

**From Masterplanning to Adaptive
Planning: understanding the
contemporary tools and processes
for civic urban order**

Lucy Georgina Bullivant

PhD by Prior Output

**The Sir John Cass Faculty of Art,
Architecture & Design
London Metropolitan University**

Supervisor: Professor Peter Carl

Date of submission: October 2014

Contents

<i>Section heading</i>	<i>Page numbers</i>
Abstract	page 4
Introduction	page 5-7
Research methodology:	pages 5-9
Overview	page 7-9
My portfolio	page 8
Definition of my research topics and aims	page 8
Impact of my research	page 8
Thematic commonalities and diversities	page 8-9
Research hypothesis	pages 9-12
The problem of an ethical, civic cultural order:	pages 12-15
Cultural differences	page 12
Urban planning history	pages 12-15
The masterplan:	pages 15-25
Overview	pages 15-17
Alternative masterplanning tools and processes	pages 17-20
The adaptive masterplan	pages 20-22
The masterplanning framework	pages 22-23
The influence of temporal factors on plans	pages 23-24
Performative processes	pages 24-25
Zoning:	pages 25-28
Zoning orthodoxies and alternatives	pages 25-28
Social equity and urban design:	pages 28-32
Overview	pages 28-29
Alternative public space models	pages 29-30
Participatory processes	pages 30-32
Multiple scales of planning	pages 32-33
The plan as legal instrument	pages 33-34
Landscape urbanism	pages 34-36
Ecological urbanism	pages 36-37
The role and identity of planning tools:	pages 37-43
The masterplan's modes of representation	pages 37-39
Digital planning tools	pages 39-40
Planning processes, digital tools and use of data	pages 40-41
Evaluating the impact of digitally enabled urban design and planning	pages 41-43

Critical overview of planning tools in the context of urbanisation	pages 43-46
Portfolio:	pages 48-60
Introduction	page 48
1. 'Space Invaders: Introduction', in <i>Space Invaders: 15 emerging new British architects</i> , exhibition catalogue, British Council, 2001.	pages 49-50
2. 'Cumbernauld New Town: Tomorrow's Town Today', essay in <i>Happy: Cities and Public Happiness in Post-war Europe</i> (Ed. Cor Wagenaar), NAI Publishers, Rotterdam, 2004.	page 51
3. 'Istanbul: Talking Over the Strait', Volume, The Guide issue, #4, 2009.	pages 52-53
4. 'A message to transform urban futures: 'everything fits here but not everything goes': Barcelona, Spain', The Architectural Review, February 2011	pages 54-55
5. 'Urban Age Hong Kong', 12 December 2011, Domus website, Domus Editoriale.	page 56
6. <i>Masterplanning Futures</i> (Routledge, 2012), winner of Book of the Year, Urban Design Awards, February 2014. Presented as a hardback book	pages 57-58
7. Urbanista.org webzine (www.urbanista.org), founded December 2012. Viewable online at www.urbanistas.org	pages 59-60
Conclusion	pages 61-71
Declaration	page 72

Abstract

My research is an examination of the scope of contemporary urban design and planning tools and processes which can act as alternative qualitative methodologies for the renewal of urban conditions at multiple scales through adaptive methods embracing change, stresses and shocks affecting societies and the city as a growing epicentre of human inhabitation and complex systems. With growing urbanisation, the question of what constitutes liveable urbanism across urban territories is a critical one.

Addressing the lack of unified and culturally aware analysis of the evolution in urban design and planning practice being applied in various contexts across the developed and developing world, I have, through my own international research programme over more than 15 years, traced their potentials for incubating renewal through a collection of published outputs, each with their own approach: a book, essays for the media and for exhibition catalogues and a webzine.

Through examination I have learned about the capacities of tools and processes to break with silo thinking and damaging legacies of the past, and to adapt, or to forge new instrumentalities in ways that are context-responsive and situational. My focus has been on studying largely ongoing, phased projects, so this is a work in progress. This self-appointed intellectual mandate for comparative urbanism has required a form of evaluation that includes consideration of the use and mis-use of history and old rules, operational narratives and contestatory factors, enquiry into assumptions made, responsibilities claimed, and objectives combining issues of determination (of plans, by their clients) and self-determination (of communities).

I have striven to show how the recognition of planning baggage and the emptying out of its tactics, is, in diverse ways, creating space for alternative behaviors in the form of new, potentially more socially equitable and responsive patterns of operation, engaging and reusing resources. I have learned that new hybrid processes of top down and bottom up planning, and interest in engaging with multi-modal approaches with their relative novelty and unprecedented forms of complexity, represent major challenges to long-held beliefs about planning's role in society and the typical relationships between planner and those planned for. They foster a sense of the symbiotic relationships, interdependencies, alliances and self-determination cities need to generate their futures in socially equitable and resilient ways.

My body of research will help inform and contribute methodologies and concepts to future outputs on related themes concerning urban design and planning's role and identity, including issues of Urbanista.org, my webzine. The wider implications of my research are also that institutions involved in land use of all kinds accordingly need to carry a responsibility to adopt a higher commitment to the value of and need for adaptive instruments of civic urban order.

Introduction

My overall research project has tried to understand at a profound level the practice of urban renewal through specific tools and processes in today's neo-liberalist political, economic and social contexts. There have been huge changes to urban territories across the globe, and 2.5 billion people are estimated to join urban populations by 2050, increasing its combined population from 54% to 66%¹. Emerging land use patterns, ecological and financial meltdowns, demographic shifts and socio-political contestations represent interrelated complexities. In setting forth my critical appraisal of my research aims given below, I contend that such complexities and their overt and latent interconnections must be researched and negotiated if adaptive design and planning tools and processes are to embody the necessary criticality to lend them value in civic urban order and the difference that needs to accompany it.

As part of the systematic acquisition and understanding of a substantial body of knowledge, I have examined a range of professional practices taking place under the umbrella of urban design and planning, recognised by peers to greater and lesser degrees, and perceived by wider publics to a far lesser degree in different ways. In each case, professional sectors and lay publics, the forms of engagement can be said to be simultaneously shifting, and yet rooted in anachronistic practices. In what ways have urban designers and planners in the last 15 years, through both their commercial and speculative work, responded to the fracturing effects of urbanization by devising and incorporating new tools and processes arising from conceptual strategies which actively engage with the notion of an ethical civic order, and lend leverage to the city as a resource for all? What existing factors and protocols need co-option, adaptation and eradication in the process, without which their impact is lessened or even negated?

Today's context is one of emerging specific patterns of urbanisation, namely urban growth and privatization, within a neo-liberal phase of capitalism. This condition cannot necessarily to be assumed to exist world-wide as free market capitalist democracy, as the marked contemporary distinctions between the political systems of, for example, mainland China, Hong Kong and Taiwan, remind us. Contemporary urban planning is largely applied to municipalities run on consumerist lines and reshaping the city in an idealized, controlled form, in which 'affordable housing' of lower income workers is usually inadequate in number, more limited in an official sense, sited inconveniently, or being appropriated by local councils in order to push forward new development schemes.

Urban planning as a profession has at many different points in its history strived for a scientific approach of a kind that excluded social issues. While top down urban planning has been carried out for centuries, the first US National Conference on City Planning staged in 1909 coincided with the inauguration of the new profession of urban planners. These figures initially came from many disciplines, a feature that characterizes the most versatile urban design and planning teams today. On the other hand, at that early date in the US, practitioners' most powerful new urban planning tool put most forcefully into use was the zoning of land, legally approved by the US Supreme Court from 1926. While it was justified on the grounds of building types such as factories and homes not mixing, it brought extensive social dislocation in its wake.

In the aftermath of 20th century conceptions of the rational city, deemed by M. Christine Boyer a mythical 'promise of technical utilitarianism and functional organisation',² with private interests penetrating the public sphere, there has been a rise in a form of urbanism ('residual rational city', 'post-rational city', and 'neo-liberal city', are possible terms that come to mind, and not the 'symbiocity', a term coined by ETH Zurich students researching Chengdu, China, in 2013, that seems antithetical to such conceptions) propelled by notion of the city as product and dominated by exchange value, that is concerned with recreation of districts on luxury lines, not regeneration in the sense of creating an equilibrium of benefit that is egalitarian (redolent of UK Welfare State principles applied after the Second World War, enabling the rebuilding of society). This is represented by urban space developments that frequently fail to acknowledge the need for a sufficient equity in the urban condition, or change with consent, regarding such issues as somebody else's business.

¹ United Nations, <http://www.un.org/en/development/desa/news/population/world-urbanization-prospects-2014.html>

² Boyer, C M, *Dreaming the Rational City: The Myth of American City Planning*, The MIT Press, 1983.

In spite of the political marketing speak announcing the UK's Localism Act of 2011, existing local community groups and newly assembled collectives of this kind acting unilaterally do not in their congregating patterns of behaviour, even with the emerging impact of crowdfunding, lend sufficient leverage to influence this situation. A number of tense ethical conflicts are present within the complex terrain of the contemporary urban condition; this urgently calls for professional engagement, rather than a liberal/neo-liberal overriding.

In what ways, therefore, in spite of the challenges, are urban design practices – through custom-designed, tailor-made plans, frameworks, tools and processes – showing signs of honouring the city as a condition of multiplicities and locus for the building of local communities, capacities and social capital? How can tools and processes be further strengthened in their approach and rigour in order to engage at a profound level, fulfilling a professional duty of care in optimum ways? As an exhibition curator I am also interested in whether this theme is conveyed and thrown open for discussion in sufficiently deep and lay-friendly ways at ticketed architecture and urbanism Biennale and Triennale events such as Rotterdam, Venice and Oslo, for example.

The issue of the endangerment of the civic sphere discussed by Benjamin, Simmel, Mumford, Boyer and others is not a new issue. The body of thinking that affirms the Right to the City (Lefebvre et al) and proponents citing it today (Boyer, Roy), also widely acknowledge the nature of the Arab Spring and the Occupy movement as centring on fierce contestations over democracy and its imposed limitations, manifested through uses of land, and issues of access as well as related human rights issues concerning labour and amenities.

Planning has traditionally been determinist, while in the 1960s the concept of universal space was envisaged (for example, by Archigram, Cedric Price, SuperStudio and Archizoom) as a way to enable anything to happen. Today cities carry their planning baggage in myriad ways: there are cultures with colonial planning inheritances (for example, under the auspices of the Commonwealth, in Nigeria, South Australia); centralized governments with ideals based on past 'glories', or new urgencies such as the need to generate a post-fossil fuel dependent knowledge-based economy whose silo administrations and complicity with the market limits their operating tactics (the UK, now France as the state has diminished scope for 'grand projects', and widely across Europe; Abu Dhabi, in the case of the latter phenomenon); there are prevalent urbanist tendencies which, due to a lack of rigour in urban planning culture, lay waste to mono-functional and spatial suburbanization and volume house builder monopolies (Norway, for example), and even when there has been a strong history of urban planning, initiatives leading to what have been critically acknowledged to be monocultural results (the national, regional and local policy of VINEX development sites implemented in the Netherlands, 1995-2005, for example).

In my research I differentiate 'tools' and 'processes' while also recognising that they also overlap in meaning. Planning 'tools' signify instruments and frameworks (conceptual plans into which transdisciplinary intelligence and applied research is fed, intended to achieve a set of objectives that are wide in scope: aesthetic, regenerative, and sustainable), as well as individual tools of representation e.g. transect plans, and today strongly associated with digital parametric software both pre-defined for planning purposes and customised by the designer for specific uses. A masterplan is also seen as a marketing tool, as a persuasive, communicative device to convince investors, partners and citizens of its merit.

'Processes', by comparison, connotes the range of planning activities proposed by masterplans and frameworks, each of which has been devised with an anticipated cause and effect. Examples of processes include the remediation of land increasingly necessary in post-industrial contexts; public consultation processes which are boosted today by increasing interest in citizen participation; the implementation of new cycles of reuse of resources, either recognised ecological systems such as Cradle to Cradle, or retrofitting; mapping as part of research to provide fresh data on which to base propositions; and reconceptualisation, for example, of the uses of land, resources and facilities, or the ways in which local businesses can be nurtured.

I have been concerned with what strategies for emerging adaptive plans by architects and urban designers through specific new tools and processes identified during the course of my research demonstrate on a practical, yet conceptual basis: how the city can be approached as a complex system with a potentially ethical civic order. I have applied the questions: planning tools and processes 'by whom?' and 'for whom?' These are problematic refrains, but essential if the forensic approach to adaptive planning tools

and processes is to be regarded as incisive.

In assessing their commonalities, it is clear that all apply a value system of ‘scientific politics’ (as Rowe and Koetter argue in *Collage City*)³ as an alternative to the pre-determined utopian plans of the past. While varied in their individual processes and identities, such tools and processes serve to acknowledge the city as an ongoing collective effort. They adopt a largely non-generic approach; they also harness public consultation, not as token lip service as in the case of many developments, but as part of their localized strategies that deal with, and marshal, a diversity of conditions.

Adaptive planning is far more than simply the addition of new buildings – public amenities, housing or infrastructure – but needs to be perceived as an entire ecology of social inclusivity. As an emerging culture, its tasks and challenges continue to call for advanced multidisciplinary collaboration across knowledge silos, but also appropriately geared tools and frameworks. This calls for a high degree of situational research deployed.

The role of the urban designer as critical register and advocate of ethical civic order should not be seen as necessarily antithetical to commercial practice, as self-briefs do not alone constitute a sufficiently powerful critical mass. Moreover stakeholders’ practices are more likely to be influenced by an active and rigorous urban design and planning culture if the powers of the generalist design professions operating within its territory are not applied hermetically. Historically this has been the case, for example, these dual objectives were key to the building of garden cities such as Letchworth in the UK (not that this model of practice showed great stability – Ebenezer Howard, its instigator, went bankrupt before Welwyn Garden City, the urban successor he ploughed on with at Letchworth, was completed). Today’s urban public realms, in reality privatised, as Anna Minton’s published research⁴ investigates, and the degree to which there is scope to act within this political and economic context, calls for maximum creativity in adaptive strategies.

The civic identity of such instruments in terms of the renewal of civic space is mostly not yet enshrined on a mandatory legal basis, but propositional through change with civic consent. Today the challenge for the socially minded designer is to identify opportunities in the course of practice to serve chosen value systems, addressing issues of equitable land use and access, including working with community land trusts (CLT) who may have had to fight extensive battles for the right to build genuinely affordable housing in perpetuity, for example, or, in the UK, exploiting the Section 106 instrument to provide new public realm.

Research methodology

Overview

For my PhD by Prior Output I present my research and its outputs as a coherent body of work and collective embodiment of a newer form of urbanist research acknowledged to possess significant agency within the current political, economic, social, cultural and ecological climate. As an internationally operating specialist – a curator of exhibitions, conferences and talks; author of a number of published books; editor of published magazines and founder of my own webzine (Urbanista.org); widely published critic; member of numerous advisory panels of specialist bodies, and competition juries; consultant and advisor; Professor of urban design history and theory (Syracuse University), and guest lecturer and chair – I use my projects across these fields of specialist endeavour as vehicles of quasi-participatory research.

These activities have entailed empirical work, interviews, spatial analysis, analysis of decision-making procedures and outcomes, historical and theoretical texts, lectures, public events and advisory panel work. They have originated from both a). commissions by a client – *Masterplanning Futures*, my book published by Routledge in 2012⁵, being a recent example – but also b). advanced according to a self-

³ Rowe, C, and Koetter, F, *Collage City*, MIT Press, 1984.

⁴ Minton, A, *Ground Control: Fear and Happiness in the 21st century City*, Penguin, 2012.

⁵ Bullivant, L, *Masterplanning Futures*, Routledge, 2012. Thereafter referred to in footnotes as *MF*.

brief: my webzine, Urbanista.org, founded by me in 2012, is a prime example of the latter, both of which are presented as portfolio items as part of my PhD by Prior Output. Non-institutionally based, my practice has brought a range of insights, some of which have more traction; others, more ephemeral power. I have formulated them individually as outputs, each one reaching different audiences than others.

