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The Place-shaping Continuum: A Theory of Urban Design Process

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ABSTRACT *Drawing on empirical research in London, this paper examines how public spaces in the contemporary city are shaped. Together, the 'contexts', 'processes' and 'power relationships' that are revealed represent an integrated framework in the form of a journey through time during which contemporary public space—exemplified in this paper through the case of public space in London—is moulded. Extrapolating to the larger field of urban design, the discussion advances a theory of the urban design process as a place-shaping continuum. This urban design (or place-shaping) process, in all its complexity and variety, has the potential to anchor the field of urban design, offering a core for intellectual enquiry and policy/practice innovation. To situate this, the paper begins with a brief examination of urban design as a subject for investigation.*

Investigating Urban Design

A Mongrel Discipline

A reading of the literature on public space demonstrates how partisan and polemical much of it is (see Carmona 2010a, 2010b), but also that particular views about public space—either negative or positive—are often espoused on the basis of remarkably little evidence, with the evidence that does exist sometimes distorted to fit a particular thesis. The same goes for the larger field of urban design that has variously been criticized as a tool of neoliberalism, a movement without social content, historicist and nostalgic for traditional urbanisms, value free, too focused on ends rather than means, even the hand-maiden of global capitalism. This for a discipline that the Planning Institute of Australia (n.d.), not untypically, argues aims at the creation of useful, attractive, safe, environmentally sustainable, economically successful and socially equitable places.

Either something is going dramatically wrong or there is simply a gulf in understanding between those approaching the subject from different intellectual traditions, or between those devoted to understanding and critiquing the urban realm and those focused on changing it (through policy and practice). Urban design is in fact a mongrel discipline that draws its legitimizing theories from diverse intellectual roots: sociology, anthropology, psychology, political science, economics, ecological, physical and health sciences, urban geography, and the arts; as well as from the 'professional' theories and practices of: architecture,

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landscape, planning, law, property, engineering and management. Indeed, wherever it can.

Some have long praised urban design as an integrative force, deliberately straddling and helping to connect the silo-based disciplines of the past (Bentley 1998, 15), even praising its intellectually incomplete yet responsive status as an asset, helping it to "compete and survive" by staying relevant to academia and practice (Verma 2011, 67). Others, however, bemoan the 'vagueness' of urban design as "an ambiguous amalgam of several disciplines" (Inam 2002, 35), denounce it as too mundane and orthodox, obsessed with the perceived eternal truth of its prescriptions and not enough with their wider social and environmental consequences (Sorkin 2009, 181), or accuse it of suffering an intellectual 'anarchy' in the absence of a dedicated intellectual core of its own (Cuthbert 2011, 94). For critics of this nature the answer is often to reject urban design as a free-standing field, and instead to see it as a sub-set of something larger, including: spatial political economy (Cuthbert 2006); urban studies (Arabindoo, 2014); urban planning (Gunder 2011); sustainability (Sorkin 2009); or architecture (Koolhaas 1995).

However, if one accepts that urban design is already a distinct field of practice, as seems evident by the spread of universities around the world with programmes dedicated to the education of urban design professionals,[1] and if, as many have observed, urban design addresses some of the most 'wicked' of urban problems, then it seems improbable to deny the potential at least for a distinct intellectual tradition. Equally, given its comparatively small size as a discipline, albeit one with ancient roots, it is hardly surprising that urban design draws much of its substance from the larger and longer established disciplines that surround it. Thus, just as the 'professional' activity of urban design developed to fill the gaps between the types of professional remits outlined above; as a focus for academic enquiry, the case can equally be made that urban design occupies key interstices between larger and longer established academic disciplines spanning the arts, sciences and social sciences.

The size of the discipline may also explain why Marshall (2012, 267) found "that urban design is at least in part pseudo-scientific". He has argued, for example, that many of the underpinning works of urban design are scientifically robust in themselves, but there has been a tendency to uncritically adopt them into the fabric of the discipline without adequately testing their validity in different circumstances or against alternative hypotheses. The need, he has argued, is "not just for more and better science, but more specifically [for] more systematic verification and critical assimilation of scientific knowledge within urban design theory". For Marshall (2012, 268), urban design needs to be fortified from within, rather (as others have argued) than effectively abandoning urban design to more developed knowledge fields outside the discipline which may have little to say about its primary preoccupation, how to better shape place for future use.

Today, knowledge about urban design exists:

- First, as a focused amalgam of core knowledge and practice pragmatically drawn from other fields, both professional and intellectual
- Second, as a distinct and evolving field that has added to, worked over and given new meaning to this borrowed knowledge and practice through:

  A. Fashioning it together into a singular and tolerably coherent field of knowledge (broadly the field articulated in such works as Moudon 1992, or

more recently Carmona et al. 2010 that offer an integrating overview of the subject).

B. The generation of new knowledge around what is unique about the subject and practices of urban design (the focus of this paper).

Finding the Core

Whilst borrowing analytical techniques from elsewhere, in different ways most of urban design's foundational texts, the work of Jacobs, Cullen, Whyte, Alexander, Lynch, Gehl, etc., fall into category 'B' of the second group of knowledge. However, although new knowledge for the discipline is continually generated (and borrowed) as a feed into category 'A', considerable discord still remains about the very nature of urban design as a field.

Most obviously this occurs between those taking a critical social sciences perspective on urban design, and those hailing from practice-based, particularly design, backgrounds. Thus the literature is replete with critiques of design-led approaches to development, dismissing such perspectives as physically deterministic or simply irrelevant when placed alongside less subjective and more certain socio-economic or scientific considerations (see Kashef 2008). On the other hand, large numbers of well-documented grand projects (and arguably much of the built output of the Modern Movement) have been incorrectly promoted on the basis of their social benefit, when such benefits have often turned out to be largely illusory (Knox 2011, 49–52).

Both perspectives are equally troubling, the first advancing a space-less (political economy) perspective, challenging the very notion of urban design itself, and the second a place-less (physical/aesthetic) vision for a phenomenon that will always be rooted in both place and space. In reality, physical form will impact decisively on the socio-economic potential of space, just as the socio-economic context should always inform any design solution adopted. Equally, neither will determine absolutely the outcomes; as Biddulph (2012) has persuasively argued, urban designers should not be misled into believing they are simply applied social scientists; equally, they should temper their tendency to normative thinking with a deep awareness of the interpretive and very political nature of the context in which they work. The conundrum therefore concerns how to reconcile these understandings, bringing a social science and design (scientific as well as normative) perspective to bear on the analysis of urban design in order to move beyond partial views of the territory. The answer, it is suggested here, is through a focus on process.

A key problem, however, lies in the fact that few urban design interventions are subjected to analysis that compares outcomes with processes of delivery. Urban design projects are rarely subjected to post-occupancy review in the way that buildings are, and almost never is a systematic view taken across the entire process of creating or recreating places. This plays into a key critique of urban design, that its obsession with finished product marginalizes its understanding as "an on-going long-term process intertwined with social and political mechanisms" (Inam 2002: 37). Nowhere is this more apparent than the noticeable obsession (particularly in the US) with the latest 'urbanisms': ecological urbanism, ethnic urbanism, everyday urbanism, landscape urbanism, new urbanism, post-urbanism, sustainable urbanism, tactical urbanism, temporary urbanism etc, etc. These trends seek to neatly package favoured physical forms with prescribed

social and/or ecological content and philosophical meaning, but often end up in circular debates about aesthetics.

The reporting of urban design in the UK is little different, with the press (mainstream and professional) focusing on high profile 'projects' and typically reviewing schemes just before completion, omitting discussion of use or serious debate about development process, and focusing instead on image. The result is a series of crude judgements about the quality of urban design, based on limited evidence and an almost entirely cursory and image-based view of projects: that they are iconic, corporate, securitized, pastiche, etc., without a full understanding of the design, development and political processes that gave rise to them, how they are used and by whom, the manner in which they are managed and why, and so forth (Carmona and Wunderlich 2012, 5). Yet, arguably, it is exactly these 'process' factors that determine how places are shaped and which, if studied, might provide an irreducible core for the study and practice of urban design.

Moreover, these processes relate not only to the types of self-consciously designed schemes that catch the eye of the press, but also to the un-self-conscious processes of urban adaptation and change that continuously shape the built environment all around (Carmona et al. 2010, 72). Cuthbert (2012) titled these larger processes 'The New Urban Design', distinguishing the explanatory process for the formal properties of settlements in their totality from 'project design' which he associated with large-scale architectural projects. It is argued here, however, that these processes are a place-based continuum, and both are 'urban design' whether or not they are driven by a conscious process of design.

Understanding Urban Design Process

Through the medium of contemporary public space in London, the research on which this paper is based represented an attempt to understand the process of urban design, by examining in a comprehensive manner the historical and contemporary context for public space creation and the entire process of space generation and regeneration.

Whilst urban design is undertaken at different scales, often much larger than that of a single urban space, studying public space offers a good surrogate for these larger urban design processes (as well as the smaller ones) as public space schemes typically sit at the heart of larger development and/or policy propositions and/or long-term 'natural' processes of urban adaptation and change. This was certainly the case for London public spaces, which variously related upwards to larger development projects (of which many were part), to spatially defined regeneration strategies and programmes, and to borough and even city-wide policy, guidance and stewardship processes relating to larger-scale design. They transcended public and private modes of development, and all forms of partnership in between, and gave rise to schemes that were at different times and in different places 'public' variously by right or privilege, reflecting their diverse ownership and management arrangements.

The research lasted three and a half years from late 2007 to early 2011 and, as well as a wide-ranging literature review and local policy analysis, encompassed:

- A London-wide survey to identify new and substantially regenerated squares completed across London since 1980. The survey, enlisting the assistance of London's 33 local authorities (32 boroughs and the City of London), identified

approximately 230 new or substantially regenerated spaces, with another 100 proposed (Figure 1).
- An impressionistic on-site visual analysis of 130 of these spaces. These constituted all the identified spaces in 10 London boroughs chosen to reflect central, inner and outer London locations and the range of socio-economic contexts of the city.
- 14 multi-dimensional case studies of London squares (and the larger development projects of which they are a part) of six types: Corporate, Civic, Consumption, Community, Domestic and In-between (Table 1 and pictured in Figures 3, 4, 6, 7, 9 & 10). They focused on the 'context for', 'process of' and 'outcomes from' projects, and involved interviews with all key project stakeholders (variously with architects, urban designers, planners, developers, managing agents, regeneration agencies, community groups, investors and politicians); time-lapse observation in each space; and extensive interviewing of actual users of each space (see Carmona and Wunderlich 2012).

The discussion that follows traces the generic model of urban design process that emerges from this work, illustrating it through the specifics of the London case. This theory of urban design process is summarized in Figure 2, in which urban design is represented as an integrated place-shaping continuum through time incorporating, first, two key contextual factors: the history and traditions of place, which in multiple ways continue to exert their somewhat intangible influence on projects from one generation to the next; and the contemporary polity, the policy context through which the prevailing political economy is directed (or not) to defined design/development ends. Second, these contexts influence four active place-shaping processes: (1) design; and (2) development—shaping the physical

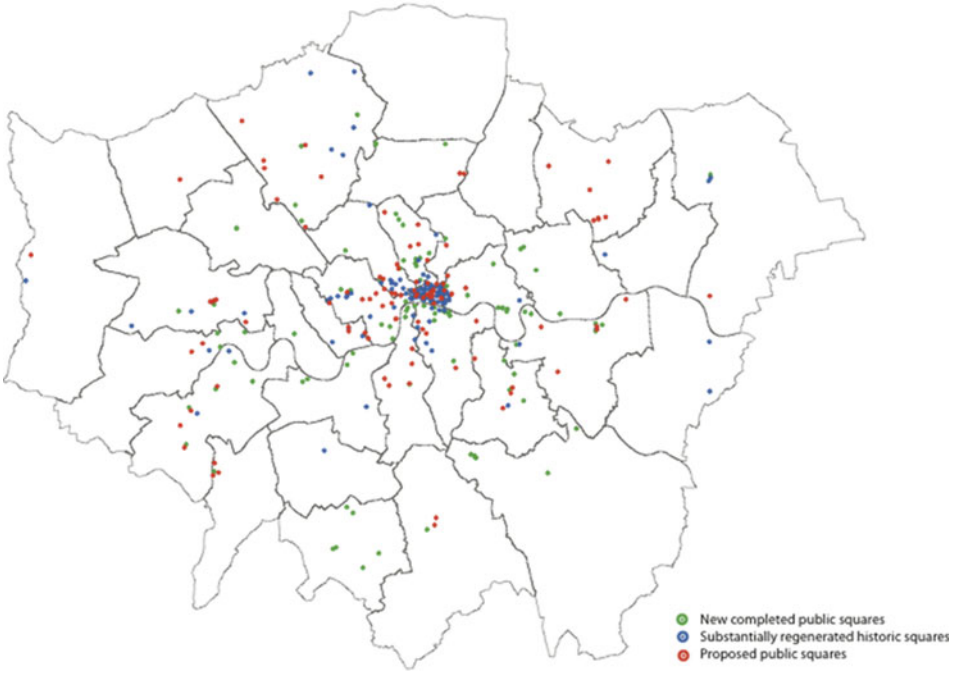


Figure 1. London-wide survey of new and refurbished spaces between 1980 and 2008 (and those proposed).

Table 1. 14 public space case studies.

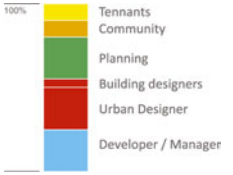
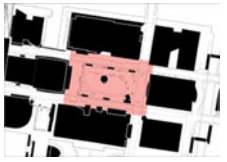
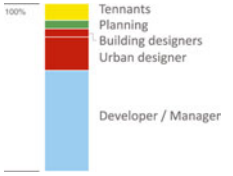
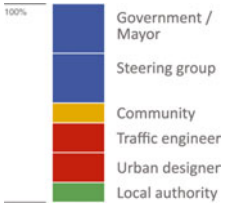
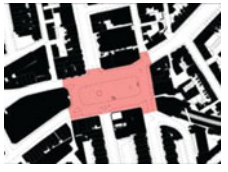
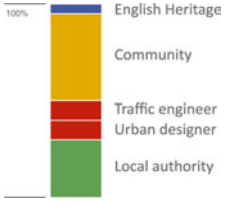
Case study		Data and relative stakeholder influence		Type	
Paternoster Square		Completion—2003 Borough—City of London Geographic—central London Form—piazza Function—corporate Responsibility—private-public		Corporate space	Corporate spaces sit at the heart of large corporate estates or adjacent to major office buildings, and are dominated by the corporate functions that surround them
Canada Square		Completion—1998 Borough—London Borough of Tower Hamlets Geographic—Inner London (but Canary Wharf treated as London CBD) Form—garden square Function—corporate Responsibility—private-public			
Trafalgar Square		Completion—2003 Borough—City of Westminster Geographic—Central London Form—piazza Function—civic Responsibility—public		Civic space	Civic spaces have a key representational role and provide a setting for the civic-type activities and functions located on them
Sloane Square		Completion—abandoned Borough—Royal Borough of Kensington & Chelsea Geographic—Inner London Form—other Function—civic Responsibility—public			

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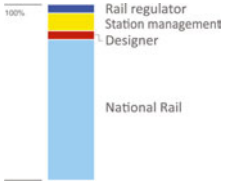
Table 1. (*Continued*)

Case study		Data and relative stakeholder influence		Type	
Euston Station Piazza		Completion—2009 Borough—London Borough of Camden Geographic—Central London Form—forecourt Function—consumption Responsibility—public-private		Consumption space	Consumption spaces are dominated by the retail and catering functions both within and around them
Festival Riverside		Completion—2005 Borough—London Borough of Lambeth Geographic—Central London Form—piazza Function—consumption Responsibility—public-private			
Gabriel's Wharf		Completion—1988 Borough—London Borough of Lambeth Geographic—central London Form—piazza Function—consumption Responsibility—private-public			
Swiss Cottage Community Square		Completion—2006 Borough—London Borough of Camden Geographic—Inner London Form—garden square Function—community Responsibility—public		Community space	Community spaces provide a focus for the local social and community functions of their surrounding neighbourhoods and often have community-type functions located in and on them

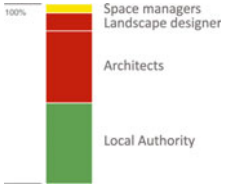
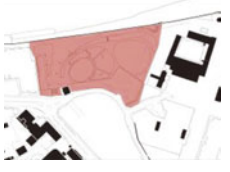
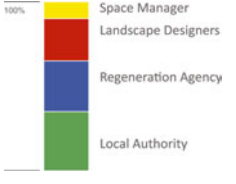
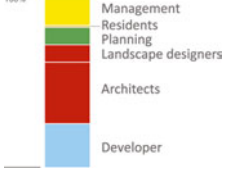
Peckham Square		Completion—1999 Borough—London Borough of Southwark Geographic—Inner London Form—piazza Function—community Responsibility—public			
Royal Arsenal Gardens		Completion—2000 Borough—Royal Borough of Greenwich Geographic—Outer London Form—other Function—community Responsibility—public			
GMV Village Square		Completion—2009 Borough—Royal Borough of Greenwich Geographic—Outer London Form—piazza Function—domestic Responsibility—private-public		Domestic space	Domestic spaces similarly sit at the heart of residential developments and are dominated by the residential functions that surround them
Empire Square		Completion—2007 Borough—London Borough of Southwark Geographic—Inner London Form—courtyard Function—domestic Responsibility—private-public			

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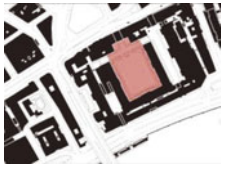
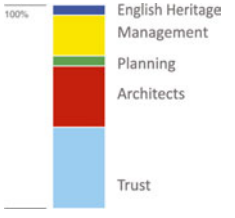
Table 1. (*Continued*)