My investigations lead me to conclude that the question of what is research in architecture is currently pitched between pure scholarship – either history/interpretation, or building science – and a more ambiguous plea for design as research which in many widespread cases has validity and leverage in the formation of tools and processes of validity in specific contexts. My own work has a meta-focus in the sense that I am not personally preparing, in the formal role of a trained architect, urban designer or planner, to design urban frameworks other than for exhibitions, media and public congress. However my roles are entirely complementary to these processes; and my attention to relational patterns, specificities, barriers, paradoxes and latent possibilities is critically and actively nurtured through my ongoing work. One distinct feature of my role is that I am freer to share the results of my research in the public domain, since the practitioners above are often restrained by client protocols in this respect.

My portfolio

To support my case for my PhD by Prior Output I am presenting a portfolio of some of the most significant of my outputs. Details are given at the end of this document. They include my book *Masterplanning Futures* (Routledge, 2012, winner of Book of the Year, Urban Design Awards, February 2014), and some published essays, which are a key part of a larger programme of research I operate, including my webzine Urbanista.org, one element in my submission.

Definition of my research topics and aims

My research topics and aims constitute a broad but interrelated body, and continue to stay roughly the same – how to make civic/ethical order – but the constituents and cities/urban regions change. My investigations of aspects of this theme include empirical, original research. By ‘research’ I mean research questions, methodology and means of dissemination/strategies for supporting ‘impact’ in addressing the needs of individual citizens, public and voluntary sectors and commerce. This new form of research I have invented, applying a mix of investigative journalistic, academic research, curatorial, writing, editorial, advisory, mentoring, advocacy, managerial, entrepreneurial and financial planning skills. Paraphrasing Wikipedia’s entry on ‘invention’⁶, my research aims have been to formulate questions and instincts as insights, seeing new possibilities, connectivities and relationships as well as barriers, and combining concepts and elements from different realms not usually put together; identifying new genres; applying those insights through unique processes and methods in order to change and/or discard conventions, and help improve processes for creating a result, extending the boundaries of knowledge, experience and capability.

Impact of my research

My research can be deemed to be effective in the sense that it has ‘impact’, meaning that it generates insights of which people take account through the benefits outlined above, and it is ongoing, and in a constant process of ‘updating’. It achieves the status of being significant, rigorous, vital, generative of new ideas, using existing knowledge in experimental ways to produce new or substantially improved processes, and sustainable in its objectives. In terms of financial support for my research projects, I have included a note in the portfolio entries about the research income and research income in kind obtained through these activities.

Thematic commonalities and diversities

I have considered in depth a wide range of urban contexts, finding that each one, in its own way, has its own story of ethical conflicts and tensions shaping the history of urban design echoing others: the thirst for profit, the challenges of patterns of settlement and population growth, social and geographical divisiveness caused by urban design, loss of heritage, the limitations of housing provision by the state or through the private market, market fantasies about systems and frameworks, choice, opportunity,

⁶ <https://en.wikipedia.org/wiki/Invention>.

outcomes and the biddability of customers, safety and social determinism, and the rise of a close identification between cultural and technological innovation and both national economic policy and gentrification.

Researching and writing about the problem of an ethical or civic urban order has credibility in the context of huge urban growth, not just recent attempts in Asia and the Far East to make huge projects of social transformation, but affecting any cities and regions with expanding populations (London, Las Vegas being two). The giant model centrepiece of the Urban Planning Museum in Shanghai represents 'the future', and yet its fast-track incubation eschews incrementalism in which community groups have a developmental role. This is evidenced by increasing community campaigns against displacement. In the UK, central government has invited proposals for a new wave of 'garden cities' drawing on the ideals of the original Garden Cities from the early 19th century. By contrast the US and Europe are today burdened by a relatively more hesitant and cash-strapped approach to development, growth and land use, with security issues used to block creativity and design permitting spontaneity. The proliferation of voices and projects advocating alternatives to both a full philosophical embrace of limits, and to fast-track top down development, represents a middle ground that draws on a wider embrace of citizen participation and other modes of reciprocity in adaptive planning.

To advance such an enquiry, some authors have seen the value of studying one geographically located model, for example, in *Shanghai New Towns: searching for community and identity in a sprawling metropolis*⁷ (Harry den Hartog), which focuses on the decentralization of planning derived from classic Western examples; while others study urbanist strategies across a whole continent, in the case of *Radical Cities*, on Latin American social urbanism, by Justin McGuirk.⁸

However it is also important to undertake comparative analysis of new models of planning globally emerging from more innovative, synthesising approaches relying on the willingness of client bodies to transcend a zoned or otherwise conventional masterplanning approach. My attendance at each of The Urban Age conferences, an initiative of LSE Cities and the Alfred Herrhausen Society, from the date of its Mexico City event in 2004 onwards, showed me that focusing on the dynamics of top down and bottom up planning is key; however while generously supplied with pre-event research findings, I find an absence of post-event evaluation and analysis of the various discourses by public and private sector specialists presenting; while the extensive *Living in the Endless City*⁹ publication largely represents speakers views, rather than those of the audience. The most instrumental publication emanating from Urban Age to date has been the recent *Handmade Urbanism: from Community Initiatives to Participatory Models*.¹⁰

Research hypothesis

My work foregrounds the issues of liveable urbanism and how cities can be improved through urban design. My hypothesis is that within the overall project of urban renewal, counter-practices to masterplanning - as a traditional, rigid, wholly top down, rationalizing operation for bringing about a comprehensive planning scheme -, have emerged in the recent years, evolving as models of diversified adaptive planning that favour wider outcomes which are largely socially and culturally regenerative.

This is a multidisciplinary approach that draws on the skilled input of landscape architecture, engineering, ecology, geology and urban physics, as well as social psychology and anthropology. It has been prevalent in the Global South, where approaches to the informal have been longstanding and incremental in character, applying acupuncture and retrofitting, helping to grow resources and build capacities in environments of dense adjacencies between rich and poor, but also municipal masterplans and

⁷ Hartog, H den (Ed.), *Shanghai New Towns: searching for community and identity in a sprawling metropolis*, 010, 2010

⁸ McGuirk, Justin, *Radical Cities: Across Latin America in Search of a New Architecture*, Verso Books, 2014.

⁹ Burdett, R and Sudjic, D, *Living in the Endless City*, Phaidon Press, 2011.

¹⁰ Rosa, M L, Weiland, U E, *Handmade Urbanism: from Community Initiatives to Participatory Models*, Jovis Verlag GmbH, 2013.

infrastructure schemes have directly addressed poverty and social exclusion (Medellín, Bogotá, São Paulo, Constitución and others), represented by a segment of *Masterplanning Futures* on plans for social equity.¹¹

Adaptive planning at best is distinctly about custom design, rather than merely following rules. In the former guise it creates fertile processes and produces innovative methodologies, and in many cases casts the protagonists – urban designers, the clients in a range of guises from the private and/or public sectors and local communities – into challenging new ways of interacting in which the existing tools and processes get pushed to the limits of their viability and frequently get broken, since they are often brittle and blunt, in any case, in the face of new coalescences of urban complexity. It entails the task of bending and breaking, challenging and adapting existing rules and belief systems, and degrees of non-linear thinking that often rub up against the distinctly linear processes of business managers.

Adaptive planning rejects the task of zoning space, and applies a more metabolic approach to spatial relationships that responds holistically to the disjunctures of globalization, urbanization, natural disasters and neo-liberal development affecting the socio-economic and ecological sustainability of cities. At all stages its cultural task is to combat the widespread belief that the market will take care of urban form, and is justified because that attention contains an agenda to ‘land grab’, and apply a social determinism, however superficially attractive.

Within the scenarios (Greenwich Peninsula, London, for example) in which developers purchase land from willing municipal bodies and up-market schemes are realised in a relative post-industrial ‘void’, long since lacking in a sense of place after previous industrial communities were displaced elsewhere, the quality of projects hinge on designers applying a natural inclination to field mixed tactics lending amenity. However for schemes to avoid enclavism, this has to be done in a spirit of localism so that others who do not live there can also enjoy the resulting effects on a context, and the fault lines need to be soft. The history of Greenwich Peninsula can be read as one in which considerable funds were already spent on a masterplan (by Farrell) for the site over many years which was then sidelined by the new owners who are reducing the percentage of affordable housing from 38% to 21% and increasing building size over the original plot boundaries.

Adaptive planning as a process is not consistent across the globe, and strong signs of the continuation of more conventional masterplanning persist gilded through focus on exciting amenities. The propagation of new identities for urban planning and its instrumentality in ways that are responsive to today’s social complexity puts into focus, as pertinent questions, issues of ‘who the master is’ and ‘whose future is being considered’.

The contemporary guiding vision of a framework or strategy is coming to be a pooled one of consensus, exceptionally, rather than ordinarily, including the local community, and the process of identifying influences through profound research and responses builds tactics which serve as a critique of old and newer practices. More conceptual framework than masterplan, and in some cases officially running in parallel to ongoing district masterplans (Making Space in Dalston by Muf Architecture + Art and J&L Gibbons in Dalston, being one recent example) today’s rightful equivalent constitutes a game plan in which the design processes and incremental outcomes are as important as ones that are long term.

The metaphor of a hybrid ecology that has emerged as an ‘engine’ or systemic process of desirable conditions for urban evolution can be applied in a myriad of ways in today’s networked society. These complex hybrid processes can instead constitute an adaptive plan – one that recognizes and makes responsible use of the interdependency of specific systems within urban ecologies – represents a far more complementary instrument. Industrial heritages and successions of ad hoc development in ‘unplanned, disconnected phases’ have already created unsustainable pieces of city that need to be retroactively managed if they are to be released for use.

However, the onus lies on planners to remake the ecology of territories in a way that carries an ethic of collectivity with it, and that is a task that invariably comes with multiple motives that should be detected at a profound level (for example, remediating the Onondaga Lake at Syracuse, a Rust Belt city upstate New York, affected by industry and urbanization, is finally in process, despite the closure of the main polluter in 1983, with accompanying plans for river walks that will also facilitate new ways of accessing

¹¹ *MF*, p115-155.

Destiny, not the city's lakeside future garden of Eden, but the existing super-sized local shopping mall, the sixth largest in the USA, which occupies a site near the lake, and along with the stadium is one of the city's chief monumental features above an eclectic mix of building stocks and styles).

My research hypothesis also hinges on the limited ways in which urban design and planning processes and tools are discussed more widely outside of academia. Contemporary masterplanning's conceptual foundation is constituted by design quality and image and procedural competence. I am interested in evidence of a critical expansion of the disciplinary base of urban design that transcends silo-based thinking. Masterplanning today is a major area of commercial work opportunities available, invariably through competitions; but strangely the contemporary forms it might take is a topic covered in a critical way by very few contemporary architectural publications, and more likely to be dissected through online specialist planning titles, or national newspapers.¹² *HafenCity Hamburg*¹³, an example of a published study of a single scheme, is an exception, produced by its client. *Stadtmachen.eu: urbanity and the planning culture in Europe*.¹⁴ The study is confined to European analysis, although it valuably discusses the validity of a 'new pragmatism' in architecture and urban design (see my essay, 'No More Tabula Rasa', 2007, in the Portfolio section), and other ideas of contemporary urban planning beyond the conventional masterplan including innovative 'bigness' as well as the reinvention of industrial settings, topics I have discussed extensively in *Masterplanning Futures*.¹⁵

I also contend that concepts of comprehensivity of plans are still valid. This is not to be confused with pre-determination. It makes sense to talk in terms of comprehensivity (as opposed to completing all the tick boxes), in terms of perception and aggregation, employing multi-disciplinary lenses, when sustainability in ecological, social and economic terms – of a both equitable and efficient nature is now a key requirement for most urban plans. Plans in today's network society rely on the increased use of digital media and these tools lend the process greater flexibility and enhances communication between participants and stakeholders. Moreover the experiential factor of urban design and planning was significantly readdressed by urban designer Jan Gehl in his anti-Modernist research and data collection and analysis in the early 1960s. This factor is a now commonly voiced aspiration, but less a practical reality in a total sense, unless the quality of the multidisciplinary team and overall perspective of the client regarding the cultural benefits of the investment are exceptional. Considering a possible shift in emphasis implied in the use of the term 'comprehensivity' from a more narrowly aesthetic outcome, it seems possible that its usage has migrated from the field of humanitarian campaigns concerning resources. For example, the Comprehensive Framework for Action was first cited by the United Nations in relation to their plan for food security in 2008.

However my key driver here is considering the factors behind the decision-making processes of a plan. There is an analogy with Jungian thinking about the value of paradox related to the human condition that is very relevant to considering interventions in urban contexts. A formula for a context may be limited if it does not grow directly from the varied nature of a context and its situation, accepting the weaknesses; it does not evaluate conflicting impulses in a way that serves them both, for example, a context in which a developer has bought land for a top down scheme that is essentially monocultural. This opportunity could, with stronger local government political agency, be placed in the hands of another developer, or more than one, in alliance with a community land trust, and a mixed-use scheme created, favouring educational, creative and business incubation, benefitting local people and others wishing to occupy the space. The growth model (privatised) and the community model (collective) can combine through paradox, rather than clash through a suppression of the latter by the former.

For a solution to most credibly emerge from the dynamics of the opposing energies facing each other, in a city, it should engage with formality and informality, enclosed space and open public space, retail buildings and street trading, fixed and flexible facilities and spatial solutions, certain controls by authorities and freedom. The ethical, unitized plan does not take away elements clustered at one pole, branding them as bad and incompatible with the others towards the other end of the spectrum; each

¹² Rosa, ML, Weiland, UE, *Handmade Urbanism: from Community Initiatives to Participatory Models*, Ibid.

¹³ *HafenCity Hamburg*, Springer Verlag, 2010.

¹⁴ *Stadtmachen.eu: urbanity and the planning culture in Europe*, Karl Krämer Verlag, 2008.

¹⁵ *MF*, in my essays on China (Qianhai Port City, OMA, pp250-263), *HafenCity*, Hamburg (pp45-56), *Milan UDP* (pp187-201) and *Copenhagen* (pp27-44).

represents a truth about human experience. Therefore such a plan concept carries an ethic about building re-use and waste recycling, rather than more drastic eradication methods of demolition. It is because it stays loyal to this paradox that it is a unitive vision.

The problem of an ethical, civic urban order

Cultural differences

A key problem the notion of an ethical, civic urban order presents is that it is hard to define in terms of accountability from top down governance, and to find the means to protect it from being usurped by narrow commercially driven development. Taking account of cultural differences, for example, the Islamic city was never intended to be democratic, and Socrates' agoras excluded women. Urbanism led paternalistically by industry at the time of the Enlightenment set rules, reasons and functions, but a dichotomy opened up as humanistic and social perspectives grew. Immanuel Kant, for example, recognised the obligation to challenge abstract, top-down planning with action based on reason and authenticity of thinking about personal responsibility towards ourselves and to others.¹⁶ John Locke's concept of 'the state of nature'¹⁷ relates to the making of a body politic based on explicit consent, but allows for situations in which citizens feel compelled to resist authority.

Cities' intense concentrations of people and economic surplus has made them fertile hubs for the evolution of culture and communication. Constraints on city form have always been topographical and climatic, while advantages have been proximity to water, natural transportation routes and harbours. Survival tactics have had to be forged to overcome natural disasters, war, terrorism and economic decline, but also pollution, and furthermore strategies deemed to be vital to stability achieving social definition, division and entitlement, one example of which is Baron Haussmann's military plan for Paris, widely only perceived today as wide boulevards.