Case study		Data and relative stakeholder influence		Type	
Somerset House Courtyard		Completion—2000 Borough—City of Westminster Geographic—Central London Form—courtyard Function—in-between Responsibility—public-private		In-between space	All spaces are in-between in the sense that they are the space between buildings, but this category relates solely to those spaces that have been carved from the forgotten, the incidental and the inconsequential in order to create something positive and new.
Monument Yard		Completion—2005 Borough—City of London Geographic—Central London Form—incidental space Function—in-between Responsibility—public			

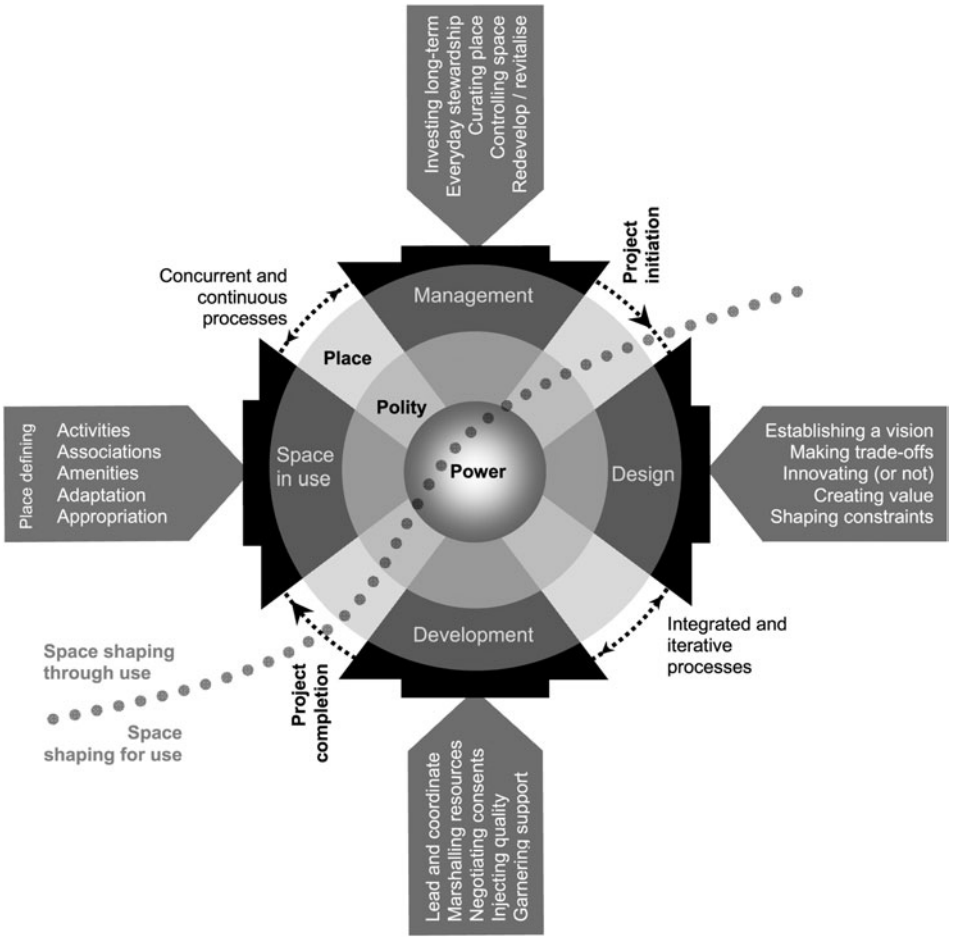


Figure 2. Urban design process: a place-shaping continuum.

public realm for use; (3) space in use; and (4) management—shaping the social public realm through use. Each encompasses complex sets of aspirations and practices that together are decisive in determining public space outcomes.

Third, and finally, a set of power relationships between stakeholders operates like a lens, focusing the processes of urban design in different directions and in diverse and inconsistent ways, and decisively moulding the nature of outcomes in the process. Together they represent a new theory of urban design process, a claim built upon extensive empirical and conceptual research, yet at the same time open, as any theory (see Zeisel 1984, 67), for others to test and develop and/or challenge at different times, in different contexts, and with different development scenarios.

Contexts for Urban Design—Place and Polity

The continuum begins with a look to the past. Urban design is situated in both place and time, but despite our obsession with the here and now, with the latest economic or political news, the latest governmental initiative, development project or urbanism trend, it may be that our influence today is less significant

than we like to imagine. Instead, how we act today is shaped by an accumulated history of experience and practice, by established ways of doing things that change only very slowly and that are still (despite globalization) very place dependent, and by the fact that real innovation in design is rare (see, for example, Panerai et al. 2004, the story of the urban block). This means that urban design process begins long before contemporary development proposals are dreamt up, and these in turn build upon a very long history that continues to inform processes of change through to today. The creation and recreation of public spaces in London represents a case-in-point.

The Historic Processes of Place

Almost 2000 years of history has left London with an immense heritage of public spaces across the city, although for the last 350 years at least the development processes that shaped them have changed very little. With the exception of the post-war re-building in which the public sector took an uncharacteristic and largely ill fated—Hebbert (1998, 75) says 'lethal'—lead, the city has been shaped and re-shaped by an uncoordinated network of hands. In these processes large landowners and powerful developers have typically taken the lead, guided by market opportunity, a light-touch regulatory process and a fragmented state that has often been reluctant or incapable of investing directly in the infrastructure of the city itself. This way of doing things stretches like a hand through history, defining a particular 'London-way' (Carmona 2012), that continues to characterize place-shaping processes in the city.

Looked at in terms of its impact on public spaces in the city, the most successful spaces for 'public' uses (if judged by the fact that they still exist largely in their original form and are open and actively used by the public) were either created through largely un-self-conscious design processes (e.g. London's historic market spaces), were designed for private purposes (e.g. the garden squares), or have evolved into their present role from an initial far more staid and largely representational purpose (e.g. London's civic set-pieces). Those (pre-1980) spaces designed with a specific public social purpose, within post-war public housing estates for example, have, by contrast, often been demolished and redeveloped.

Arguably, it is the characteristic processes of place and how they vary from one city to the next that, along with the particular natural context, determines the nature and qualities of place. In a socially and politically stable city such as London, these macro-processes of change evolve only slowly, lending an in-built inertia to even the most seemingly dramatic of policy changes such as the adoption of Abercrombie's Greater London Plan closely followed by comprehensive planning after the war. Almost everywhere, to varying degrees, this hand of history represents a first key dimension of the urban design process (see Farrell 2010 for a masterful demonstration of this in relation to London). In London the 'London-way' defines a dominant political economy of place (neoliberal long before neoliberalism was invented) whose impact on the physical city and on processes of development has been, and remains, profound.

The Processes of Contemporary Polity

Yet, even in the most stable of societies, the process of urban design will evolve over time, reflecting changes in society, the economy and the prevailing politics; overlaying the historically defined processes of place with a characteristic contemporary polity. The period from 1980 to 2012 in London reflects this, a period that can be divided into three, each marking a shift in the prevailing policy context, if not in the fundamentals of the London-way.

Neglect and innovation. The period spanning the 1980s and 1990s (Margaret Thatcher to Tony Blair) marked the final closing of the more interventionalist post-war experiment. In the mid-1980s, London's already fragmented governance was further emasculated with the abolition of the GLC (Greater London Council), allowing the city to once again fully engage with the speculative development model that had shaped so much of its history. The conflation delivered four key outcomes:

- First, an attempt by large developers operating within such a deregulated environment to safeguard their own huge investments by investing directly in design and in new forms of private public space; like their Georgian predecessors, recognizing the essential economic value that could be added through a high quality public realm (Carmona 2009, 104). Broadgate in the City and Canary Wharf were the first of this breed of post-'big bang' developments.
- Second, the emergence of an 'alternative' privately driven model in which low value ex-industrial spaces have been regenerated through the insertion of imaginative, often temporary, retail, creative and community uses (Bishop and Williams 2012). Here the model relies on the manufacture of a new social public realm which, by attracting people, also stimulates value. The transformation of Camden Lock exemplifies this type.
- Third, that everywhere else London's public realm deteriorated with a decline in the type of everyday public investment necessary to manage and maintain a reasonable quality public realm. Wider urban and social policy left London's streets as the de facto receptors of a range of social problems on top of being clogged by traffic as a consequence of unchecked car ownership (Thornley 1992, 1).
- In time, the fourth outcome led to a growing concern about the deterioration of London and its lack of strategic governance, and to the creation of policy approaches at the national level that portended a renewed civic concern with design quality, particularly that associated with London's urban environment. All this was dressed in an overarching concern that London would fail to compete internationally if the quality of its public realm did not improve (Kennedy 1991, 98, 200).

Thus, whilst the third and fourth outcomes from the period reflect a story of political and policy neglect and eventual retort, the first and second delivered new and innovative forms of public/private space not previously seen in London. The combined political and economic transformation of the period was increasingly clearly being written into the fabric of the city in permanent and less permanent ways.

Renaissance-max. The period up to the late 1990s reflected another curious feature of London, that from time to time during its history the city has become

stigmatized as dirty and degraded, with poor public infrastructure. As a consequence, approximately every 50 years, there is a reaction against this state of affairs and a spate of public reinvestment to address the concerns: the Regency period, the Victorian parks movement, and the post-war re-building were such periods; arguably the next period, from the late 1990s to the late 2000s, was too.

The period of the New-Labour Government was marked by subtle but increasingly significant tweaks in the balance between the state and private enterprise (Imrie, Lees, and Raco 2009, 5–6), tweaks that in a resurgent market led to a flowering of new and regenerated public spaces across the capital. Under Ken Livingstone—the left-wing first Mayor of London following re-introduction of strategic government to the city in 2000—the absence of direct public sector resources led to the pragmatic decision that to achieve real change the state needed to work through the market in order to harness a proportion of its resources and capture an element of its growth for public ends, including enhanced public space (Bowie 2010, 228). In addition, that the state itself had a direct role in stimulating a context for better design (and therefore in maintaining London's attractiveness to investors) through establishing encouraging policies, taking better care of that part of the built environment for which it was responsible, and setting standards through exemplar projects and proposals.

However, true to the London-way, this renewed interest in public space was ad hoc and uncoordinated, delivering only where market circumstances allowed. Thus, as Livingstone quickly discovered, the landownership, development, funding and planning complexities of London ensured that fine aspirations were liable to remain just that unless direct (and considerable) public money could be invested in schemes—which increasingly it was—or unless the cost of public space was internalized within large private development projects (Figure 3).

Fortunately for Livingstone, his urban renaissance-inspired policies, by driving up the built densities across London, acted to make both private development schemes and new public spaces viable where they had not been before. His policies also helped to increase the importance of expected design quality. Thus, although his own ambitious public space (100 Spaces) programme (Mayor of London 2002) quickly floundered amidst the complexities and extended time lags associated with delivering public spaces in London, the drive towards higher quality design eventually found its way into the local policies

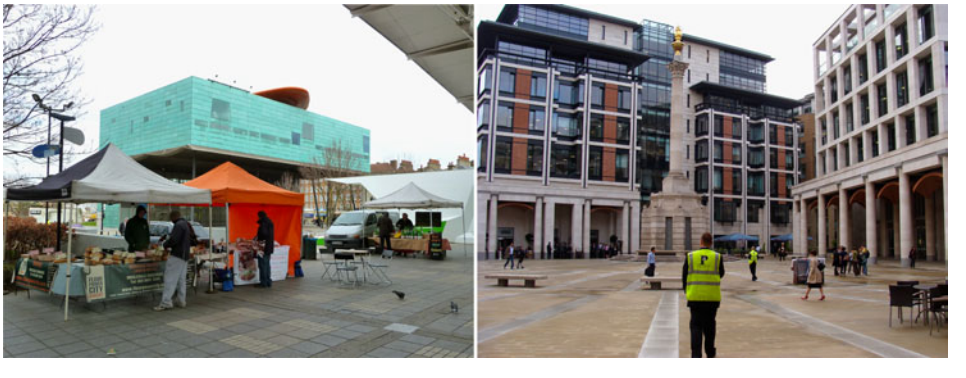


Figure 3. Direct public investment vs. private investment: (i) Peckham Square, a space owned and managed by the London Borough of Southwark (ii) Paternoster Square owned and managed by Mitsubishi Estates.

(although not always practices) of its 33 local authorities. It also gradually infused the other constituent parts of the Mayor's empire, including, belatedly, to parts of the huge streets budgets controlled by Transport for London (TfL). In this period, increasingly, London became associated with a renaissance in its public spaces (Roberts and Lloyd Jones 2009, 173–177). Although schemes were largely dependent on the private sector for their delivery, the change in the wider political economy and its translation into design-led local planning and regeneration policy, had a significant impact on the production and better management of public space.

Renaissance-light. The election of Conservative Boris Johnson as Mayor of London in 2008 seemed to signal a different emphasis on public space, with, for example, the immediate cancellation of the planned remodelling of Parliament Square, the western extension to the Congestion Charge and the 100 Spaces programme. However, the Great Spaces initiative (Mayor of London 2009) that followed pursued remarkably similar public space aspirations to the 100 spaces programme, whilst demonstrating the greater desire of the new Mayor to work actively through other organizations (including developers and the London boroughs), rather than taking on responsibility for delivering projects himself. Thus, on the one hand, the programme represented a less ambitious role for the Mayor (looking to others to deliver), but on the other hand, a greater sense of the reality of delivering public spaces in London where Mayoral powers and resources are limited.

A parallel move to lower density requirements in the London Plan (the raising of which had been a key shibboleth of the urban renaissance—see A + UU 2003), and to encourage larger housing units though the adoption of internal space standards also presaged a possible move away from higher density 'renaissance' policies and towards medium density solutions. In high-profile schemes such as the redevelopment of Chelsea Barracks and the Olympic Legacy Masterplan, this is leading, once again, to the design of housing around garden squares.

More significant, however, than differences between the two Mayors was the fact that despite being charged with strategic London-wide responsibilities, both incumbents (Johnson less enthusiastically at first) explicitly recognized the vital importance of high quality urban design to London's future. In this area, both Mayors seemed to have honourable intentions, with the pursuit of a higher quality public realm viewed as a means to deliver clear social as well as economic goals, and not simply a mechanism (amongst others) through which to support a neoliberal view of the state, as some critics have suggested (Knox 2011, 131–135).

London's urbanism, just as its politics, embraced a third way, with the state taking a stronger role in the provision of high quality public spaces, whilst typically still looking to the market to take the lead. Thus the renaissance periods ('max' and 'light') contrasted sharply with the pre-1997 period (and particularly with the 1980s), with policy helping to refine and direct the natural place-shaping predilections of London whilst still subservient to the London-way. Whilst the spaces of the 1980s were largely private innovations, commercial or alternative in nature, the spaces of the renaissance have increasingly seen a public hand at work, as a promoter, partner or provider; policy was shaping the dominant political economy and in doing so was more actively shaping the built environment. The combined result has been an increased flourishing of public space projects in London during the period (Figure 4), in excess of 230 across the city since 1980

Figure 4. London's renaissance spaces small and large, new and refurbished: (i) Festival Riverside (ii) Royal Arsenal Gardens (iii) GMV Village Square (iv) Somerset House Courtyard.

(most after 2000). The influence of contemporary polity—the politics, policies and resulting political economy of place—represents the second key context in the process of urban design.

The Processes of Urban Design: Designing, Developing, Using, Managing

Within and moulded by the contexts provided by historical place-based modes of operation and the contemporary policy-influenced political economy, the analysis of public spaces in London demonstrated that a series of more immediate place-shaping processes constitute urban design. In fact there are four key place-shaping processes: design, development, space (or place) in use and management. These begin with design, yet despite the foregrounding of the term in the very notion of 'urban design', other processes are equally and often more important in determining how the built environment is shaped.

Shaping through Design

A range of factors dictated design strategies for public spaces in London with design providing the means through which aspirations for public space were mediated and strategies defined to create spaces for use. Many models exist of an idealized design process, either generic (applicable to any product), or focused specifically on the built environment (e.g. Shirvani 1985, 111; Moughtin et al. 1999, 5; Cooper and Boyko 2010; Kasprisin 2011, 7). Most see the process as a cyclical, analytical, creative and synthesizing process in which design is 'self-consciously'

used as the tool to 'knowingly' shape the future of places, typically by specialist designers skilled in conceiving and communicating design solutions for particular places or projects.

Looked at holistically across the 14 public space case studies, this generic process of intentional design within the larger urban design or place-shaping process was sometimes empiricist in nature (drawing from precedent, analysis and experience) and sometimes rationalist (following a pre-determined path towards a set of idealistic goals) (Lang 2005, 380), and often a mix of the two. Each process, to greater or lesser degrees, addressed five related but distinct agendas.

Establishing a vision. The generation of an agreed 'vision' for positive change represented the ultimate purpose of the intentional design processes studied. A characteristic of public space design processes, however, is their infinite variety as informed by the very different physical contexts they mould, stakeholders they engage and aspirations they address. London is no different in this respect, with design processes that are often long and complex and informed by multiple overlapping factors. A creative design process is critical to this, the aim (even if not always realized) being to create an 'event'; a place that is distinct and attractive, something to draw users in and encourage them to partake, even if just to momentarily pause (Figure 5). The method is an iterative design process of the type that has long been represented in models of design methods (e.g. Asimov 1962), although fully integrated with allied development processes (see below).