The agency of human capital, first defined by William Petty,¹⁸ achieves momentum at this point, but the Enlightenment's social contract theory has needed an update regarding human relations in order to be capable of embracing wider contexts and psychological capacities, introduced as a Five Capitals model by environmentalist Jonathan Porritt with human, natural, social, manufactured and financial capitals to make sustainability, quality of life, education and training key levers'.¹⁹ The philosophies, theories and practices of the 'good city' of the 21st century stem largely from ecological thinking allied to this expansion of ways in which to consider and mobilize resources, including Cradle to Cradle,²⁰ Michael Braungart and William McDonough's concept first devised by Braungart in the early 1980s. However such tenets struggle with the prevalence of sprawling infrastructure designed by traffic engineers given a professional role historically divorced from urban design and community planning, which still today represents a yawning gap in urbanism, also in its competitiveness with agriculture, itself undergoing industrialisation, rather than a closer, more symbiotic relationship.

Urban planning history

Whether considering the form of the Neo-Platonic Renaissance City, the Haussmannisation of Paris (imposed to retain military order over civilian life), or the equal potential structure of the grid, it is fair to state as a historian that urban planning and socio-political strategies have been intimately connected. The history of the city from the time of Aristotle and the humanist city and its influential readings by Bruni, Alberti, and later thinkers such as Hans Baron²¹ reflects its diversity of functions and corresponding

¹⁶ Kant, I, *The Groundwork of the Metaphysics of Morals*, Cambridge University Press, 2012.

¹⁷ Locke, J, *Second Treatise on Civil Government*, Watchmaker Publishing, 2011.

¹⁸ Kiker, BF, 'The Historical Roots of the Concept of Human Capital', *Journal of Political Economy*, 74, October 1966.

¹⁹ Porritt, J, *Capitalism as if the World Matters*, Routledge, 2007.

²⁰ Braungart, M. and McDonough, W, *Cradle to Cradle: Re-Making the Way We Make Things*, Vintage, 2009.

²¹ Baron, Hans, *The Crisis of the early Italian Renaissance*, Princeton University Press, 1966, for example.

forms, from centres of familial, church and state power, trade, manufacture, storage and transportation, and principles of sound organisation and governance. Baron's 'civic humanism' relates to the emergence of humanism from the long transformation of civic conflict into civic politics, as the basis of the culture needed to effect this with decorum, fairness and a sense of orientation.

While the denotation Cicero in *De Oratore* (11.36)²² gave the role of history by as 'magistra vitae', in order to learn from, and improve on the past, a sufficient contemporary humanist urban approach needs also to approach the present in an active critical spirit. Tools and processes are not effective because they now possess superabundant technologically augmented capacities to analyse and control everything, anytime, anywhere. They have value because they are accompanied and informed by the ongoing, pluralist and multidisciplinary study of the actual behaviour of urban design in specific contexts and under different conditions, carried out beyond abstract rational pre-conceptions of such causality.

Imagined cities have been propagated physically and mentally for millennia. Relatively few cities (while a few more community centres) of this nature have been realized, but have, in their various forms, nonetheless influenced many urban renewal projects. Plato's *Republic* used the polis as a vehicle for the structure of understanding, whilst both Atlantis [*Timaeos*] and the city in the *Laws* are circular. Examples from the time of Aristotle demonstrate a huge variety of alternatives in terms of the interplay of networks, buildings, residential accommodation and public spaces. Architects began systematically studying the shaping of urban space during the Renaissance, as if the city itself were a piece of architecture that could be ordered in an aesthetically pleasing and functional way. Symmetry, orderly grids and ways to deflect artillery were all features of planning in the 15th century, while the Baroque city accommodated at grand scale the buildings of the emerging national states.

The era of the metropolis over one century ago brought the primacy of the city as a setting for commerce and a hierarchy of transportation routes. These concepts of urban desirability led to low-density sprawl characteristic of car-dominated urban development (first in the USA, and then elsewhere where suburbia has been allowed, while following different patterns) and high density city centres supported by rail transit. Extensive public infrastructures were created for large populations and high densities, and adaptations have been highly visible in the clustering of commercial buildings downtown and various sub-centres.

New towns were conceived as commercial enterprises, and the neutral grid of the city was considered the most effective means of dividing land up into parcels for sale, and context in which players speculated on land values. Instead of religious, political and cultural imperatives shaping urban development, the market was allowed to determine the pattern of urban growth. This did not exclude mixed-use, as the waterfront districts of New York, Boston and Philadelphia in the period around 1920 epitomise, but planning came to exclude sectors of society considered undesirable through their social determinism.

Cities have changed radically since the Industrial Revolution, vastly expanding their populations through the mass exodus of rural dwellers, and urban economics increasingly became interwoven with those of national and international markets. The industrial city's centre was a central business district (CBD), with a convergence of transportation systems, and districts of worker housing nearby. Large manufacturing zones were increasingly decentralized, but the increased congestion, pollution and disease led to an exodus to the suburbs, while the increasing skyscrapers in the CBD came to reflect the emerging dynamics of the real estate market maximizing value from small parcels of land.

The imperative to create cities on a tabula rasa underpinned utopian schemes of Le Corbusier – Contemporary City for 3 Million People (1922) and Radiant City (1935) – were high-density, with skyscrapers and mid-rise apartments on open parkland, with a strict division of districts for different uses served by a multi-modal transport system. Frank Lloyd Wright's Broadacre City (1935) is a suburban utopian plan, spatially dispersed, low-density and gridded, with ample plots for family houses, yet incorporating farms, orchards, light industry and recreation, connected by highways.

Trying to achieve an ideal and efficient order (a task which the early twentieth century US City Efficient movement led by planners including Frederick Law Olmsted proved to be inefficient) served to render urban planning a generic, apparently scientific, objective, professional city-wide activity of codes, ratios

²² Cicero, *On the Orator, Books I-II*, Harvard University Press, 1948.

and other quantitative measures.²³ These preserved the sense of distance from what was being planned, and removed placemaking as a cultural practice. But the irony, as author and collaborative community planning specialist Leonie Sandercock has pointed out, was that ‘in the post-war rush to turn town planning into an applied science much was lost – the city of memory, of desire, of spirit; the importance of place and the art of placemaking.’²⁴

New subcentres have developed on the peripheries of many cities, leading the metropolis to become a multi-centred urban region or set of urbanized regions or ‘megapolopolis’. Planners since the 1950s have increasingly focused on the economic consequences of changes in urban form, as modern cities have increasingly engaged in global competition for economic resources, such as plants, corporate headquarters, high tech firms, and investment, by offering cheap land, low tax rates and breaks, enhanced transport and utility infrastructure and skilled labour, and quality of amenities, including parks, recreational facilities and high quality architecture. These factors challenge urban planning, and also create a strong imperative to design equitable solutions for those of lower incomes, existing and new residents, who may otherwise be adversely affected by such inexorable urban change favouring inward flows of capital.

The identity of masterplanning as a practice in the 20th century was diffused globally through various mechanisms including colonialism – pre-eminently the garden city movement – and adhered to a predominantly low-density identity. However the reality remains that urban planners mostly are not given the opportunity to work with a tabula rasa and have scope only to make incremental changes to an urban scene shaped by a complex historical process. There are many aspects of today’s emerging adaptive planning which makes a virtue of that reality.

Cities in the past have been collections, or aggregations of various types, creating urban qualities. Today the megapolopolis, a type of sprawl-based urbanism in its formative stage, is what Albert Pope²⁵ has called ‘an aggregate urbanism that does not enjoy the benefits of aggregation’, partly due its apparently ‘instant’ nature, but also because it is strictly zoned in various ways through masterplanning. The totalizing measures of conventional masterplanning add up to urban incoherence. Pope describes its failure as one of a lack of legibility of its parts, since the masterplan alone is merely a two dimensional zoning, and the blocks of forms are commonly not related to the whole.

City planning, it is fair to say, is more about maximizing benefits, rather than a responsible use of resources, and so urban incoherence becomes the price its instigators are happy to pay or fail to see as incapacitating. Moreover, in considering the nature of planning, we have to take account of ideas such as those of Giorgio Agamben, who in *Homo Sacer*,²⁶ following Hannah Arendt, argues that ‘we’ (the instigators of mainstream planning) have inverted the Aristotelian principle of living within our resources for the sake of a profound politics. Instead today ‘we’ use our politics to manage resources for the sake of well-being defined as health, labour and consumerism. Evidently, of the three, the third comes first in priority, judging by the ways in which developers in, say Hong Kong, today build right to the edge of site boundaries and very high, which merely serves to exacerbate high levels of air pollution as the morphology does not permit carbon monoxide fumes to disperse (according to Christine Loh, the previous Chief Executive of Civic Exchange, Hong Kong, relayed in an interview I did with her as part of my work on Urban Age Hong Kong. See Portfolio essay).

Urban planning is a potent tool in the city as speculative playground, and in implementation can have huge impacts on land values. However, institutional urban planning in the 20th century in the USA, anyway, has been rooted in reform, and has ostensibly served to protect shared public values such as health, safety, environmental quality, aesthetics and social equality. One current research aim is to further discover, via attendance at the Urban Land Institute conference 2014, NYC, in October 2014, and as part of a future issue of Urbanista.org on NYC, to what extent this approach is still being maintained, especially under the Mayorship of de Blasio, as opposed to Bloomberg, who, along for a number of

²³ Bullivant, L, Ermacora, T, *Recorded City: Co-Creating Urban Futures*, Routledge, 2015. In production.

²⁴ Sandercock, L, *Towards Cosmopolis: Planning for Multicultural Cities*, John Wiley & Sons, 1997.

²⁵ Pope, A, ‘From Form to Space’, in *Fast-Forward Urbanism: Rethinking Architecture’s Engagement with the City*, Princeton Architectural Press, 2011.

²⁶ Agamben, G, *Homo Sacer: Sovereign Power and Bare Life*, Stanford University Press, 1998.

beneficial urban works to waterside contexts in NYC, is also known for changing zoning regulations to enable speculative developments more leeway.

Certain figures breaking the mould historically – Michel Ecochard on the African continent between 1950 and 1970; Jan Gehl in Denmark and increasingly globally since the early 1960s – evolved methodologies which engaged with local constituents making decisions, with local architects, builders and coopting unskilled workers into the process. Urban-Think Tank, Kéré Architects, 1:1 Agency of Engagement, MASS Design Group and Studio Mumbai are among contemporary examples that engage with a range of constituents and largely deprived contexts through recourse to a versatile arsenal of strategies including diagrammatic means, as with Ecochard, who also used photography and text as part of his community and site research, according to academic Tom Avermaete²⁷, that were furthermore intended for wider communication to the whole community.

Advocacy planners and others gave focus to the qualitatively performative city, rather than planning on the basis of order based on the professional knowledge of narrow quantitative issues, through the notion of the vital city, with Kevin Lynch (*Good City Form*, 1981)²⁸ citing vitality, sense, fitness, access, control, efficiency and justice and key dimensions. It seems that these clusters of qualities have, in the current era, become privileged ‘collections’ of city making, yet stripped of the social equity that the advocacy planners and others of similar political leanings, valued. The connections between human values and physical forms aimed to set new normative theories of city form, deemed Lynch, so must be regarded as a work in progress, he further acknowledged, leaving present day exponents of socially equitable urban design and planning to consider how such theories truly achieve a status of normativity. Lynch’s focus in his field research on citizens’ mental maps and wayfinding emphasized the social experience of a town or city, rather than only its functionality, and drew environmental psychology into urban planning. It also placed great importance on visual communication in urban spaces in a way that drew together citizens and planners on the perceptual aspects of urban design.

In today’s urban capitalistic world, graphic renderings displayed in exhibitions, for example Princeton graduate Zigeng Wang’s ‘The Section of Empire’, analyzing the tensions and contradictions of urban capitalism’s geographical landscapes, represent complementary visual material of a suitably dissecting nature and readable by lay people, along with animated videos (as evidenced in exhibitions such as the Rotterdam Architecture Biennale (for example, conveying the history and present day evolution of La Défense, or Brussels’ patterns of housing and planning today), as emerging genres of reading urban capitalism, potentially also perceived as quaint urban art works, especially perhaps in Beijing art galleries, where censorship operates to a greater or lesser degree.

The masterplan

Overview

The masterplan, which has been inimical to an ethical urban order due to its imposed nature consists of a set of instruments: land use maps, zoning, density controls, building regulations and planning standards, has been seen as an exercise in the physical planning and design of human settlements, operating on a rigorous administrative structure, with social, economic or political matters lying outside its scope. In terms of definition of process, it was a technical activity carried out by trained experts with relatively little involvement of politicians or communities.

The masterplan, also known as ‘master plan’, blueprint or layout, showed a detailed view of the built form of a city in its idealized end state. The practice of masterplanning was used in tandem with land-use zoning originated in the early part of the 20th century and used by middle and high-income groups to maintain property prices and prevent invasion of land by less desirable occupants, who were excluded.

The history of the masterplan stems from German and French techniques in response to the huge expansion of cities both in population and industrial demands. Created mostly for open land, their

²⁷ Avermaete, T, ‘Accommodating the Afropolis: Michel Ecochard’s Alternative Approach to the Modern City’, in Angelil, M. and Hehl, R. (Eds.) *Informalize! Essays on the Political Economy of Urban Form*, Vol. 1, Ruby Press, 2012.

²⁸ Lynch, K, *Good City Form*, MIT Press, 1984.

implementation swallowed up villages, cleared slums, remediated brownfield sites, for example. Their interventionist roles were variously defined; they enabled social inclusion through infrastructure. Contradictions were part of the process. The Sardinian fascist New Towns of the 1930s, for example, on reclaimed marshland, articulated a separation between religious, civic and commercial spaces through pluralistic design approaches.

While cities were zoned well before masterplanning, the Tragic and Comic stage sets by Vitruvius being one example of a more ephemeral nature, the 20th century masterplan also brought a new form of zoning. Development economics has played a significant role, and while developers have been around since ancient times, the economic logic of delivering a package, for example for housing, on which the returns can be calculated, has increasingly influenced urban development. This has also limited masterplans' visionary nature, rendering it more a way to control land capitalization, bringing with it an inherent conflict between the long-term life of the city and the short-termism of development.

Specific to the time and place from which they emerged, plans contained social objectives which were largely anti-urban in their density and intentionally corrective of many of physical hazards of cities eg Ebenezer Howard's Garden City of 1901 and Le Corbusier's modernist city ideal of the 1920s and 1930s, which replaced mixed use areas and slums with allegedly safer and more sanitary mono-functional zones. In the US plans rationally ordered land use in cities industrialized in the late 19th century, and came in for critiques by CIAM members in the 1960s, while specific cities such as Los Angeles have been characterized by an infrastructural approach to land use, environmental mitigation and delivery of services, rather than masterplans.²⁹ Plans took over old agricultural territories, as in the case of Cerdà, the Spanish urban planner who designed the Eixample, the 19th century (1860) extension to Barcelona, applying a rational structure to an agricultural territory in the form of a grid structure, avoiding privileged zones for social classes, based on a socio-statistical study of the old city's population conditions, which in the event, differed in evolution from his research.

The intention to implement a plan and in the process socially exclude through an enforced tabula rasa has taken shaped most noticeably in the UK in the Canary Wharf business district, designated an Enterprise Zone, and realized in 1991 as a result of government intervention to relax planning rules, and in spite of the existence of many local community plans for the area which were ignored (documented in the archives of the Museum of Docklands). Upon its opening, the developer went bankrupt, as the commercial property market had collapsed.

The ideas behind modernist planning, included a legal and economic instrumentalisation through zoning, that still shapes planning in many parts of the world, applied in a form that creates urban districts as products, 'economic cities' free of sufficient or any public consultation, for example, the psychologically unhealthy, segregating gated township³⁰ or 'investment destination' economic districts such as King Abdullah Economic City on the Red Sea, which, at 168km² is the size of Washington DC, is relatively high density, but requires a certain level of income for residence, unless an individual goes there as a servant to a rich family and is then accommodated in a 'labour village'. Over 50% of the site is an industrial valley that dominates the coastline (along with a seaport), one of the biggest of its kind in Saudi Arabia, where land plots are available for lease or sale.

Such schemes could be termed 'anti-urban': the urban as an ethical concept calls for plans to assert a higher degree of social equity; all the usual gritty elements of a city have been emptied out in order to control the entire territory through a plan that follows the old zoned industrial city; the seafront is taken over for industry, not living space.