Making trade-offs. A major focus of such iteration was the need to address competing calls on limited space. In this regard urban design is often depicted as a discipline concerned with reconciling public, private and community interests (Dobbins 2009). However, rather than reconciliation (which suggests resolution is possible), these processes are often trade-offs, in London most often demonstrated through the balance between traffic and pedestrian movement. Thus from the 2000s onwards new and regenerated public spaces have increasingly been reclaiming space from traffic. However, traffic remains controversial, not just to those who seek to drive and who put pressure on politicians to allow them to do so, but also to local communities frightened by the perceived displacement effects caused by space-reclaiming projects. In this respect traffic modelling and forecasts are often the hidden hand driving many urban design processes. More broadly, decisions about whom space is for, and the different trade-offs this will necessitate, are likely to remain a source of on-going tension. In central London, for example, local authorities are beholden to their residents (the voters) but are also guardians of

Figure 5. In London, design strategies are of three types. Creating a space that: (i) is remarkable in itself, attracting users through its physical design; (ii) hosts a range of uses that attract users to and through the space; (iii) hosts 'fun' features and or activities that encourage users to engage with the space.

nationally important heritage and the real estate needs of large swathes of 'UK plc', roles that are often in conflict. Through urban design processes the physical manifestations of such trade-offs are eventually written into the built fabric of the city.

Innovating (or not). Whatever the vision and trade-offs, in London widely shared empiricist prescriptions about what makes for a 'good' place—active frontages, good connections, tamed traffic, opportunities to rest, responsiveness to setting, etc.—are, on the whole, informing contemporary public space design. Nevertheless, designers retained a strong predilection for rationalist design innovation based on the argument that more 'interesting' clearly contemporary spaces would attract users and contribute to other objectives such as wider regeneration. These preferences were indulged more often in publically owned schemes than in private ones, and as a result public schemes tended to be less 'traditional' in their physical design, although not necessarily in their use, leading to ongoing management challenges (see below). In general, however, design innovation of itself seemed to be of little consequence to public space users, with some of the simplest design solutions delivering the greatest positive impact, whilst innovation was most successful when focusing on the use of space rather than its style (Figure 6).

Creating value. Urban design is often discussed in terms of the social value it delivers to society, concerned with delivering the equitable, sustainable, liveable city (Gehl 2010, 61). The research revealed, however, that these normative aspirations are difficult to deliver without a focus on another key objective, creating economic value. The research confirmed that for private developers an enhanced sense of place added to the intrinsic value of developments by making them more attractive in the market. In the residential sector this was often simply 'aesthetic value', but in the corporate sector experience had shown that to maximize value, spaces needed to be 'put to work'. Thus above and beyond their aesthetic value, they had a 'use value' that it was important to optimize in order to increase the enjoyment of occupiers and to attract users (Figure 7). The clearest

Figure 6. Innovation in use vs. innovation in style: (i) Swiss Cottage Community Square, local dance students regularly use the space to rehearse (ii) Sloane Square, controversial shared surface outside Sloane Square tube station, a taste of what had been proposed and then abandoned for the rest of the square.

Figure 7. Aesthetic value vs. use value: (i) Empire Square (ii) Euston Piazza.

example of this (and one often criticized in the literature (Sorkin 1992, xiii–xv) was the commercialization of space. The research demonstrated, however, that commercial uses are often the stuff of life: drawing people in, animating space, creating active frontages, giving space a purpose, helping to provide a return on investment, cross-subsidizing public goods, and so forth. The value imperative lies at the heart of urban design, and in London, when it was ignored, led directly to the creation of unloved, exclusionary, unsustainable and ultimately unliveable space.

Shaping constraints. If design gives and is given shape by value, then a similar two-way relationship exists with regulatory processes as defined through policy. In making decisions about public space, for example, schemes often have to be negotiated and re-negotiated over time. Sometimes this reflects the market not performing as expected, giving rise to changes in the value proposition. At other times the need to re-negotiate design can be linked to changes in policy such as the loosening of density stipulations, as happened in the City of London in the 1980s and in the rest of London in the early 2000s. In London, regulatory processes impose constraints that some stakeholders perceive force them to play it safe, particularly when designing in historically sensitive locations. Elsewhere such constraints have been seen as the inspiration to deliver something unique and extraordinary, the new courtyard at Somerset House, for example (see Figure 4 iv). Whichever, they represent a constant that decisively shape outcomes.

Shaping through Development

In some of the most widely used event-sequence models of the development process (e.g. Barrett, Stewart, and Underwood 1978) design is conceived of as a transitory phase within a larger well-ordered process of procuring projects. By contrast, the public space case studies in London had in common that there was no common development process, and that the development process itself could be seen as a phase within the larger on-going process of place-shaping or urban design. For each project the line-up of stakeholders, the leadership and the power relationships were different, although design remained a common and constant (as opposed to transitory) means through which schemes were

negotiated and re-negotiated over time, with problems—financial, regulatory, contextual, market, etc.—typically requiring a re-design in order to move things forward. Design and development processes are therefore typically integrated and iterative in nature.

In this respect the generation of development propositions (via design) was the intentional means by which projects advanced (and places were shaped), although players in the process varied in their expertise and most—developers, planners, engineers, funders, occupiers, etc.—would not have self-consciously regarded themselves as designers and what they did as design. They were, however, knowingly engaged in shaping places for use through processes that ranged in their type across the four categories of urban design defined by Lang (2005, 27–28), namely singular one-off projects, a phase within a larger masterplan, part of the incremental implementation of a long-term policy framework, and as infrastructure to fix future development. Despite the variations in practice, five common sub-processes were apparent, which are described in the following sections.

Lead and coordinate. Urban design typically involves a bewildering array of stakeholders across development, regulatory, enabling and long-term stewardship roles (Tiesdell and Adams 2011, 5–6). A critical task is therefore to coordinate the various interests in the face of contrasting views about how to shape place, whilst the research suggested that ideally this requires a strong project champion committed and able to drive a project forward. Whilst the holder of this role can vary, where no such leadership is in place the resulting delays and compromises rarely enhance outcomes. The London public space projects were led variously by developer representatives, council officers, politicians, charity CEOs, civil servants, and, in one case, by a masterplanner. Whoever takes the role, being able to understand the dynamics of the local stakeholder environment, and listen and respond to issues, is as much part of the leadership role as creating and advancing a vision for change. Communication is therefore key to ensure that: aspirations are fully understood, proposals do not become hijacked by narrow interests, and, whilst retaining a necessary focus, all legitimate inputs are taken on-board.

Marshalling resources. Complex stakeholder relationships are made more complex by the combinations of funding (private and public) needed to underpin many urban design projects. Of the London case studies, six spaces were funded entirely through market mechanisms, three through entirely public funding from a combination of sources, three from a combination of lottery funding and public, charitable or private sources, and one from a dedicated pot of Section 106 'planning gain' funds derived from associated developments. An implication of this is that projects generally require favourable market conditions for their delivery. Indeed, the danger of delivery without such conditions was demonstrated in Royal Arsenal Gardens where private confidence in the area lagged behind public commitment by at least 10 years, revealing the challenges of coordinating public funding cycles with market opportunity in regeneration areas. Elsewhere the case studies demonstrated how the failure to read market conditions and thereby lease key units with appropriately active or publically oriented uses quickly undermined intended public space outcomes such as achieving a vibrant public realm.

Negotiating consents. Moving from market to non-market space-defining mechanisms, a range of regulatory instruments have to be negotiated to realize projects, whether public or private. In London, three are critical for public space schemes:

- Planning controls to sanction new public space proposals or where changes of use or alterations to the (non-highways related) built fabric occur in existing spaces.
- Highways orders, focusing on changes to highways themselves (including 'stopping up' existing rights of way).
- Listed building consents, for changes to the historic (listed) built fabric.

London's 33 local authorities play a critical role in each of these but, reflecting the largely discretionary environment within which they operate, the research suggested that their interest in using such powers to positively intervene in the space production process varies hugely. In part this is accounted for by the variation in context, with schemes in more historic settings receiving (generally) greater regulatory attention, but two other factors were also significant. First, the internal capacity and capabilities of boroughs to engage in such concerns, which, for many, were limited. Second, their confidence in the abilities of other stakeholders to deliver in their stead. Thus the pressure to intervene (beyond the most basic regulatory responsibilities) reduced noticeably when those responsible for public space projects were seen as having the public interest at heart.

Injecting quality. The literature perceives the role of urban designers in various lights, from all-powerful creative force to impotent market servant (Bentley 1999, 30–39). The London research concurred, concluding that the role varied as much as the spaces themselves, although generally took two basic forms:

- Masterplanners working on larger development projects with multiple spaces who needed to combine clear financial thinking about development options with three-dimensional vision in order to maximize investment returns and space potential.
- Public space designers (architects and landscape architects) working within the confines of individual spaces already defined by a masterplan or existing within the historic built fabric; designing or re-designing space in order to maximize space amenity: aesthetic, social and functional.

In both roles the influence of designers varied, and ranged from 'fundamental'—a creative design process focused on making schemes remarkable, through creative design, and viable through reconciling stakeholder, market and regulatory constraints—to 'peripheral'—largely concerned with applying a decorative sheen to spaces where all the key decisions had already been made. This scope they shared with planners, who, although not directly involved in the creative design process, had both fundamental roles in tying down key public benefits such as the presence and position of public spaces, key routes through schemes, and the land-use mix, whilst also influencing final outcomes in less permanent ways through the negotiation of detailed landscape treatments.