Specific old models are being reapplied in many contexts for economic advancement. Howard's garden city ideal, for example, still holds great sway in municipalities, and I researched how it was being interpreted in urban plans. The original garden city ideas about density are loosely applied today by municipalities such as Chengdu, in China. Projects such as Sociópolis³¹, by contrast, are resource-focused. Sociópolis takes over old agricultural territories in Valencia, but in order to retain and nurture

²⁹ Cuff, D and Sherman, Roger, Eds, *Fast-Forward Urbanism: Rethinking Architecture's Engagement with the City*, Princeton Architectural Press, 2011.

³⁰ MF, p11.

³¹ MF, pp 217-223.

them in a hybrid scheme of residential and live/work uses aimed at young people and the elderly.

The deployment of top down masterplanning in the 21st century by a new generation of state capitalists is a theme explored further by the architectural historian Wouter Vanstiphout and Michelle Provoost of Crimson in 'The Banality of Good: Six Decades of New Towns, Architects, Money and Politics', an exhibition (shown at the Venice Architecture Biennale, 2012, and in London, 2013) focusing on the perpetuation of masterplans as tools for new cities in special economic zones.

This represents to them an appropriation of a discarded part of 'our public design toolbox' with its engagement with 'utopia' by the private sector enjoying the freedom of the market. This is part of a phenomenon defined by academic Keller Easterling as 'Extra-State Craft'³² in which the state has not abandoned the process of making cities, but uses market-led activity as 'a proxy or camouflage' in the new knowledge economy, and 'zone' and 'city' become interchangeable concepts. These operations are reflected in the Fordist model of Masdar City, a free zone for eco-industries³³ and schemes such as the Songdu International Business District masterplan, a scheme full of towers being built from scratch on reclaimed land at Incheon's waterfront, 40 miles from Seoul in South Korea (designed by KPF).

The normative planning industry is monopolized by consolidated and standardised practices which take a replicatory, rather than a productive approach to their practice, providing services utilising basic engineering logic which adheres to the ways in which most of the construction industry works.

Alternative masterplanning tools and processes

The fragmented geographic contexts of the contemporary city have themselves redefined the meaning and practices of urban planning. A credible alternative to the conventional masterplan is the evolution of planning into a multidisciplinary practice in which processes and goals changing shift from the pre-planning of a fixed ideal or replicable formula to the diversified tactics of adaptive planning of the complex, shifting realities of cities today.

For example, one ethically motivated methodology in the management of projects frequently adhered to by both practitioners and clients in the public sector is the devising of comprehensive strategies across sectoral boundaries, not in different silos, as a way to find better solutions. This in itself may not be revolutionary, but it demands that the legal and economic instruments behind plans be reassessed, which opens the field for planning to become more closely relational in its scope to a wider range of issues in cities and regions. These practices adopt new paradigms of thinking across politics, economics, geography, geology, architecture, urban design, engineering and art.

I would further argue that the top down masterplan in the narrow form that it existed allied to the 'public design toolbox' at the time of the building of the post Second World War New Towns Crimson include in their exhibition, is no longer viable as a responsive socio-spatial practice, and that there is evidence of efforts globally to create a new set of tools markedly different to those of the past, which is in great part a reflection of a criticality in the face of blurred boundaries between public or private sector client activity.

Urban-Think Tank reject outright the practice of masterplanning, favouring the retrofitting of slums they focus on in the Global South. Its limitations as it is currently practiced are also debated by the trio of Chinese authors Gu Chaolin, Yuan Xianhu and Guo Jing (China's Masterplanning System in Transition)³⁴ and ARU, in their defence of their landscape infrastructure approach to Saemangeum Water City³⁵, offer alternatives. Many practitioners carrying out masterplanning or large urban plans were themselves uncomfortable with the term 'masterplan', knowing its out-of-date methodological and ideological baggage from the 20th century. Enrique Norten's stated preference³⁶ for a 'vision' over a masterplan as a

³² Easterling, K, *Extrastatecraft: the Power of Infrastructure Space*, Verso, 2014.

³³ *MF*, pp159-173.

³⁴ Chaolin, G, Xianhu, Y, and Jing, G, 'China's Masterplanning System in Transition: Case Study on Beijing', 46th ISOCARP Congress, 2010, part of a research project on China's urbanization conducted by the National Natural Science Foundation (NNSF), China. Discussed in *MF*, pp251-252.

³⁵ *MF*, pp227-236.

³⁶ *MF*, p216.

far more potentially motivating term carries the promise of desirable values and quality recognized by everyone. This is understandable but does not stop cooption of the word for plans aimed at strategic economic goals alone without any social equity.

I am concerned with the development of a variety of urban environments not based on purely economic logics or political strategies, and my research has enabled me to identify many indicators of change in cultural practice broadening the parameters in masterplanning away from the reductivism of an urban design based on Euclidean geometry and blueprint approach – realized once and serving for all time – and towards a combined, iterative research and decision-making process as an active tactic in response to complexity. Even then there is a variety of different emphases and ways in which language is used. ‘Understand the breadth of issues – scoping out everything that would have an influence on a project, and then creating a mechanism to manage that’, urban designer Jason Prior of AECOM’s operationally efficient definition of masterplanning (referring to the London Olympics) while others would regard the mechanism to need to be an interpretative (since scoping alone may not be interpretive) as well as a managing tool or set of tools.

The engagement by masterplanners with layers of urban history that are regularly interrupted by change is very common today. For example the post-industrial Milan UDP and Carlsberg³⁷; agricultural Sociopolis, Valencia; Xochimilco, Mexico City³⁸, and Musheireb, Doha (former neighbourhoods, or ‘fireejs’).³⁹ What is a contemporary urban collective identity when challenged by globalization, natural disaster, changes in industry and perceptions of nature as an amenity? These new plans, through their intentionally innovative conceptual models, address the imperative to make the city afresh through the reconceptualisation and reworking of spatialities of social and ecological interaction. In a context following disaster, innovative tactics can ‘intervene and work with diverse memories of historical contexts’⁴⁰, including rebuild culturally responsive amenities in sites destroyed by natural disaster (Constitución, Chile; Make it Right, New Orleans,⁴¹ that existed in the past and/or b) the innovative spatialisation of social networks.

The imperative to remake the city is defined by urban historian Christine Boyer⁴² as a need to ‘move beyond the will to instrumentally formulate historical unities’ to deal with fragmentation and disjunction accepting the ‘inadequacies of both the City as Panorama, with its rational scientific models based on describable pasts and predictable futures’ and the ‘commercially contrived City of Spectacle’. Both of these concepts have a reductivist impact on urban space.

The value of design codes, used over centuries in urban design and as a driver of masterplanning, and favoured by the US movement, New Urbanism, in their socially contrived pedestrian-friendly schemes, has to be questioned. Does their implementation serves to undermine the creation of socially diverse neighbourhoods’?⁴³ Instead of a set of rules, there can be the employment of cross-cultural urban influences and forms within plans, for example, the organic flexibility of the medinas of Moroccan cities on U-TT’s Hoograven vision, Utrecht⁴⁴, and the conceptual intentions behind the ‘city pieces’ of ARU at Saemangeum⁴⁵. In avoiding the creation of a theme park, such tactics represent densifications, but not literal reenactments of, the dispersed global city.

Specific evolutions have taken place in approaches to urban design and its social identity, for example, Metabolism, or the work of Jane Jacobs. The development in the 1970s of process planning,²² and the

³⁷ MF, pp187-201, pp27-44 respectively.

³⁸ MF, pp217-223, pp211-216 respectively.

³⁹ MF, pp59-68.

⁴⁰ MF, p278.

⁴¹ MF, pp93-103 and pp104-114 respectively.

⁴² Boyer, C, *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments*, MIT Press, 1994.

⁴³ MF, p278.

⁴⁴ MF, p153.

⁴⁵ MF, pp227-236.

²² Ratcliffe, J, *An Introduction to Town and Country Planning*, Hutchinson Educational Ltd, London, 1974).

pressure for reconciliation inherent in the activities of planning urban space called for a systems approach to planning, created advances. But the opening up of free market thinking made these difficult during the period from 1980s to 2009, when global economic crisis struck. Many neo-liberal-driven plans were put on hold, or went ahead and crashed economically, while by contrast in certain economies, BRICS, especially, fast track plans were forged. However, in the last six years during global economic crisis, signs of allegiance to socially committed urban planning are evident in many adaptive plans.

The objectives of contemporary land use have broadened from appropriation for the realization of a narrow ideal, to the protection of natural resources and environmental functions from adverse impacts eg. Xochimilco, Mexico City ⁴⁶, and encompass the interacting factors of land function, building design and economic and community support (chapters on Almere, HafenCity, Sociopolis, Lion City, Milan UDP), the application of energy-efficient and climate-resilient structures (Montecorvo; Make It Right, New Orleans ⁴⁷, maximizing utility while minimizing future environmental damage eg. Constitución, Chile. ⁴⁸

The metaphor of the 'ecosystem' also suggests the optimum functioning of a micro-city, or micro-scale urban environment, and planning in service of the local, rather than reinforcing globalisation's already delocalizing effect on a district, a condition described by the client of Musheireb ⁴⁹ in discussing the decline in old neighbourhoods, or 'fireejs', of Qatar and across the Gulf Region. The strategies of contemporary planning to address these issues, avoiding, as the client says, a melting of cultures, are detected in a number of the chapters including on Sociópolis, Valencia; Lion Park, Johannesburg and Musheireb, Doha.

Whereas in the 20th century masterplanning components were largely visual and technically engineering-driven, the most progressive of today's plans respond to socio-economic challenges with strategies of sustainability and empowerment of citizens. Perceiving the identity of their masterplan and its intentionality, 'it exceeds the scope of an urban masterplan or blueprint because it describes how the city can develop in economic, cultural and social terms', as Adri Duivesteijn, the Alderman of Almere ⁵⁰, described Almere's Structure Vision 2030. This imperative to urbanistically grow on these lines is related to the marketing of urban identity (also vital for equity, local and international investment), and about achieving a relative form of creative flexibility in defining possible actions and a trajectory of speculation, rather than a full-blown predetermination. It is idealistic and pragmatic. In this sense a more accurate term to describe the exercise would be 'game plan' or, as is often used, 'road map'. In the case of Almere, part of the process is the addition of 'densities, programmes and characters' not yet existing in the current set up. This approach includes testing, prototyping and other forms of conceptual speculation not usually part of conventional masterplanning.

'It lies with the sociologist to comprehend the purpose and performance of the planning system', ⁵¹remarked a respected planning author of the day in the early 1970s, and this includes shortcomings of the overall societal systems governing planning. One problem is that the legislative frameworks in which today's cities are planned are in many respects anachronistic in relation to evolving social patterns and needs. Moreover, the persistence of older approaches to urban planning, for example, zoning, has created a disconnection between planning systems in force and the evolving nature of 21st century cities. Aihwa Ong, a critic of neo-liberal, market-driven strategies of spatial fragmentation (propelled by diversified zoning in different types of special zones) points out that these also extend the space of the nation state ⁵², as Ananya Roy reminds us, ⁵³ an expansion in numbers of types of special zones that she cites George

⁴⁶ MF, pp211-216.

⁴⁷ MF, pp174-183 and pp104-114.

⁴⁸ MF, pp93-103.

⁴⁹ MF, p63.

⁵⁰ MF, p242.

⁵¹ Ratcliffe, J. Ibid.

⁵² Ong, A, *Neoliberalism as Exception: Mutations in Citizenship and Sovereignty*, Duke University Press, 2006.

⁵³ Roy, A, 'Slumdog Cities: Rethinking Subaltern Urbanism', in Angelil, M. and Hehl, R. (Eds.) *Informalize! Essays on the Political Economy of Urban Form*, Vol. 1, Ruby Press, 2012.

Lin questioning: 'where then is the city?'.⁵⁴ The city, it would seem, is caught in a related condition of inertia brought on by zoning, and simultaneously fragmented in character as a result of the zoning process.

What, then is an alternative approach in land use to zoning, a feature of all 20th century top down masterplans in the context of the market-driven city, that does not fragment the space of the commons? The achievement of a 'dynamic set of urban tools' enables specific local governments to avoid zoning, a practice many wish to abandon, or have already, such as Stella Goldenstein, Deputy Chief of Staff, Mayor of São Paulo, speaking to this effect in her lecture at The Urban Age's South America conference in São Paulo in 2008. Moreover such parties theoretically strive towards an open, resilient system, although how 'open' in different instances is of course a moot point.

Adaptive plans include strategies of the reuse of buildings within a specific context. In KCAP's masterplan for Perm, Russia, the aim is avoid creating 'microrayons' (micro neighbourhood), small districts of prefabricated concrete apartment buildings from the 1970s, now deteriorating, built near the airport on the edges of cities like Kabul and Minsk, and not designed to absorb new buildings⁵⁵. In a context in which 'microrayons' exist and represent resources, many strategic plan-based reconstructions of them in phases through various leverage tactics have also taken place recently, for example, as explained in the video *Microrayon Tomorrow*⁵⁶, by Alexander Sverdlov and Anastasia Smirnova.

A concrete example of this is today's increased focus on food security and elements to enable the community to generate long term value from the territory, for example, the adoption of the traditional huerta, or market garden model, in Sociopolis, Valencia⁵⁷, or in Aurecon's masterplan for Caxila II, Ondjiva, Angola, which includes allotments and other commercial space for the residents of the temporary 'museques' (tented cities) provided while formal housing is built, and schools that also serve as recreational facilities over the weekend, with pocket gardens for play. However the assets of food security can be nurtured without recourse to a formal masterplan, provided aims and processes are in place, as the comprehensive activities of Dreaming New Mexico (Bioneers) within this region, exemplify, a project about participatory, restorative bio-regional planning through a new socially inclusive infrastructure, and the value of systemic thinking facilitated through research, discussed in an essay in *Recorded City: Co-Creating Urban Futures*, my next book, co-authored with Thomas Ermacora.⁵⁸

The adaptive masterplan

As a concept, an adaptive planning process is one that is restorative of an ethical urban order, but it is also an outgrowth of traditional masterplanning and its evolving patterns since the late 1950s have revealed rational, normative and progressive approaches. As writers like Peter Hall⁵⁹ note, it was larger historical issues such as shrinking cities that led planners to focus on social and economic issues away from the physical.

Systems planning changed the discipline profoundly between 1960-70 into a science of complex systems carried out in a standardized sequence and driven by engineering. Spatial interaction modelling was introduced for the first time, and there began a shift from the assumption that objectives were fixed from the start, into the new concept of planning as process, with 'programmes adapted during their

⁵⁴ Roy, A, Ibid. Lin, G, 'The Growth of Chinese Cities in the Era of Volatile Globalisations: Dynamics, Challenges, and Opportunities', paper presented at the 'Making Global Cities and the World Economic Crisis' conference, Shenzhen, January 4-8 2010.

⁵⁵ MF, p10.

⁵⁶ Sverdlov, A, and Smirnova, A, *Microrayon Tomorrow*, for International New Town Institute (INTI) and the Province of Flevoland, the Netherlands, 2010.

⁵⁷ MF, pp217-223.

⁵⁸ Bullivant, L and Ermacora, T, *Recorded City: Co-Creating Urban Futures*, Routledge, 2015.

⁵⁹ Hall, P, *Cities of Tomorrow: An Intellectual History of Urban Design and Planning in the 20th Century*, Wiley-Blackwell, 2002.

implementation as and when incoming information requires such changes', as Andreas Faludi put it ⁶⁰. The emerging advocacy planning of the 1960s offered democratic processes, and speculation on the role of planner as incrementalist and advocate, informal coordinator and catalyst, or even community healers, nonetheless they relied on personal knowledge to deal with complexity. More transversal approaches to the traditionally top down methods of making cities have been influenced by advocacy planning (Paul Davidoff) ⁶¹ which included social values and justice, with the planner as advocate. The plan is no longer unitary, but plural, with multiple options for each plan, discussed with different interest groups, and as a result the public is better informed about alternative choices, public agencies are forced to compete with the private sector, and outside organizations get a chance to create their own alternatives.