Garnering support. Local residents and other interested parties will also have a role to play, but this may not be the idealized role envisaged in textbooks on participatory design (e.g. Wates 2000). London is a case-in-point. The diversity of

London's communities (such as its spaces) is a feature of development processes across the city. These vary from largely apathetic communities (for varied and complex reasons) who have to be coaxed through formal consultation processes into making any contribution at all, to highly active (generally well-off) communities that are highly capable of de-railing projects if proposals are not in their narrow interests. In the main, therefore, the role of communities is largely reactive or negative; reacting to proposals already made for spaces, sometimes voting on a beauty parade of options, or actively campaigning against projects. It is certainly easy to over-romanticize the potential impact of such engagement and equally to under-value the importance of clear professional vision. Equally, it is easy to under-estimate the impact of an alienated community—at Sloane Square a small group of enraged local residents effectively sunk the scheme—and to over-rely on inappropriate professional expertise. Getting the balance right in every case will not be easy.

Shaping through Use

Through intervention-focused processes of design and development, places are shaped and re-shaped 'for use' in a deliberate and largely pre-conceived manner. This, however, is not the end of the urban design story. Instead, literature old and new demonstrates how concurrent processes of everyday use and management continue to shape places long after those who originally created them have left the scene (e.g. Appleyard 1981; Hall 2012). However, given the risks and unknowns associated with development, multiplied by the uncertainties associated with human-centred activity per se, how new public realm will actually be used can never be entirely predicted, at least until—post-completion—a distinct use profile emerges. Thereafter it will be subject to the continuous flux of the modern city (Hack 2011), potentially changing patterns of use, and therefore urban design outcomes over time. As a consequence, the impact of space in use on the character and quality of spaces stem from a 'natural' (rather than conscious design) process, 'unknowingly' shaping and reshaping the nature of urban places.

Observing 13 of the 14 public space case studies (those actually built) during the summer of 2009 revealed how they were used, whilst interviewing users revealed by whom and with what purpose. The work suggested that use defines place in a number of ways: through the day-to-day activities and human associations in space, through the commercial amenities this supports, and through processes of adaptation and appropriation to different uses over time.

Activities. Use gives meaning to space and decisively shapes the experience of it. The research revealed a great diversity in use, but also some overarching physical and land-use determinants of occupancy patterns in London's public spaces (see Table 2), giving rise to some recognizable common patterns of activity at different times of the day (Figure 8). Within this, space utilization for 'situated' (as opposed to 'transient') activities is maximized at lunchtime when almost any space will find a constituency of users. Outside of these times use will depend on levels of comfort, attractors, amenities and features, particularly in order to sustain use into the evening. Relaxing, drinking, eating, meeting friends, socializing with colleagues, play (for children), watching others, reading, smoking, skating and simply waiting, were the dominant situated activities in London's public spaces.

Table 2. Determinants of space occupancy in London.

Drawing users in	Encouraging users to linger
○ Movement in public space predominantly flows along dominant 'movement corridors' or desire lines passing through spaces, and from movement corridors to 'attractors' (destination land-uses) and vice versa. ○ 'Amenities'—cafes/restaurants, shops, big screens, band stands, kiosks, markets, sports facilities, toilets, seating, etc.—and 'features' around and in a space—fountains, paddling pools, street pianos, public art, sculptural furniture, play equipment, skating opportunities, etc.—encourage engagement with the space, learning through play and informal social exchange ○ In the majority of spaces that are well integrated into the movement network or that host major attractors, at any point in time only a small proportion of users stop in and engage directly with the space itself (situated activity), the majority pass straight through (transient use). The exception are spaces off the movement network in which the space itself, its amenities and features are the major draw ○ Spaces with movement corridors/desire lines but without attractors, amenities or features are unlikely to become animated, but will benefit from a background level of movement and more or less continuous use ○ Spaces with attractors and/or amenities or features, but without movement corridors/desire lines still have the potential to become animated if the draw provided by the attractors/amenities/features is significant enough ○ Spaces without attractors, amenities, features, or movement corridors/desire lines are doomed to failure, their lack of function and absence of users acting as further discouragement to others who may happen across them ○ Visual permeability into and through a space encourages through movement and a sense of 'publicness' but does not guarantee either. By itself visual permeability has little to do with space animation which is determined much more by the attractors, amenities and features on a space	○ Users, on average, stay longer in soft spaces than in hard spaces ○ Grass is highly conducive to relaxation, play and social exchange, it is comfortable, flexible and allows users to position themselves to take advantage of micro-climatic conditions ○ Hard spaces need to be designed with comfort in mind in order to encourage anything more than transient use. Careful consideration should be given to seating, both formal and informal (steps, kerbs, walls, etc.), and to its suitability to a range of users ○ Fixed seating is less flexible (and generally less comfortable) than movable seating, constrains the formation of social groupings and reduces the possibility of positioning to take advantage of the sun, shade and other microclimatic factors ○ Different users are attracted by different microclimatic qualities, some seek shade and others sun, all seek shelter in inclement weather. Spaces that allow a degree of choice are more comfortable for a greater number of users across a greater part of the year. ○ High levels of transient use generally stimulated high levels of situated activity, with the highest density of such activities occurring in the interstices between dominant lines of movement and around key features and amenities ○ Individual spaces (if large enough) can work successfully as a series of distinct and separate sub-spaces, each with a different character and purpose. Such strategies can also fail dramatically if poorly conceived in relation to a realistic assessment of user demand

The mix of these and the manner in which they changed through the day gave individual spaces their personality and, reminiscent of Jane Jacob's (1994, 60) "ballet of the city sidewalk", ensured a constantly changing character, even in the same location, over time.

Figure 8. Distinctive times included rush hour (7.30–9.30), mother and toddler mornings (9.30–12.00 (e.g. i), lunch time (12.00–2.00), peaceful afternoons (2.00–3.30), school's out (3.30–5.50) (e.g. ii), post-work wind-down (5.30–7.30) (e.g. iii), and night life (7.30–23.00).

Associations. Turning from patterns of use, to who is actually using urban space and with whom, the normative assumption is that space should be inclusive with user profiles that reflect the population at large (CABE 2006). In London's contemporary squares, however, spaces that mirror the social make up of the city do not generally exist as (unsurprisingly) spaces are dominated by the user groups that predominate in their immediate hinterland. However, despite a narrow constituency of users—dominated, for example, by young mothers and toddlers or office workers—spaces can function very well (in terms of being filled with life and purpose). Indeed, where space allows, users naturally differentiate themselves, particularly by age, through the appropriation of different sub-areas of spaces by different groups. Teenagers, for example, will group in areas were they can be more boisterous and active, young families where children can explore whilst being supervised, and older users in quieter locations and where comfortable seating is available. Users themselves are clear about what they like and do not like (Table 3), who they prefer to associate with—generally mirrors of themselves—and who not. For them, different spaces have different purposes and need to be assessed in that light; some spaces are transient, others are for spending time in, some are relaxing, and others have a vibrant buzz. Not all urban design will be equally attractive to all, and should not be.

Amenities. Although profiles of users can never be guaranteed, developers will typically orientate their development projects to meet particular market demands, and this will play out in the sorts of 'amenities' (see Table 2) that front, and give character to, the public realm. The research suggested, for example, that corporate developers are generally very clear about the audience they aim to attract to their public spaces: 'quality' tenants attracted through highly managed and secured spaces with high-end amenities. In turn, this gives a certain feel that is very comfortable for the targeted corporate users who then provide a captive market for the consumption opportunities on offer. In explicitly consumption-oriented spaces, promoters are equally focused on the market segment they wish to attract, with spaces designed and tenants selected to appeal to different target markets. None of this actively excludes other users, and developers sometimes found that the mix of users did not support the types of commercial amenities they had envisaged. Nevertheless, these commercial decisions to a large extent dictate use, and, as like attracts like, once an area is occupied by a particular profile of users, this will tend to be self-perpetuating, and will only change gradually over time.

Table 3. Public space preferences in London.

Socially, London's public space users like:	Physically, London's public space users like:
○ Relaxed, comfortable, safe spaces in which they feel they can stay as long or as briefly as they want ○ Spaces that encourage a regular user community to emerge and that give rise to social interaction ○ Spaces with an urban buzz in busy locations, that are full of life and which offer a range of amenities (particularly consumption opportunities), such as al fresco dining and markets ○ Family-friendly community spaces in which children can explore an interesting yet safe environment whilst under the watchful eye of parents who are able to relax and socialize ○ Quieter green spaces in residential areas that are suitable for relaxation and play ○ Well-used and overlooked spaces which thereby feel safe. The presence of CCTV and visible security is generally welcomed by users of public space	○ Fun features which are very popular for the relaxed and playful feel they can give a space and the interaction they stimulate, and which encourage users to linger for longer ○ Spaces that feel obviously open and encouraging to public use and that avoid ambiguity (e.g. the presence of gates) ○ Greenery (trees and grass) which represents a strong preference of Londoners, even in heavily used urban locations ○ A distinctive setting with views, historic features, memorable landmarks, or visually interesting (not austere or overly corporate) architecture. For users, building design rather than the design of the public space itself often determined whether a space felt distinctive or not ○ Clean and tidy and well maintained spaces which users associate with being safe and less threatening. Most spaces met these benchmarks, although highly used public spaces with pigeons (e.g. Euston Piazza) attracted more criticism than others ○ Adequate, comfortable seating and toilets, particularly for older users ○ Spaces without traffic.