Adaptive planning also transcends the polarities of preservation versus urban renewal that were familiar tropes in the 1960s, in the sense that redevelopment was increasingly influenced by media, as historian Alison Isenberg argues in her forthcoming book about the US development scene in the 1950s, *Land v. Landscape*, 'by publicists, graphic artists, architectural model makers and renderers, photographers, sculptors, political cartoonists, lawyers, critics, foundations, engineers, and plaintiffs' ⁶².

Adaptive planning consists of sidestepping the traditional definition of physical determinism of a technical solution to be fully implemented. By contrast to traditional masterplanning, it is not once and for all time, but 'a recurrent decision-making process' ⁶³ and, as Giancarlo Di Carlo said of architecture that its legitimate role should be one of generating processes. ⁶⁴ In methodological terms, it does not construct theory on the basis of abstract thought and consider the project to be the practical application of the universal concept, but the projects themselves are used to construct meaning ie action, rather than pre-determination, to support outcomes.

While contemporary mainstream economists pride themselves on their tools to analyse everything, adaptive planning tools are not about narrow 'land use accountancy' ⁶⁵ strategies detached from complex real world problems, but their reformist purpose is community wellbeing which is not always related to optimum physical organization and spatial disposition of urban areas.

An adaptive planning mindset addresses the economics of the housing crisis, not as a way to maintain capital's profit margins, but as architect Alastair Parvin, the co-author of *Right to Build* ⁶⁶, advocates, to enable new land use categories in the existing UK planning system, for example, C5 to enable people to build their own houses more affordably and easily. It is wedded to equitable tools, recognizing that in the shift to state versus market, while Section 106 is seen as a democratic decision making tool in the UK planning system, its tacit corruption restricts parallel markets, for example, agricultural land for housing use; and new instruments allowing priority to those with only one house on all new market housing in a city such as London.

Adaptive planning fully acknowledges the triumvirate nature of its identity: architects, developers and end users (as well as regulatory planning inspectors). However that triumvirate needs supportive, educated planning inspectors. A commitment to promoting off-site construction methods, for example, in a masterplan, will prove to be socially ethical in a consistent way, in a context of citizen empowerment and planning support. For example, Taylor Wimpey's plan to opt to move away from the off-site construction method used by Rogers Stirk Harbour, the architects, in the first phase of the development at Oxley Woods by proposing a more traditional brick-built scheme, was foiled by a rejection deeming it out of keeping, a win for localism as well as for progressive design.

⁶⁰ Faludi, A, *Planning Theory*, Oxford, 1973.

⁶¹ Davidoff, P, 'Advocacy and Pluralism in Planning', *Journal of the American Institute of Planners* 11/1965.

⁶² Isenberg, A, Professor of History, Princeton University web page, http://www.princeton.edu/history/people/display_person.xml?netid=isenber.

⁶³ Ratcliffe, J, op cit.

⁶⁴ Di Carlo, G, *Spazio e Società*/Space and Society magazine, 1978.

⁶⁵ Ratcliffe, J, op cit.

⁶⁶ Parvin, A, Saxby, D, Cerulli, C, Schneider, T, *A Right to Build: the next mass housebuilding industry* University of Sheffield School of Architecture and Architecture OO;/, 2011.

Adaptive planning enables social equity where possible, giving citizens and municipalities agendas on which to act based on fair and transparent processes of implementation, distinguishing them from plans with divisive interests. It has to be intermediary, not polarized, with the urban designer as a broker of citizens' interests.

It has in the last decade been given new agency through schemes advanced by specific practitioners and agencies that aim to create alternative ways for urban designers, the public and municipalities and agencies (public and private) to interact, with strongest focus on giving the public a voice and seat at the table. While not all plans conform to this model, a major impulse is to support community development at a micro-scale level, through strategies that work in multiple, complementary registers, rather than impose a big picture for an imagined community.

There are aspects of this approach which are in continuity with traditional masterplanning – with marketing used as a tool. Adaptive planning does not necessarily change the status quo in terms of the client and whom is affected by a plan. One of its characteristics is that there is no single consistent procedure, rather overlaps of approach.

The masterplanning framework

A masterplan framework derives from bespoke, custom-designed approach to masterplanning, involving the creation of a framework of principles. In such a construct, principles based on social and ethical leverage never before combined in such a way can be applied to urban design. For example, in a context such as Johannesburg, where developers make suburban, car-focussed plans their commercial goal of choice irrespective of social realities, the SEEDE criteria devised by Michael Hart for his Lion Park Framework plan⁶⁷ – of an integrative type never created before here - were designed to be inclusive and generative of local employment, education, training, better health, boosting environmental capital through urban agricultural schemes.

In the context of natural disasters and extreme weather events, the thrust is towards rebuilding with resilient typologies and a comprehensive approach for raised structures, and comparative cost models, such as demolish versus rebuild, in the US in response to new FEMA ([Federal Emergency Management Agency](#)) regulations that have resident cost implications, are central to their viability.

Recent ambitions for strategic spatial planning, which emerged in Western Europe during the 1980s and 1990s have aimed at comprehensive sustainability, culturally and economically, but have rarely found equity and viability in a desired time frame, often being called off in the midst of the economic crisis (for example the plan for Santa Giulia, an industrial district of Milan designed with a masterplan by Foster + Partners and a landscaped 'green lung' by West 8) or with corruption and negative evaluations abounding to 'kill' the scheme (Dongtan Eco-City outside Shanghai).

The directive of a long term spatial plan, an emerging municipal instrument in the last decade has been forged through frameworks and sets of principles, rather than rules or sets of codes, underlying all development, of whatever scale, for example, in Almere 2.0, the Netherlands⁶⁸, Abu Dhabi 2030 Urban Structure Framework (of which Masdar City⁶⁹, is a part), PlanNYC 2030 (now OneNYC)⁷⁰, Plan for the 21st Century: New Orleans 2030⁷¹ or Detroit Future City: Detroit Strategic Framework Plan. Such a framework is often a strange mix of city branding, marketing and urban planning, propositional in its representational and communicational means in order to attract equity, but if done well through an effective mix of stakeholders it also serves to enshrine strong city making principles for a district, city and/or region for a particular era in a way that has not been done before.

The identity of the framework as a defining structure for a set of principles, criteria and intentions developed in tandem with citizens, irrespective of timescale, makes it a versatile and appropriate

⁶⁷ MF, pp129-140.

⁶⁸ MF, pp239-249.

⁶⁹ MF, pp 159-173.

⁷⁰ MF, p11.

⁷¹ MF, p104-115.

instrument due to its flexibility, updateability and ability to contain experimental elements. A common denominator of strategic spatial plans is the inclusion of objectives relating to emerging concerns of the city for environmental protection, sustainable development, urban global positioning and social inclusion. The framework is multi-scalar, including complementary projects, policies and partnerships of every size and scale, intended for near-term benefit and long-term implementation.

In some contexts, such as China⁷², the rapid urbanisation of the second-fourth tier cities is creating a very generic urban landscape of special zones knocking up against each other and fragmenting space. The drastic means can be likened to plastic surgery in the sense of implantations and erasures, and, in contexts where land must be found in sufficient degree, entailing coastline rehabilitation solely to add hectares to a plan, in the case of Shenzhen's Bay, for which there are plans to create a central hub of activity on a similar scale to Canary Wharf in London, the ECB area in Frankfurt, the Presnensky District in Moscow and La Défence in Paris.

Alternatively, there is the flattening, and the ignoring and blocking of existing topography, in order to build, in the case of rural mountainous Norway and Istanbul, Turkey, respectively), and fast-track developments (or gated communities) that give pedestrian permeability a low priority. A necessary alternative approach addressing this problem applies content-based drivers through urban design activities to help embed locally scaled spaces with a sense of meaning, for example, West 8's recent Flower Village plan for Guangzhou.⁷³ The increase in mixed tenure schemes as part of contemporary plans eg. HafenCity, Hamburg, and in Sociópolis, Valencia, for the elderly and single people, is part of a tactic to move away from the model of the typical nuclear family unit⁷⁴, the first realized by the municipality, the second with municipal back up.

The influence of temporal factors on plans

With the rise in vogue of 20 to 30 year visions in masterplanning with related business plans, the need for sophisticated levels of planning and design expertise is extended. The increasing numbers of landscape architects practicing masterplanning may be related to the fact they are most able through their training and mindset about working with nature to deal with the long term evolution of place. West 8, for example, advocates incorporating awareness in a plan of 'ecology, infrastructure, weather conditions, buildings, programmes and people in a playful, optimistic manner'. That is a relatively short term objective, while 'the realization of an urban masterplan is a long-term process. It is not a ready-made object, but accumulates richness and beauty through time', calling for a 'strong and understandable concept' in order to carry forward the plan in a unique way. At the same time, phasing and dovetailing of complementary plans is also more common, for example, the long-term Vision for Zuidas, for example is joined by the Short-Term Action Plan, '15 by 15', meaning 15 points of action for realization between 2012-15.

Emergency planning today includes fast track masterplanning that avoids building barracks in a knee-jerk fashion, as in the case of L'Aquila, in the Abruzzo region of Italy, in the aftermath of the 2009 earthquake, commissioned through construction cronies of Berlusconi who resited the G9 conference in the city, lending its reconstruction a higher media profile. One of the best examples was the masterplan for the regeneration of Constitución in Chile⁷⁵ after the earthquake and tsunami, where the consortium elected to produce a plan the public would formally vote in within 100 days.

The evolution of masterplans in an incremental way is applied more as a risk-averse tactic of developers than as a means to open up the process to non-commercial stakeholders. Argent, the developers of King's Cross (2008) revealed that incrementalism was the firm's chosen approach to maintain a more secure funding regime than had been applied to earlier schemes in London (for example, Canary Wharf, whose first phase realisation caused the developer to go bankrupt on completion). Developers such as Renewal, on Egret West's Surrey Canal Masterplan, south London, see mixed use masterplanning regeneration of post-industrial areas such as the Surrey Triangle in New Cross Gate of south London, as a 'long game',

⁷² MF, pp250-263.

⁷³ Bullivant, L, 'West 8 wins Flower Village Guangzhou Huadi Sustainable Masterplan', Urbanista.org, issue 1, 2013, <http://www.urbanista.org/issues/issue-1/news/west-8-wins-flower-village-guangzhou-huadi-sustainable-masterplan-competition>.

⁷⁴ MF, pp217-223.

⁷⁵ MF, pp93-103.

partly because it integrates many different features (and also for financial reasons).

Creative strategies for long-term growth include Neville Mars' plan for Caofeidian in Tangshan ⁷⁶, which is designed in relay, with each team adding to the previous proposal in 3 year cycles by proposing an urban expansion of 100,000 people to achieve a city of one million by 2040. This approach supports the identity of a city as 'an accumulation of evolving ideas, able to emulate the complexity and organic logic of a slowly maturing city'. For Mars, evolutionary planning avoids the generic in favour of a more genetic approach.

Another aspect of an incremental approach that opens up possibilities of creative practice is the chance to test pilot projects, already referred to with regard to Marlene Wagner's work, which is part of a masterplan such as Almere 2.0 in the Netherlands, ⁷⁷ that are cross-sector in specific locations before larger-scale city roll-outs can happen. With cautiousness in development comes the need to minimize risk, and that manifests as developers locking down risk through controlled schemes, but also in some instances a greater willingness to test strategies.

A key feature of adaptive planning processes is the inclusion of soft planning or programming of 'meanwhile uses' (a term coined by the London Legacy Development Corporation for the series of events and activities that will take place on the London Olympic legacy masterplan site while it is being realized for the long term), and curated programmes. The latter are exceptionally given to the masterplanners as part of the project, in the case of AWP's masterplan for the retrofitting of La Défense cited above. While UK councils (Brent, Croydon) are branching out into creating 'meanwhile' foundations (Brent) and toolkits for citizens (Croydon), these also need to envisage brokering arrangements for greater permanency. Canning Town Caravanserai in Royal Dock, which while successful in its engagement of a wide range of local people and organisations, has now been asked to move to a more polluted part of land on the other side of the A14, and arguably an initial negotiation with the developers lending the land and detailed evaluation of benefits to the local community might have otherwise paved the way for the project to assume a permanent status.

Performative processes

Focussing on adaptive processes enabled me to find numerous instances of what I term performative processes. Cybernetics forms part of a systems approach to planning, moving away from the physical determinism long associated with the planning system, which was increasingly applied from the 1970s onwards, but arguably is not yet sufficiently understood today in terms of its potential as an applied research method.

This issue was one I wanted to draw out in terms of sustainable planning systems through my interview with Urban-Think Tank (U-TT), who devise catalysts and prototypes to activate their systems ⁷⁸. The widespread use of the natural metaphor of 'ecology' or 'ecosystem' within adaptive planning intends to lend the process of urban planning a cybernetic aspect of layered interaction between disparate elements, ranging from waste-to-energy systems, to the idea of hybridity of man-made and natural environments, of concepts of the urban and rural, or 'rurban', as architect Vicente Guallart who initiated the Sociópolis scheme ⁷⁹ terms it. One vector of this is exemplified by the work of Pierre Béranger, the landscape specialist based at Harvard GSD, who promotes landscape infrastructure processes, in which ecology becomes the new engineering, envisaging infrastructure ecologies as capable of shaping and directing the future of urban economics. This, in his view, both overcomes the inertia of zoning and the over-application of technological systems, by which I understand him to mean smart city soft and hardware.

One relevant and fertile philosophical distinction, also stressed in the work of Deleuze and Guattari ⁸⁰ is

⁷⁶ MF, p251.

⁷⁷ MF, p239-249.

⁷⁸ MF, pp141-155.

⁷⁹ MF, p221.

⁸⁰ Deleuze, G, *Difference and Repetition*, Columbia University Press, 1994; *The Logic of Sense*, Columbia University Press, 1990; Deleuze, G and Guattari, F, *A Thousand Plateaus*, University of Minnesota Press, 1987.

that while traditional systems theory and cybernetics was based around the notion of homeostasis, the systemic innovations I seek to identify are open ones, which possess resilience, and the ability to create new patterns and thresholds.

Considered philosophically, a reductivist, or reductionist programme allies itself with a positivist approach, in which complex systems are analysed into components, as if the behaviour of the components will account for the behaviour of the system, as philosopher John Protevi discusses.⁸¹ In so doing, emergence is denied, and all apparent ‘wholes’ are perceived as mere aggregates. This approach has been criticised by David Harvey in *Explanation in Geography*⁸² not only because this approach holds implications for definitions of time and events – the first not reversible, the second unique – which is the essence of historic phenomena. Accordingly, an undue focus in my particular study on process – events in the making – and the uniqueness of events, processes, practices and plans, serves to introduce a more wide-ranging and nuanced way of thinking about planning as a historical phenomenon, not a set of aggregates, regarded as mere templates which can be copied across cultures. I recognise the risk that the terminology of ‘tools’ used for masterplans carries in this respect.

The mediatory nature of masterplanning as a practice, ‘operating between fixed and flexible outcomes’⁸³, relates to the way it deals with the multitude of aspects to be taken on board – local, regional, international, cross-sector, citizen-focussed – in a context of spatial fragmentation of cities, means plans are obliged to offer consistency. A ‘classic’ masterplan has relative crudity in this respect, which makes it not the right instrument (Meyer and Schneider, 2008)⁸⁴ and incrementally tested experimentalism is increasingly required to overcome the difficulty in predicting outcomes calling for creative interfaces between formal procedures and informal development. This is particularly an issue when it comes to landscape urbanism approaches, which embrace the quality of landscaped public realm for all citizens and urban visitors, and the issue of evolutionary planning due to the usually longer time scales of nurturing green spaces and their biodiversity.