Adaptation. Given enough time, all spaces in London will change (sometimes considerably), for example: the transformation of the original hard and private Georgian squares to green public pocket parks; the gradual invasion of space in London over the last 100 years by motorized traffic at a pace so slow that few noticed the consequences until it was too late; or, more recently, the spread of café culture across the city, hand-in-hand with which has come a sense that the public spaces in the city are places to linger and enjoy. Most recently, attempts to reclaim space from traffic have been less widespread, but, where delivered have been transformative, including at Trafalgar Square where the extent, diversity and quality of use has transformed on the back of fairly modest physical changes. Elsewhere, however, similar schemes have revealed significant tensions, for example, the reaction to proposals at Sloane Square brought to the fore questions about who such spaces are for, locals or Londoners at large, and how change to historic local environments should be managed. Generally, however, less vociferous (or perhaps simply more apathetic) communities have accepted and occasionally embraced adaptive change with few questions, despite the dramatic re-shaping of their local environments (Figure 9).

Appropriation. The move from pre- to post-project phases of the place-shaping continuum also brings with it the possibility that places will be used by different

Figure 9. Reclaiming traffic space, adaptive change of national and local significance: (i) Trafalgar Square (ii) Monument Yard.

groups for different purposes than originally envisaged. In the two domestic spaces studied within residential developments, their relative isolation from existing foci of urban life, and from other large-scale 'attractors' (see Table 2) meant that rather than filling with animated life (as was intended), both spaces now successfully cater for lower-key more homely functions: as visual amenity space, space for gentle relaxation, as nodes on pedestrian thoroughfares, and as places around which local facilities are situated. When the same failure to animate occurred at one of the three community spaces examined—Royal Arsenal Gardens—the space was appropriated by a very different type of community than originally envisaged, the London-wide community of skateboarders, giving an unwanted space a purpose that was later formalized with the construction of a skate-park. Recognizing the realistic likely future potential of urban space is a critical part of the design/development process, but if this goes wrong, then allowing suitable adaptation and appropriation represents a continuance of the 'natural' urban design process; a process, the research suggested, that should be facilitated rather than hampered by the next (or really concurrent) stage in the place-shaping continuum – management.

Shaping through Management

Left to their own devices, the 'natural' but unknowing processes of use will continue to shape and re-shape the experience of place. Rarely, however, is urban space left to its own devises as almost all space (to a greater or lesser degree) is managed. These processes may give rise to small scale, typically incremental, physical changes in the public realm: new street furniture, signage, repairs, planting, etc.; but are just as likely to give rise to more significant social or 'space in use' changes: in the way spaces are occupied and used, in traffic flows, in the profile of users, in the occupancy and use of surrounding buildings or parts of them, in policing, and so forth. Individually they are 'self-consciously' designed and deliberate in intention, but the impact on place-shaping at large—on the larger urban design—will often be unconsidered and only 'unknowingly' affected, operated as they are by a series of specialist or technical operators, which, in the public sector at least, typically work in silos (Carmona, de Magalhaes, and Hammond 2008, 19–22).

In the London case studies, with the exception of domestic spaces in the residential schemes, long-term freeholders were both involved in the public space

development process and retained responsibility for stewardship thereafter. Whether public or private, the incentive was therefore there from the start to fully consider on-going management costs and liabilities and to ensure that these issues were appropriately reflected in design solutions. This, however, was not always incentive enough.

Investing long-term. A characteristic of speculative development processes is a strong short-term emphasis on product—on getting the project designed, delivered and disposed of (Leinberger 2008, 183). With regard to the provision of public space, the research counter-intuitively suggested that the public sector most exemplifies this. Thus, on completion, projects are passed from one department and budget to another, the result being that high quality capital funded schemes can quickly deteriorate because standardized and inflexible management regimes dictated by the realities of revenue funding are not up to the bespoke aspirations of designers and project promoters, even within the same organization. For private schemes, by contrast, he who pays the piper calls the tune. In corporate developments, for example, the needs of tenants to project their image into the public realm leads to high specification, highly managed environments. Domestic spaces in residential developments are also invariably run in the interests of their private resident communities, which typically includes the need to keep management costs down, for example by discouraging activities such as ball games with maintenance implications. The experience across all forms of public space emphasizes the importance of including long-term management expertise within the design/development team from the start and being realistic about the funding and skill levels available to achieve resilient outcomes.

Everyday stewardship. Underpinning differential investment in the long-term management of places are very different rationales. For corporate developers, building-in resilience and nurturing it through careful stewardship helps to maintain long-term asset values. At Gabriel's Wharf, by contrast, the 'temporary' nature of the development means that it has had very little maintenance over its lifetime, although the somewhat scruffy and faded look of the space is part of its charm and plays into the brand identity and business model of the wharf, just as pristine Canada Square does to the model at Canary Wharf. The nature of the space therefore dictates the nature of the management regime (Figure 10). The

Figure 10. Maintaining corporate asset values vs. perpetuating an 'alternative' feel: (i) Canada Square (ii) Gabriel's Wharf.

public sector, by contrast, does not operate on a business model but on a public service rationale with spaces typically managed on the basis of specified performance expectations tied to:

- Contracting out management services.
- Classifying spaces according to user load.
- Set programmes for regular maintenance.
- 'As and when' approaches to specialist services e.g. chewing gum or graffiti removal.

Rather than operating as self-contained closed management systems, as private developments do, the public sector manages the infinitely variable spaces of a continuous connected public realm. New public spaces have to fit as best as can be arranged within this regime.

Curating place. As well as prosaic stewardship roles, proactive curatorial activities are advocated by some as a route to a more vibrant urban public realm (Montgomery 1998). Almost all of the case studies featured such activities to some degree, and many had been designed with plug-in infrastructure to suit. In the corporate world this is viewed as helping to create a stimulating environment for workers whilst attracting users to associated retail, and contributing to the wider civic life of their localities through hosting charity, religious and key memorial events. In consumption, civic and community-oriented spaces, practice varied widely, from low-key and occasional arts and community events focused on particular local audiences, to regular activities such as farmers markets, to highly organized programmes of entertainments. The major exception were the domestic spaces, where the failure to encourage active pursuits contributed to their sedate character. This may or may not be appropriate for residential spaces, but contrasted strongly with the original intentions for such spaces. A key lesson was therefore that organized activities need to be considered and factored into the design process from the start, alongside, location by location, a realistic assessment about whether they are desirable and viable at all.

Controlling space. Some of the most ardent criticisms of contemporary public space (both private and public) are reserved for the manner in which it is controlled (Low 2006, 82; Minton 2009, 29–36 etc.). London's spaces adopted security regimes that ranged from nothing (beyond standard policing) to the creation of über-secure environments with, variously, dedicated private or public security, extensive CCTV and night-time gating. As well as deterrents to serious crime, these measures were deployed to enforce a range of petty-controls, sometimes denoted explicitly through on-site signage to ban 'offending' behaviours such as cycling, unauthorized trading, and the consumption of alcohol, and sometimes implicitly, for example, control of begging, unauthorized selling or demonstrating in private/public spaces. 'Soft controls' (Loukaitou-Sideris and Banerjee 1998, 183–185) were also regularly used to design-out activities considered undesirable, such as skateboarding, with positive displacement strategies (facilitating activities elsewhere) seen far less often (Figure 11). Overwhelmingly, however, security and other means of controlling 'undesirable' activities were seen by public space users as a necessary (even reassuring) part of the process of making and maintaining desirable places to be.

Figure 11. Encouraging (i) and discouraging (ii) fun.

Redevelop/revitalise. Like use, management will be open-ended and continuous. However, even the most historic of built environments will be subject to development pressures that from time to time will lead to redevelopment or revitalization. Of the 14 public space case studies, six were entirely new spaces where no public space had existed before, two were complete redevelopments of pre-existing spaces, and a further six were spaces that were revitalized (albeit radically) and given a new purpose. With the exception of the new projects, the others had, in effect, already been around the place-shaping continuum at least once and were journeying around the continuum again (Paternoster Square at least three times). Thus, in any one location, urban design starts with a formal design process, and for most places, at sometime, it will also end with design in whole or in part, having been subject to a range of continual place-shaping processes in between.