Zoning

Zoning orthodoxies and alternatives

The machinic zoning of the city into a hierarchical structure of plots was ‘a technical solution meant to secure an orderly and stable development of the urban land market’ (Boyer)⁸⁵, aimed at maximizing the productivity of space not organizing the city in terms of its social identity and amenity. In the USA from the 1920s it became divorced from comprehensive planning and in the hands of legal and property figures became a crude ordering of land to facilitate the market, excluding businesses from residential areas. It came to be identified with ‘a mechanical order’ enabling skyscrapers and futuristic urban space.

While some commentators felt this would lead to more rational and equal city planning, with scientific laws applied to solve social problems, in practice social equity, through economic and racial segregation, was excluded from the growing independence of districts. The abstract nature of such an approach is underscored by the fact that grid plans laid out by engineers ignored topography and processes of city growth, as Mumford and others pointed out, with suburbia expanding their reach even further.

As part of the paradigm shift in the 21st century from an orthodoxy of zoning, and from quantitative to qualitative strategies of provision, methods termed variously as ‘social design’ by Urban-Think Tank⁸⁶, or ‘social urbanism’, by Alejandro Echeverri in Medellín,⁸⁷ have become popular. They are situational and arguably have their roots in the direct neighbourhood focus of Jane Jacobs or anti-Modernism of

⁸¹ Protevi, J, ‘Deleuze, Guattari and Emergence’, *A Journal of Modern Critical Theory*, 29.2, July 2006; *Life, War, Earth: Deleuze and the Sciences*, University of Minnesota Press, 2013.

⁸² Harvey, D, *Explanation in Geography*, Edward Arnold, London, 1969.

⁸³ MF, p8.

⁸⁴ Meyer, U M, and Schneider, J, ‘Transformation of the city – reflexive strategies’, in *Stadtmachen.eu: Urbanity and the Planning Culture in Europe*, Karl Krämer Verlag, Stuttgart, 2008.

⁸⁵ Boyer, C. M. *Dreaming the Rational City*, The MIT Press, 1997.

⁸⁶ MF, p148.

⁸⁷ MF, p123.

urban designers such as Jan Gehl, who began his career in Denmark in the early 1960s. Responsive to the city's interdependent processes, they take on agency in the context of urban complexity by being interdependent processes in themselves, shunning the containing impact of silo thinking of the past which has characterized planning and governance patterns.

In placing focus on the qualitative, and not on zoning rules, urban designers are able to distribute density in a more varied way. Almere's masterplan incorporates high, middle and low density across the new districts, in contrast to the commonly found middle density housing schemes in the Netherlands built through VINEX⁸⁸, according to a much more standard, quantitative logic. Moreover, in the case of a number of practitioners, this has necessitated a whole scale reinvention of the 'logics' of the prevailing system. For example, Teddy Cruz, the architect working on the San Diego/Tijuana border and elsewhere⁸⁹, in moving away from a narrow approach to density, through buildings per acre, demands a reworking of the limits defined by rigid zoning and planning laws. In their place, his two solutions engage with a new instrumentality, and define the qualitative as social equity.

The UNITY Plan by The Yards Development Workshop in NYC is another recent scheme that addresses these issues head on. A community driven alternative to the generic developer alternative of megastructure super-blocks, it proposes multiple, mixed use blocks realized by multiple developers (and implicitly calls for a highly mature, well staffed local municipality to liaise on the scheme). Instead of closed streets the plan has a network of streets stitching the neighbourhood together, and multiple levels for outdoor public and private space which becomes an integrated storm water management system in line with the city-wide PlaNYC 2030 (now OneNYC), and follows the HafenCity Hamburg model⁹⁰. The process relies on diversified project delivery sources, perceived by the team as less vulnerable to fluctuations in the economy.

Often the level of questioning intervention is limited to calls for a new approach to the brief and processes of implementation. The architects and urban designers Interboro's 2003 Better Numbers submission to the Boston Society of Architects' Density Competition responded to the organisers' request to design a dense, mixed-use development on an underutilized 50 acre site in a Boston suburb. The practice took issue with the architecture and planning profession's 'neutral' perception of density as merely a measure of residential population and dwelling units per acre. While it drew up a masterplan following that formula by placing a lot of housing onto the site, it stressed that, when planning for density, spatial concepts should be supplemented with time-based ones such as instance, frequency and duration, as well as more normative ones such as diversity and interactivity.

Questioning approaches to land use with alternatives to zoned space involves a widespread analysis of land utilization maps in order to fully marshal an approach that is remediatary rather than about zoning. For example, the work by those taking part in the Grand Paris ideas competition staged by former French President Nicolas Sarkozy⁹¹, who demonstrated a widespread focus on joining pieces of disused land. Or engaging with research using the local maps of this kind, as cited as key in their work on Hong Kong by Eskiye⁹², architects based there, enabling the assessment of patterns of density as well as adjacent agricultural open space, as a means to look at changing their interplay and bring green space into the city from the periphery.

If cities are centres of interdependencies played out over time, urban renewal can be carried out without the need for zoning and the destruction of complexity built up through urban evolution, but this definition is not given importance as a contextual factor by urban developers keen solely for commercial dependency. The polycentric development of Mexico City, including Xochimilco, one of the sites of the ancient Aztec city Tenochtitlan,⁹³ for example, led to their overlap of centres, producing 'zones with increasing complexity and networked relationships'. In such a situation with serious air and water

⁸⁸ MF, pp248-9.

⁸⁹ MF, pp18-19.

⁹⁰ MF, pp45-56.

⁹¹ MF, p6.

⁹² Bullivant, L, 'Beyond the Billboard and the Kiosk', in Bullivant, L, Ed., *4dsocial: Interactive Design Environments*, AD, July/August 2007.

⁹³ MF, pp211-216.

pollution affecting 'The Sleeping Beauty' (a popular local description of the city), reductivist zoning afresh would be counterproductive to creating the kind of interconnected sustainable identity the already degraded area of Xochimilco badly needed. Furthermore, earlier, ad hoc development in 'unplanned, disconnected phases' had already created its own unsustainable zoning that needed to be retroacted.

There needs to be more interrogation of the processes of upgrading of informal settlements acknowledging that they are mostly divorced from the formal city, yet as sociologist Saskia Sassen and others have stated, have deep underlying relationships with it. Such a tacit interdependency comes to the fore in instances such as the planning of the Olympics in Rio, during which some of the favelas have come under threat of requisition redevelopment, such was the 'urgency' of local government contestation, fended off by mass citizen protests. Working on schemes such as Lion Park, Johannesburg⁹⁴, Marlene Wagner, an academic and architect based at TU Vienna⁹⁵, studies urban patterns of both formal and informal areas, and is an advocate of trialling new instruments supporting new approaches to dealing with informal settlements, in order to evaluate their success.

Alternatives to zoning functions draw on social relations, whereas zoning functions are conveniently enclavist for operational reasons. In Sociópolis, Valencia⁹⁶, the intention is described as the spatialization of communality, recognizing three aspects of social interaction or 'ecologies', in line with Felix Guattari's definition, and in direct response to changes in Spain's traditional family structure, relocating specific groups of people who tend to be isolated or disadvantaged in relation to housing provision, the elderly and single people. Again, there is the intention to create a neighbourhood as an artificial ecosystem, by contrast to the grid system of Cerdà in Barcelona in the 19th century, in a solution that follows rules of urbanity identified by the architect without the need to put urban form first.

An important aspect of this is that creative adaptive planning produces 'toolkits', which could simply be a convergence of imaginative legislation and incentives that work locally, as in the case of the Center for Urban Pedagogy's work in NYC. A further example of post-zoning practice is the enabling of a mix of individual and collective initiatives at various scales where individuals can more easily buy plots of land and build their own schemes, whether houses or houses and a workplace (and allowing for further building, for example, of a granny flat or a workshop, in future), for instance in Almere Oosterwold, in the Netherlands,⁹⁷ essentially inventing their own futures.

Such an organic variant of normative planning goals – moving towards the 'unplanned' – in areas of Almere like Oosterwold or Homerus Quartier, where locals can form cooperatives and create their own building programmes, such as a DIY shop, apartment, and speculative flats, or houses and their own allotment) in the city – operating with just five rules governing building – including one that states that architect-designed houses can sit next to kit-originated houses – is one in which the government can play a facilitative, rather than a directive role, but where the private sector does not rule but individuals, defining the future direction of their communities and the nature of their interaction. There is evidence of the fact that the self-building experiment in Almere has ridden the storm of economic crisis better than the business plans of Dutch volume housebuilders.

Another key issue raised by self-building⁹⁸ is whether in fact the practice leads to more socially cohesive cities because inhabitants have a much stronger attachment to their surroundings. My own site trips to and research on slums (Neza-Chalco-Itza, Mexico City, 2004; Dharavi, Mumbai, 2006; Paraisópolis, São Paulo, 2008) showed me that residents made their living spaces according to their needs for a hybrid, live-work environment, for example, in Dharavi, space was allocated by the community, which is largely self-employed, to store and remediate their materials - recycling materials being a popular choice of work - as part of their living spaces.

The authorities have attempted to take possession of and clear the area and offer residents alternative accommodation, and we also saw examples of these in Paraisópolis, São Paulo, which the Indian

⁹⁴ MF, pp129-140.

⁹⁵ MF, p138.

⁹⁶ MF, pp217-223.

⁹⁷ MF, p246.

⁹⁸ MF, Make It Right chapter; interview with Urban-Think Tank about their retrofitting of slums, Routledge, 2012.

architect, Charles Correa, visiting with a group of us during the South American Urban Age conference in 2008, vociferously criticized for their sense of confinement and lack of adaptability. Their cost in an environment displaced from Dharavi (assuming the authorities were to go in and clear the site for development) will similarly confine their size and layout as solely domestic environments, making the live-work spatial solution of the slums (in a context with few alternatives) prohibitive.

At the largest scale, is the ‘water city’ of Saemangeum land reclamation project in South Korea⁹⁹, an example of a non-zoned city concept by Architecture Research Unit (ARU) going against the grain of conventional Korean practices. In considering the value of non-zoned plans, the obstacles to this approach are largely the continued existence of, lack of challenges to and official support for, anachronistic frameworks of regulations (see discussion on Neville Mars, an urban designer based in China,¹⁰⁰) as well as economic crisis halting the development of schemes.

There are counter arguments to the anti-zoning position that advocate ‘protective zoning’ specifically to enable and sanction urban agriculture.¹⁰¹ These replace outdated zoning regulations, so this underscores the need for any approach to division of land to be based on the concept of increasing capacity for social benefit.

Social equity and urban design

Overview

Architects and urban designers, as members of interrelated generalist professions, irrespective of who they are designing for, are naturally optimistic and aspirational; whereas while planning clients from the private sector will invariably share these attitudes, but however egalitarian they might be, their modes of operation are nonetheless transaction-driven and they will ensure commercial objectives are embedded in a plan above all other considerations alongside any officially required ‘green’ measures. This approach is taken in an era in which local governments are short-staffed, under-trained in sophisticated social issues and do not take a strong line, by and large, with market forces, leaving developers relatively free to set the agenda.

There is an explicit need to write goals of social equity into planning in all cities in order to create a better level of social stability, and recognise the value of working and non-productive citizens in need. Planning has been taking multiple forms in response to the growth and challenges of slums in the developing world, whose informal economies, as sociologists such as Saskia Sassen and others have underscored, are related to the corresponding formal economies of cities. Community design in the developed world can learn from the initiatives of slum retrofitting in the developing world, as slum initiatives in Dharavi, Mumbai and Paraisopolis, São Paulo, demonstrate, for example, Urban-Think Tank’s strategies for San Agustín, Caracas and Paraisopolis, applied in order to reinforce social bonds, in the hope of ‘catalysing commercial and social cooperatives’, and thereby ‘rhizomatically reinforcing’ an ‘area’s physical and social instabilities’¹⁰². With growing urban poverty – the US Brookings Institute has cited nineteen US cities whose levels of suburban poverty has grown to 50% of the population or more between 2000 and 2009, for example, and urban immigration (for example, to Shenzhen and Chengdu in China, from rural areas), community accommodation retrofitting plans are essential in the developed world allied to consistent research inputs.

The pressures of urbanization in exacerbating inequality calls for the kinds of creative adaptive strategies applied in informal communities of the Global South (but also in Asian cities eg Chengdu), taking on board Amartya Sen’s comment in *Development as Freedom*¹⁰³ that ‘a country need not wait until it is much richer before embarking on rapid expansion of basic education and healthcare’, which is ‘the

⁹⁹ MF, pp227-236.

¹⁰⁰ MF, p251.

¹⁰¹ For example, Van Veenhuizen, R, *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities*, International Development Research Centre, 2006.

¹⁰² MF, pp141-155.

¹⁰³ Sen, A, *Development as Freedom* Oxford University Press, 1999.

argument for putting major emphasis on these social arrangements in poor economies, without having to wait for 'getting rich' first.'

Nowadays it is more common for urban ethnographic research to be part of a masterplanning process, eg HafenCity, Hamburg ¹⁰⁴. But research into social needs is weak in some urbanizing cultures. China, of all the BRIC nations, is undergoing the fastest urbanization, and Gu Chaolin, Yuan Xianhui and Guo Jing, authors of China's 'Masterplanning System in Transition' ¹⁰⁵ make this point strongly concerning the Chinese planning system.

While mainstream masterplanning is too abstract and moreover too commercially focused to be able to place much emphasis on social equity or indeed educational initiatives, creative adaptive planning involves choices that closely relate to the poorest and their micro-economic existences (and also potentially the isolated, eg the elderly, the young) members of society (Medellín, Columbia ¹⁰⁶, Lion Park, Johannesburg ¹⁰⁷, Urban-Think Tank ¹⁰⁸, the focus in Abhijit Banarjee and Esther Duflo's *Poor Economics* ¹⁰⁹ as well as methods of community apprenticeships on schemes, which in time created teams of skilled workers able to go to sell their skills elsewhere in the country as well as support new projects. The work of Francis Kéré in Burkina Faso, the subject of a feature I wrote in 2012 ¹¹⁰ is a good example.

Self-build community patterns, for example, DIY initiatives with mobilizing effects, as observers such as have commented recently, including the architect and academic Bart Lootsma: 'across Buenos Aires on leftover plots in traditionally low value areas, (these) self-built blocks, usually of around eight apartments, have become a common sight. The cumulative effect of these interventions has led to the revitalisation of neighbourhoods, such as Palermo, Caballito, Nuñez and Barrio Norte.'

With the growth of digital community platforms including in Africa, where the greatest percentage of the world's poor live, there will be a growth of crowdsourcing ¹¹¹ as a way of allocating resources to future urban schemes which will shift the nexus of power in procurement towards community-led projects.

Alternative public space models

Against a context of the dramatic restructuring of the public sphere including the proliferation of gated communities (in Mexico City, Johannesburg, India and elsewhere in the developed world) as grafted enclaves, qualitative parameters for urban planning are being evolved that are context-specific, and about co-existence. The phenomenon of high-density adjacencies between rich and poor in cities of the Global South, cited by Rahul Mehrotra in relation to Mumbai, whose perception of the design of public space as a potential 'neutralizing instrument', is steeped in a desire to overcome the contested nature of urban space. He has also referred to the practice of local government and private sector consortia investing in infrastructure gaining a premium at the moment, as an opportunity to augment the development brief for public space uses.

The long-standing commitment by Danish urban designer Jan Gehl to challenge Modernist approaches to public space, allowing it to be a convivial meeting space (discussed in his 2002/3 lecture/essay, *Winning Back the Public Spaces* ¹¹²), while prevalent in schemes such as HafenCity in Hamburg ¹¹³ (like many new developments, programming music performances for, and dance sessions by locals), and in Lion

¹⁰⁴ MF, p53.

¹⁰⁵ MF, pp251.

¹⁰⁶ MF, pp117-128.

¹⁰⁷ MF, pp129-140.

¹⁰⁸ MF, pp141- 155.

¹⁰⁹ Banerjee, A and Duflo, E, *Poor Economics: A Radical Rethinking of the Way to Fight Global Poverty*, Penguin, 2012.

¹¹⁰ Bullivant, L, 'Architecture as a Community', the BSI Swiss Architecture Award, Domusweb (Italy), 30 December 2012.

¹¹¹ MF, p21.

¹¹² Gehl, J, *Winning back the Public Spaces: City Planning with People in Mind*, 2002/3.

¹¹³ MF, pp45-56.

City, through Michael Hart's application of Dutch Woonerf ('living street') concepts ¹¹⁴, these kinds of approaches are not given attention at Ørestad in Copenhagen ¹¹⁵, which, of the completed plans in the book, took the longest to be realised. It was a grave mistake that only a basic masterplan was chosen for Ørestad, rather than a conceptual framework plan, ideally with a team of urban designers working on it, not separately operating consultants, that could have enabled a more imaginative approach to street identity and life. This generative notion accepts the layered relational potential inherent in public urban space. The application of domestic concepts to give urban space blighted by tall buildings and no street life culturally contextual identity, in Michel Mossessian's 'urban living room' in Doha, Qatar ¹¹⁶, or the 'urban salon' applied to OBR's plan for Genoa (not featured), is one alternative scenario.

Included within the recuperative category forming a large part of my enquiry is the identification of smaller, interstitial spaces in cities for retrofitting. My interview with the Mayor of Valladolid in 2011 confirmed that small plans, for example for converting a disused car park into a social space, were easier to advance than the city's masterplan by Rogers Stirk Harbour, on hold since the start of the economic crisis.

Participatory processes

The emergence of participatory processes of urbanism is impacting the methodologies of masterplanning, and changing the identity of the urban designer. In instances where there is scope for these, his or her work is less imposition and more creating new modes of participation hand in hand with community initiatives in which they use and extend their own resources. My next book, *Recoded City: Co-Creating Urban Futures*¹¹⁷, on participatory placemaking, with the urbanist Thomas Ugo Ermacora, based on interviews with a variety of figures from agencies across the globe, underlines that participation encourages responsibility in cultural agency for community-focused urban fabric.

Such processes enable adaptive planning to possess strong scope for innovation in processes, applying collective mapping and drawing on collective intelligence. It takes the form of real time laboratory bringing various parties together at one table, and includes a range of modes of participation such as the envisioning workshops staged prior to the masterplan for Medellín, Columbia ¹¹⁸, citizen competitions for ideas (Carlsburg, Copenhagen, ¹¹⁹, the public consultation held for Almere 2.0, the Netherlands, ¹²⁰ and at the local business level, the principle of subsidiarity part of the Milan Urban Development Plan, ¹²¹ the effect of regular community workshops and formal voting procedures staged by Elemental and Tironi Asociados as part of their masterplan for Constitución, Chile. ¹²²

What has also been called 'tactical urbanism', in which the project of effecting urban change is akin to a DIY creative laboratory with a heuristic methodology conveyed through group working, evokes the city as 'remakeable' in ways (described as performative by some theorists, and honouring its identity as a place of encounter, assembly and simultaneity, as defined by Lefebvre) that might not have been anticipated.

'Social pact' design, foregrounding the application of collective intelligence, carried out by practitioners such as Elemental and Tironi Asociados (eg. the reconstruction plan for Constitución, Chile, ¹²³ for which citizens voted, and Caluma Plus, Chile) and Snark space making (based in Italy, and involved in many contexts, for example, the prevalent ruins of Auletta near Salerno, after the earthquake of 1980), focuses on the psychologically reparative, reconstructing a trust-based relationship between citizens and

¹¹⁴ MF, pp45-56.

¹¹⁵ MF, pp33-44.

¹¹⁶ MF, pp59-68.

¹¹⁷ Rosa, ML, Weiland, UE, *Handmade Urbanism*, op cit. Bullivant, L, and Ermacora, T, *Recoded City: Co-Creating Urban Futures* Routledge, 2015.

¹¹⁸ MF, p123.

¹¹⁹ MF, p30.

¹²⁰ MF, p248.

¹²¹ MF, p191.

¹²² MF, p101.

¹²³ MF, pp93-103.

institutions, in order to carry out a collective design of plans, through the discussion of the symbolic relationships between people and place. Participatory urbanism also opens up the potential for a wider dialogue with citizens, using real time workshops, but also documentary films made among the community, as the plan for Constitución demonstrates.

Emphasis is on first hand engagement and on opening up public access and amenity through ‘meanwhile’ uses, for example, Canning Town Caravanserai, east London, the Raggi Verdi bicycle trip arranged to explore proposed adaptations ¹²⁴, the DreamHamar project in Hamar, Norway, led by Ecosistema Urbano and others, the masterplan to retrofit the concrete ‘dalle’ of La Défense by AWP, Paris (2012), which tasks the urban designers to additionally play the role of curators of art and event programming of this major historic example of a Grand Projets megastructure, while physically reprogramming its formal nature.

While schemes with voting are exceptions, a participative approach is emerging more forcefully in the methods evidenced by very recent schemes such as RiverCity Gothenburg 2021, and the outreach work on riverside areas of cities carried out in Kentucky, USA, by Michael Speaks, until 2013 Dean of Architecture at University of Kentucky, an instance of the bridging of academia and local commissions. This process needs to continue, in order to knit academic programmes into society and enable graduating architects to better understand ways and means of finding and leading worthwhile projects through teamwork.

The processes of academic involvement with urban plans per se at community level demonstrate varying strategies adopted overall by different constituencies. Workshops to find new ways to improve neighbourhoods in Medellín ¹²⁵ began in the University. Schools of architecture and urban design have sustained involvement with on-site research and projects (TU Vienna, ¹²⁶ Cornell University’s Sustainable Design group ¹²⁷, University of Nottingham ¹²⁸) which I found to be in the ascendancy. Many architectural schools (Princeton, Architectural Association, NYU Gallatin, Syracuse) are now globally connected and/or recipients of Mellon Foundation funding (University of Michigan Taubman has branded its research investigation Social Equity; Princeton focuses on Latin America and relations between North and South America). There are new initiatives such as The Why Factory at Delft University of Technology ¹²⁹ and ETH Zurich’s Future Cities Laboratory alliance with a Singaporean body led by Kees Christiaanse, KCAP founder ¹³⁰, and ETH research in Chengdu and Asia (Symbiocity research and propositions, discussed in my feature on this topic on Urbanista.org).

Public consultation is often carried out for both a prolonged period, and even very early in the development process before the masterplanners were appointed, eg West Kowloon Cultural District in Hong Kong, whose public consultation lasted 2 years from the point that the three shortlisted teams were chosen, putting the three plans through an extensive democratic exposure. There are now more open source planning models, for example, examples of citizens being given the opportunity to choose the designs of their homes (eg Make It Right, Almere), and act in ways to customize housing developments.

Knowing that planning is generally regarded as relatively hermetic as a topic, and with bridging approaches in mind, animations can explain prototypical masterplanning ideas in an accessible way, eg. Loop City, Copenhagen, by BIG ¹³¹, Slussen, Stockholm, by BIG, the making of La Défense and planning new housing in Brussels (Rotterdam International Biennale, 2012). The dynamic nature of information in a format beyond technical drawings makes it easier to look comparatively at different models (possible through Sim City for anyone with a computer in this era) and those from different time periods.

¹²⁴ MF, p198.

¹²⁵ MF, pp117-128.

¹²⁶ MF, p138.

¹²⁷ MF, p138.

¹²⁸ MF, p140.

¹²⁹ MF, p23.

¹³⁰ MF, pp45-56.

¹³¹ MF, p6 and pp42-44.

When it comes to simulation as a new adaptive planning technique, within my predominant context of largely commissioned masterplans, relatively few open source simulations exist as opposed to use of simulation by the design team (the exceptions being Groundlab and MVRDV¹³²). This is an area that the emerging participatory placemaking movement after the advances made by practitioners such as Cameron Sinclair or Ecosistema Urbano (eg Ecoboulevard in Vallecas, Madrid, 2008) may advance. Crowdsourcing is an emerging means of adaptive planning, as a feature of a shared economy, doing things with people rather than to them or for them¹³³, and this also approach extends to crowdfunding local schemes in a rebalancing of the roles in urban design.

A number of masterplans are collaborative, with a number of different practitioners working together, in which the plan is a platform and creative design workshops are a key part of the process. While this practice appears to be strongest in the Netherlands, it influences the elaboration of the masterplan in both its analytical and synthetic stages.

Multiple scales of planning

Today's urban planning at its most organised consists of four levels of planning: neighbourhood, city planning and economic development, regional planning, and state planning. Decentralizing tendencies, for example, the promotion of polynuclear urban territories, for example, Xochimilco, Mexico City,¹³⁴ are either steered by urban planning, or become unmanageable sprawl. The very fragmented nature of geographic contexts of the contemporary city as the result of privatisation and zoning have themselves redefined the meaning and practices of urban planning, as Michael Dear and Allen Scott have noted¹³⁵, and rendered local urban government in many contexts weak and ineffectual, undemocratic and dysfunctional.

Clues for creative agency lie in dynamic, interdependent, mediated processes, rather than in rigid concepts. For example, critics such as Neil Brenner¹³⁶ argue that purely focussing on population growth, or traditional notions of hinterland and rural does not fully encompass the processes of urbanisation. Urbanization must be seen a hybrid, multi-scalar phenomenon evolving patterns of ever-active mutual relations between densification and its impacts on environments, as part of a contestatory social, political and cultural struggle. It encompasses forms of land-use intensification, the ways in which city cores and their peripheries polarise, and the coordinating logics, instruments and systems applied by different players. If the demands placed on a plan are multi-scalar (from the local to the global), then strategies for plans must work in multiple frames of reference.

Existing systems in place born of silo thinking and historical economic and procedural neglect acutely reveal their weaknesses at times of ecological crisis, for example, federal support for New Orleans' infrastructure was shown to be neglectful and inadequate both before and after Hurricane Katrina. City plans, however apparently comprehensive their frameworks might appear to be at the time, do not last for all time. In the aftermath of severe flooding Brisbane's City Plan of 2000¹³⁷ is being replaced, for example, to address the city's challenges in relation to increasing population, economic growth, sustainable living, housing choice and planning for resilience to natural disasters.

Given that one challenge is spatial fragmentation driven by commercial development privatizing public space and asserting new hard boundaries of gentrification via BIDS and other financially instrumental means elaborated by Anna Minton¹³⁸, the issue of achieving spatial cohesion becomes a critical political tactic of counter-contestation, with relational urbanism including a framework of principles, rather than a 'classic' masterplan, becoming essential. The scope for adaptive plans on a bigger scale to contain a

¹³² MF, pp252-258; 174-183 and 239-249 respectively.

¹³³ MF, p21.

¹³⁴ MF, pp211-223.

¹³⁵ Dear, A and Scott, A, *Urbanization and Urban Planning in Capitalist Society*, Methuen, 1981.

¹³⁶ Brenner, N, *Implosions/Explosions: Towards a Study of Planetary Urbanization*, Jovis Verlag, 2014.

¹³⁷ MF, pp264-274.

¹³⁸ Minton, A, *Ground Control: Fear and Happiness in the 21st century city*, Penguin, 2012

variety of smaller plans, eg Almere 2.0¹³⁹ with their own methodologies led me to consider the issue of aggregation, and with what intentionality this process is carried out, as well as to investigate the evolving identity of London in relation to its urban and suburban transport infrastructure, including the new Overground developments.¹⁴⁰ A more expansive definition of London would benefit from a new map in which swathes of Kent and Essex are redrawn, which would include Crossrail and Crossrail 2, as critic Sarah Sands advocates, could take the form of a new interactive and open source citizen tool.¹⁴¹

One aspect of contemporary commentators' positions on masterplans is a downgrading of attention on big scale plans – regional as well as city-wide – in favour of smaller ones, cited for reasons that revolve around fears that the former may fail and are in any case hard to evaluate. In the Introduction to the publication *Planning Sustainable Cities*,¹⁴² Anna Kajumulo Tibaijuka, Under-Secretary-General and Executive Director of UN-Habitat, argues that 'the outcomes and impacts of many large scale plans are difficult to evaluate because of the many influences and factors that are at play in cities over time. For this reason, it makes more sense to focus on site plans, subdivision plans and neighbourhood plans, all of which are smaller in scale and more conducive to monitoring and evaluation'. Building Futures, the RIBA study group, also recently staged a debate on whether big plans are relevant to cities, or smaller, strategic interventions are of more value, while the Wolfson Foundation's staging of a competition for an economically sustainable Garden City (including 'garden neighbourhoods') would seem to favour attempting to identify complementary tools to make large scale urban schemes possible.

While many would agree with UN-Habitat's analysis, and reject Wolfson's focus on a Howard-inspired 'garden city' capitalistic models over new, equitable concepts to improve existing urban territories, larger scale city-wide planning is vital today as an application of analytical thinking about urban, peri-urban, suburban and regional relationships. Moreover, there exists an unprecedented capacity through technological tools to reconceptualise 'the generative city' at this level of urban identity and regional territory relations. New technologies also make it far more possible for many professionals – urban designers, geographers, ecologists, and so on – as well as community organizations, to read big scale topographies in a deeper, and more comparative way with relative ease. Regional planning also has value today as related exercises in examining the scope of integrated actions for adaptation of smaller scale places, and/or for better connectivity and networks to be devised.

The framework, rather than the masterplan, is the instrument that possesses the flexibility and socially mediated cultural input with which to navigate positive initiatives across cities and regions, and that big scale systemic thinking in itself does not necessarily bring rigidity in tactics. Innovative, thoughtful conceptual strategies at the big scale include the Milan UDP,¹⁴³ Brisbane's Smart Cities: Rethinking the City Centre,¹⁴⁴ Terry Farrell's speculative National Park for Thames Gateway and Toronto Central Waterfront masterplan by West 8, the last two subjects of my features in *a+u*, 2006 and 2007 respectively.

There are other ways of viewing the changing identity of masterplanning, which I acknowledge. Masterplanning in the traditional sense is also 'dead' because urbanization has obliterated the opportunity to create from a tabula rasa, but the intent to create near tabula rasa-like conditions in order to advance developments and foster a new disequilibrium, is rife across urban cultures. This is not the only reason, but urbanization (process) as a territory of the real, as well as the urban (concept) as a territory of the ideal, is the context in which the plan, whether master, or adaptive, needs to have an identity. It is legitimate as part of this to look at adaptive planning as a practice with fewer rules, governed more by social imperatives for self-organisation.

¹³⁹ MF, pp239-249.

¹⁴⁰ Bullivant, L, '21st century London: Shaping the Future Now', *The Plan*, 070, November 2013.

¹⁴¹ Sands, S, 'London is fast turning into a new kind of city', *Evening Standard*, 14 October 2014.

¹⁴² UN-Habitat, *Planning Sustainable Cities: Global Report on Human Settlements*, 2009.

¹⁴³ MF, p187-201.

¹⁴⁴ MF, pp264-274.

The plan as legal governance instrument

There are many instances in which the interpretation in the form of guidelines based on urban readings of a district for a masterplan remain in this form as the stakeholders decide to interpret the opportunities differently. With the emergence of Vision Documents stating the principles of a vision, rather than a plan per se, comes a coalition agreement for the joint development of an area based on extensive political and public consultation, which is usually reviewed over time. For example, the first Vision Document for Zuidas, Amsterdam, an area of development expected to be completed by 2035, was drawn up in 2000. Due to the dynamic nature of developments there, it is reviewed every few years.

One issue arising from this is whether this approach therefore leads to the implementation of the masterplan, and/or its crystallization as a local development plan in the form of a legal instrument. A number of examples of contemporary speculative plans developed to a self-brief become officially implemented eg Raggi Verdi in Milan ¹⁴⁵; Michael Rayner's Smart Cities: Rethinking the City Centre report ¹⁴⁶ for Brisbane was subsequently adopted by the City Council.