The Power and Process of Shaping Place

Power Relationships (Agency and Structure)

The twin forces of agency and structure are extensively discussed across the social sciences. From a detailed examination of London's processes of public space creation and recreation it has been possible to map out common parts of a continuum of place-shaping—the structure. However, threading through the sub-processes of this larger urban design is a final common dimension relating to how each stage is shaped by the different players involved in these processes—the agency—and by their power relationships. This notion is also well documented in the urban design literature (e.g. Lang 1994, 457) that typically posits greatest power in the hands of those with the resources to actually deliver new development—the developers and investors.

Historically this has also been the case in London, power that has sometimes frustrated other players (Hebbert 1998, 75–77). However, that is not the whole

story, particularly in a context of varied ownership; of the 13 built case studies just three were led and delivered by private developers acting in isolation, one by a state owned private company, one by a private/public partnership, one by a private/social enterprise partnership, five by the public sector and two by charitable trusts. In fact, the case studies demonstrated that how public space is shaped and re-shaped depends on six factors, each representing a particular stakeholder group:

1. The aspirations, resources and determination of those who own the space, whether public or private.
2. The aspirations, powers and skills of those with regulatory responsibilities and their willingness to intervene to secure particular ends.
3. The aspirations, skills and sensibilities of designers; the scope given to them by the first two stakeholder groups (above), and their awareness of the needs and aspirations of the last three groups (below).
4. The aspirations of communities and their ability and determination to influence the work of the first three stakeholder groups (above).
5. The aspirations, resources and abilities of those with long-term management responsibility for the space.
6. The manner with which public space users engage with spaces and, through their use, define and redefine the nature of each space over time.

In London, the relationships between these groups vary significantly between developments (see Table 1). Moreover, a common distinguishing feature of urban design seems to be that generally it involves a larger range of stakeholder groups than many building development projects and that the influence wielded by even the same stakeholder from one place to the next can vary significantly, whether intentionally or not. Ultimately, it is possible to conclude that structure trumps agency in so far as it is the constant whilst there is no ideal set of power relationships and power shifts across time, but also that these power relationships sit at the heart of the urban design—place-shaping—process, dictating the flow and function of the process itself, and the nature of its outcomes.

The research suggested, for example, that public space managers typically have very little input and power during design and development processes, but, following completion, their role can be decisive in shaping (either positively or negatively) the social context for use. Planners, by contrast, have a significant influence on projects as they pass through the regulatory gateway, after which their control is minimal unless and until significant change is once again proposed. Table 4 summarizes some of the key power relationships in London and how these (typically) vary across the place-shaping continuum. In each case, if aspirations are to be reconciled and not undermined by the actions of those with stronger inputs earlier or later in the process, then for each stakeholder group, and across each phase of the place-shaping process, it will be important to understand where the power lies and how it waxes and wanes.

Ultimately, A Theory of Process

Ultimately, it is hypothesized that the story of public space cannot be grasped without understanding the full range of influences that act together to shape the process, and thereby the outcomes of public space development projects. Thus it is necessary to understand and critique urban design in terms of its normative

Table 4. Recurring power relationships in the shaping of London's public spaces.

		Influence by phase			
Stakeholder	Power	Design	Development	Space (or place) in use	Management
Local authority providers	In local authority driven public space schemes, the concurrence of regulatory, development, funding and management powers in one place creates a powerful cocktail of influence able to deliver effective and positive change (and occasionally to conspire in the delivery of major public space blunders)	Significant	High	Low	Low
Private developers / investors	Private and pseudo-private promoters of schemes are critical in establishing the funding package and set of alliances within which many schemes happen. In corporate and consumption-oriented schemes the stake and influence is typically long-term, but in residential schemes, typically short-term	Significant	High	Significant (through hands-on management)	High (if long-term interest maintained)
Masterplanner	In market-driven schemes the power of the masterplanner comes from their unique ability to creatively shape the development, contextual and regulatory constraints to create marketable solutions	High	Low (but can be high if design is seen as a key factor)	Low	Some
Public space designers	Landscape designers and other 'detailed public space designers often feel frustrated that they are left 'decorating' a space already defined in its essentials by others, but their role in realizing liveable space should be fundamental	Significant	Low	Low	Some

(*Continued*)

Table 4. (*Continued*)

Stakeholder	Power	Influence by phase			
		Design	Development	Space (or place) in use	Management
Planners	Planning seems to have a relatively minor role in positively shaping the nature of London's public spaces beyond its crude land-use (zoning) and reactive regulatory responsibilities	Low (but potentially high)	Significant (but potentially high)	Low	Low
Conservation	Heritage stakeholders wield significant influence on schemes situated in historic locations, but are generally responsive to innovation that respects its historic context	Significant (if in historic location)	High (if in historic location)	Low	Low
Everyday users	Users and potential users typically have very little power in the formal processes of shaping and reshaping space, although their actions ultimately shape the nature of space in use	Low	Low	High	Low
Managers	Post-completion market circumstances and on-going management practices have the power to make or break any design/development vision	Low	Low	Significant	High
The wider community	The influence of the community, through their elected representatives, can be significant and decisive, but is more often unengaged and seemingly uncon-cerned about public space projects	Low	Low (occasionally high)	Low	Low

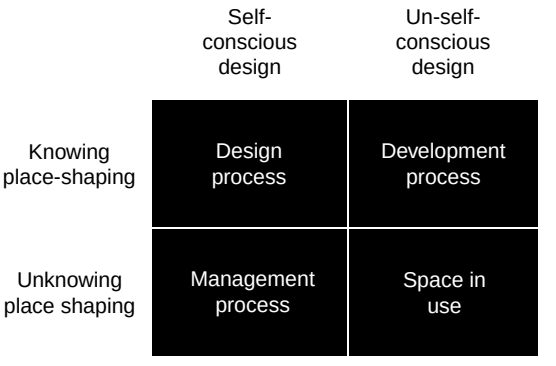


Figure 12. The typical sub-processes of urban design.

outcome-based intentions, but in order to both theorize and influence it, we need to also understand it as a process:

- Informed by its historical place-based modes of operation.
- Set within a contemporary polity or policy-influenced political economic context.
- Defined by a particular set of stakeholder power relationships.

It is further argued that it is necessary to understand the creation, re-creation and performance of the built environment across four interrelated process dimensions, self-consciously and un-self-consciously using design processes to knowingly and unknowingly shape place (Figure 12). Thus it is not just design, nor even development processes, that shape the experience of space, but instead the combined outcomes and interactions between:

- Design—the key aspirations and vision, and contextual and stakeholder influences for a particular project or set of proposals.
- Development—the power relationships, and processes of negotiation, regulation and delivery for a particular project or set of proposals.
- Space (or place) in use—who uses a particular place, how, why, when and with what consequences and conflicts.
- Management—the place-based responsibilities for stewardship, security, maintenance and ongoing funding.

Moreover, this is not a series of discrete episodes and activities as we often attempt to understand them from our siloed standpoints, but instead a continuous integrated process or continuum from history to and through each of the place-shaping processes of today and on to tomorrow. Sometimes the focus will be on particular projects or sets of interventions (design and development) to shape the physical public realm for use, and sometimes on the everyday processes of place (use and management), shaping the social public realm through use. In other words, as suggested in Figure 2, processes of change are continually defined and moulded by allied historic and contemporary processes of place, polity and power (see Figure 2), encapsulated in London through the historically defined but continually refined political economy of the London-way, and in every other city by their own characteristic way.

This then is 'urban design'. Not a physical intervention in pursuit of narrow project outcomes nor a set of normative design objectives; not a particular style or

trend-based 'urbanism' or a constrained response to a borrowed intellectual construct; and certainly not a rejection of the very notion of urban design per se because of its still evolutionary, mongrel or simply 'difficult' nature. Instead, urban design represents an on-going journey through which places are continuously shaped and re-shaped—physically, socially and economically—through periodic planned intervention, day-to-day occupation and the long-term guardianship of place.

In all its complexity and variety, the 'processes' by which urban places are shaped define the unique core of urban design. Greater focus on these processes would not devalue or dismiss debates about the normative content of what is or is not good urban design, nor discussions about its relation and contribution to allied theoretical fields. Instead, it would act as an anchor to the discipline in a similar manner that ethnography, as a subject, is anchored by its methods, or law, by the system of government. If the core is recognized (even if not fully understood), arguments over the nature of the periphery, what and where it is, would matter far less.

Yet Banerjee and Loukaitou-Sideris (2011, 275) have observed that "Not much literature has focused on the process of urban design and its relationship to the final design outcome". They have argued that although some see design as a 'glass box' process, completely explicable and capable of understanding and refinement, more often it is viewed as a 'black box' phenomenon, obscured by the fathomless complexities and depths of the design imagination. They conclude that the reality is likely to lay somewhere between, in other words, explicable but fathomless. To understand it certainly requires an integrative understanding of historically and politically defined place and a long-term view of knowing and unknowing processes and outcomes and how they are moulded through changing complex power relationships. Its discernment offers an appropriate core for intellectual enquiry and policy/practice innovation in urban design.

Note

1. 70 universities with urban design programmes are listed on just three English language websites: http://www.udg.org.uk/universities, http://www.rudi.net/pages/9074#eu, http://www.gradschools.com/search-programs/urban-design/masters.

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