Today's masterplans include city-wide strategic legal documents, as well as new urban design initiatives. Many Strategic Masterplans are now in force for specific cities since the millennium formally constituted as legal documents regulating the urban, economic and social development policies, as well as land use. Their comprehensivity includes the environmental dimension, for example the São Paulo Strategic Master Plan, 2002, or Brisbane's city Masterplan, which has had to undergo substantial revision since the city's recent floods.

The São Paulo statutory document incorporates environmental protection into the city's urban policies, which were in the past marked by a predominantly silo-based perspective, and participatory methodological approaches to management. This is expressed through the definition of one third of the city's territory as an Environmental Protection Macro-zone, and numerous policies to increase urban biodiversity through nearly 50 new parks of various sizes, some linear and an urban community gardens project.

Landscape urbanism

The expansion of landscape urbanism and landscape infrastructure concepts and methodologies within the field of masterplanning has entailed landscape architects playing a larger, more politicized role with broader influence in the making of cities than before for some years, responding to the demands of designing at all registers, from the masterplan to details of bridge designs, and the architects' prerequisite of communication with all those involved: politicians, engineers, institutions, financiers and property owners, many of whom change during the course of a project.

The practice of landscape urbanism since the late 1990s has assisted notions of adaptive planning for today's civic urban order. With its focus on a territorial aspiration, open-ended, indeterminate approach to programme, potential for change over time, and adaptive techniques, including for waste recycling, it posits 'new working concepts adequate to the power, complexity, and indeterminacy of the city itself' ¹⁴⁷. At Seattle Waterfront, ¹⁴⁸ landscape, new connections and a regeneration of the waterfront are synthesized. Important features of landscape urbanism are its political agency and remedial aspects. OMA's 1987 plan for Melun Sénart in France, for example, gives landscape voids the dominant role over the constructed environment, reversing the norm, for these reasons.

The ambivalence about masterplanning's credibility is being replaced by an interest in the potential of landscape urbanism and landscape infrastructure concepts in which landscape is increasingly connoted as an 'active urban tissue', an urban element that accommodates a wide mix of desires of urban dwellers. While early landscape urbanism focused on post-industrial cities such as Detroit, the approach has grown and found acceptance across cultures as a way of dealing with flexible, large scale planning. It has

¹⁴⁵ MF, p197.

¹⁴⁶ MF, pp264-274.

¹⁴⁷ Allen, S and McQuade, M, *Landform Building*, Lars Müller/Princeton School of Architecture, 2011.

¹⁴⁸ MF, pp69-80.

spawned a number of academic courses, including one at the Architectural Association, London led by architect and urban designer Eva Castro, co-founder of Groundlab,¹⁴⁹ which develops instruments, responses and investigates potentials emerging from developmental pressures that regional networks exert on localities today. It specializes in new operational platforms of environmental readings enabled through software, opening up new ways of simulating and testing topological, ecological and socio-spatial options in real time.

While technology sceptics might disdain the full value of urban places being mapped by GIS, and GPS, or designed with parametric techniques, such strategies enable professionals to achieve a deeper, and far more dynamic reading of the constituent elements – and therefore accordingly scope for remediation – of land. Such a strategy needs to go hand-in-hand with topographical studies in cities, which many urban planners have not previously included as an aspect of their work, for example, Juan Herreros Arquitectos' masterplan studies for the siting of the Munch Museum on the waterfront in Oslo, which promotes understanding of the relational urbanism of a city struggling with the functionality of a number of its public spaces.

The new field has been contested for its low density and social assumptions by figures such as Andres Duany, a New Urbanist, (competing with adherents of Landscape Urbanism, for US masterplanning jobs), and also for its aestheticisation of nature, and need for greater focus on ecology. In relation to the first issue, there is a strong wave of urban remediation work being carried out, for example at Xochimilco, Mexico City) by TEN Arquitectos¹⁵⁰, in which the 'invention of nature' is a tactic of resource aggregation. The related work of Pierre Bélanger, on infrastructure ecologies, carries his aim that they shape and direct the future of urban economies, which has also to do with a certain natural collectionism favouring, and allowing for difference to continue to thrive.

To achieve both goals in relation to satisfactory civic urban order, calls for strategies that produce difference while maintaining stability, so that ecologies are robust, and spatial differentiation, as opposed to conservative contextualism and segregation, can be achieved. A good plan needs a narrative but must also be a dynamic system, referring to Gregory Bateson's view that 'ecological thinking must be ecological'.¹⁵¹

The expressionist aspect of landscape urbanism, promoted by practices undertaking many contemporary masterplans such as West 8 (Madrid RIO),¹⁵² and Gross.Max, both of whose work is admired for its picturesque qualities, includes narrative-driven surrealist narratives for public landscapes. These constitute a critical response to the impact of globalization on cities. In overall approach, their projects avoid codification of urban space. They embrace a narrative-driven conceptual approach to nature and an interest in the near transgressive¹⁵³ in order to engage with the complexities of evolution and growth through a form of magic realism. The creative potential of narrative in landscape-driven urban design also transforms the mono-functional identity of a masterplan through the scope of landscape design for conceptual layering – fully acknowledging the strata of urban spaces – real and imagined.

The perceptions of artists, for example, the Surrealists, who regarded urban spaces as muses with a complex network of symbols, organic living texts with multiple and constantly changing meanings, are seen as valuable by a practice like West 8 in their global work, and such a sensibility should be a larger part of the narrative aspects of plans without being manipulated as theme parks. Governors Island, off Manhattan, by the practice, a traditional location for recreation, which in regenerated mode has many imaginative features, has also been overly challenged by real estate development issues.

Parks as public spaces, long since carrying significance as place of relative freedom, with freedom parks existing in the Philippines and Freedom Park near Pretoria designed to uphold this principle, are key to the social inclusion agenda of urbanizing cities. The Madrid RIO city park plan (West 8, Burgos

¹⁴⁹ MF, pp252-258.

¹⁵⁰ MF, pp211-216.

¹⁵¹ Bateson, G, *Steps to an Ecology of Mind*, University of Chicago Press, 1972.

¹⁵² MF, pp 202-10.

¹⁵³ Bullivant, L, 'Activating Nature': the magic realism of contemporary landscape architecture in Europe, in *Landscape Architecture: Site/Non-Site*¹⁴, guest edited by Michael Spens, AD, March/April 2007, pp76-87.

+Garrido) reconnects hitherto disconnected neighbourhoods, the river to its city (reversing the habits of generations to develop riverbanks with backs turned towards the water), and creates a flow of linked, differentiated spaces for multiple experiential uses, such as cultural activities at the converted abattoir complex to the north of the site, that is not gated and in which there is a strong sense of freedom to meander from area to area or stay in one place. At the West Kowloon Cultural District, Hong Kong (visited and studied in 2011), where the masterplanners, Foster & Partners, according to project architect Spencer de Grey (discussed in his Tate Modern talk, 2013), allocated a third of the cleared, peninsular site to a park, and the rest of the site is a wide mix of uses and sizeable multi-use public spaces, not solely cultural buildings, a plan evolved from the patterns and relational scale data of nearby streets, rather being merely a consequence of a collage of single iconic institutional forms.

Landscape urbanism also favours working what is latent in peripheral and marginal zones, rather than making a tabula rasa, eg. Xochimilco, Mexico City; Madrid RIO¹⁵⁴, including historic sites (Carlsburg, Copenhagen), Landscape infrastructures evolved from existing infrastructure within urban planning is a key mechanism of creative regeneration, as a relational spatial strategy. Examples include the Fat Walk (formerly the Lea River Park), designed by 5th Studio and Vogt and The Greenway by Adams & Sutherland, for east London. Self-initiated schemes like Tiuna el Fuerte Cultural Park, Caracas, Venezuela, by Alejandro Haiek Coll and Eleana Cadalso of Lab.Pro.Fab., occupying the underused land of a former parking lot within the city of Caracas, the project address the city's lack of green space and a need for youth programming.

By contrast to the predeterminism of traditional masterplanning, adaptive planning encompasses experimentation and testing through prototyping. Green infrastructure prototypes, for example, in the recent work of DLandStudio, NYC, are tested for eventual deployment at a larger scale; the restoration of a buried creek, giving it a line of pocket parks to constitute the organizing armature of an emerging downtown district in Lexington, Kentucky, a scheme won in Feb 2013 by Scape Landscape Architecture, following the 2011 work done by Space Group at the invitation of the Mayor to evaluate 62 acres of parking lots and underutilized land parcels.

The achievement of differentiated space is strongly identified as a need in contexts where a political imperative to do the opposite exists. Chengdu, a rapidly developing city in China, discussed in my essay in Urbanista.org (see Portfolio), Chengdu: big city symbiosis,¹⁵⁵ is encouraging unprecedented number of farmers to move to the city, and has adopted the city branding theme of garden city. Instead of preserving nature in the suburbs and industrial areas, plans are doing away with historical elements and community scale resources. Speculative plans for Chengdu by ETH students for rural life in the city, for example, adjust the monotony of urban life with a community-focussed ecosystem of urban agriculture, recreation and recycling facilities in a revival of the street. Rather than deny the relationship the formal city has to the informal, and banish slums, their research led to the advocacy of a model of bottom up areas conceived in this way next to top down areas offered a balanced model for Asian cities in which they acknowledge the value of cultural production of this kind within urbanism. This is perhaps a model of robust ecologies in dynamic equilibrium.

I perceive this to be an area that the emergent participatory placemaking movement after the advances made by practitioners such as Architecture for Humanity or Ecosistema Urbano (Ecoboulevard in Vallecas, Madrid, 2008) will continue to focus on. I also discuss the role of crowdsourcing as an emerging means of adaptive planning, as a feature of a shared economy, doing things with people rather than to them or for them, and this also approach extends to crowdfunding local schemes in a rebalancing of the roles in urban design.

Ecological urbanism

This parameter of the *Masterplanning Futures* project is also discussed above. As already stated, it aimed to identify a shift in focus from technically driven, quantitative measures in ecological urbanism towards qualitative, integrated solutions. For many, Masdar City¹⁵⁶ is not the answer, nor intended for a wide mix

¹⁵⁴ MF, pp211-216 and pp202-210, respectively.

¹⁵⁵ Bullivant, L, 'Chengdu: big city symbiosis', Urbanista.org, issue 1, 2013.

¹⁵⁶ MF, pp159-173.

of city dwellers, while by contrast, the value of MVRDV's plan for Montecorvo on the edge of Longroño lies in its strategy of holistic self-sufficiency as well as its role in the argument for and against 'eco new towns'.

Largely as a parallel, rather than an integrated, activity, ecologists make their own masterplans, and that the hyper-local harnessing of digital technologies is building the forms of conservation and planning research and implementation possible. For example, eco-drones carrying out precision mapping, which can be integrated with GIS. In science, the advance of synthetic biology has given rise to predictions that nature will in the future be programmed to clean up oil spills. This kind of distributed intelligence-based strategy enables adaptive planning to be location-intensive and real-time, influencing my argument in *Masterplanning Futures* for socially driven innovative strategies with new systemic ways of thinking about land and its resources.

Signs of innovation in planning strategies using biological resources, include, for example, ecoLogicStudio's Algae Farm, Simrishamn, for the Skane region of Sweden¹⁵⁷, which I also discuss in my book *New Arcadians*, 2012,¹⁵⁸), which uses algae as a driver for a network of new prototypical civic schemes, ranging from touristic to business centres, speculatively integrating algae production into the current and future life of the region rather than marginalizing it. The building of resilient ('resilience planning' being an emerging sector, focusing on the social sustainable aspects of places) urban places is not just infrastructure repair but about permeability and the inclusion of flood walls, for example, and the inclusion of new concepts, such as the 'Cradle to Cradle' approach¹⁵⁹, which perceives waste as food.

In this field there are many instances of difficulties in synthesizing multi-track initiatives in countries that have not dealt with major flood management historically, in which wider frameworks become part of the process later rather than at the beginning in order to deal with the myriad of issues resulting, floods lead to drinking water shortages, for example, Make It Right were commissioned by the City of New Orleans to create green stormwater management infrastructure long after its housing plans evolved¹⁶⁰; Brisbane City Council only created a Flood Review Action Plan to inform the River City Blueprint after the 2011 floods took place¹⁶¹.

The challenge of the remediation of sites calls for lenses perceiving a neighbourhood as an artificial ecosystem supporting reuse, as in the case of Sociópolis¹⁶², and at a larger scale, schemes such as Stefano Boeri's BioMilano¹⁶³, which aims to strengthen transitional areas in order to connect the urban, rural and natural in an instrumental way (this supports both urban agriculture and the livelihoods of the 'cascine', farms in the peri-urban areas around Milan, the subject of my feature, 'Cybergardening the City', 2012, featured in Urbanista.org¹⁶⁴).

If the masterplan is to be infused by social awareness, its adaptive planning tools and processes need to promote a cosmology of the commons, allying ecological know-how and social justice/support for self-determination, for which a proliferating number of schemes such as Simrishamn and Sociópolis, in particular, present seeds of ideas.

The role and identity of planning tools

While urban planning through the means of tools and processes, terms which are often seen as interchangeable to denote the plan and its proposed concepts and processes of implementation, has been in the ascendancy, most global cities lack this full-blown approach and are subject to laissez-faire

¹⁵⁷ MF, p5.

¹⁵⁸ Bullivant, L., *New Arcadians: emerging UK architects*, Merrell, 2012.

¹⁵⁹ MF, p108.

¹⁶⁰ MF, p13.

¹⁶¹ MF, pp273-4.

¹⁶² MF, pp217-223.

¹⁶³ MF, p197.

¹⁶⁴ Bullivant, L., 'Cybergardening the City, Milan', Urbanista.org, issue 1, 2013.

incrementalism, and in contexts of considerable slum developments, the formal city often apparently ignores the informal city, or in some cases has introduced local municipal programmes for retrofitting and upgrading, for example in Paraisópolis in São Paulo, which are defined as micro-planning due to their neighbourhood scale, but informal settlements are also prone to land grabs by municipalities for new development plans for example, at Dharavi in Mumbai, and Santa Marina and Vila Autódromo in Rio – affected by Olympics’ plans for events facilities and Bus Rapid Transit infrastructure development. In other cases, municipal leadership is not strong, and while tools are endorsed as the best way for urban renewal, and a masterplan competition may be held, yet the final plan advanced ends up being a mix of elements from across the shortlisted entries.

The tool in urban planning is invested with significance as a key to sustained change, and has a variety of meanings. As already stated, the most specific and potent tool, or instrument, of 20th century urban planning has been zoning, legally mandated. Other connotations of tools are for programme management, to plan and schedule work. But the word ‘tool’, or ‘instrument’ more widely and usefully today, denotes the masterplan itself, defined as a ‘development framework’, for the way in which large areas, potentially in multiple ownership, may be developed. In UK terms at least, it involves appraising local context, reviewing policies and regulations applicable, conceiving a ‘vision’ for the place, determining feasibility, establishing planning and design principles, and an agreed plan for the development process. If developers decide to submit a detailed planning application on the basis of this framework, a 3d visual assessment must be undertaken.

In the UK, central government’s desire to speed up planning has helped to incubate the parameter plan, applied by AECOM at North West Cambridge, a 140 hectare site, that fosters growth of the research and technology-based economy, is multi-modal to honour the cycling culture, restricts parking, maintains its courtyard elements, adds vibrancy, allows for flexibility in use and lifestyle and reflecting Cambridge University’s innovative sustainable thinking, encompassing a balance in rates of growth in jobs and housing. Parameter plans, now required as part of the legal planning framework are based on a more relational understanding of issues than was the case in the past. Rather than retrofitting abstract technical studies to a design, here the design of a development is driven by an evidence base. Before any work on design is undertaken, detailed ecological, topographical, flood, arboricultural, traffic and landscape is gathered by a multidisciplinary team to inform the ‘parameters’ of the development area. As a result, indicative site layouts that truly respond to the site parameters can be designed.

The chief tool of urban planning, the masterplan, is detailed guidance in 3d, describing and illustrating a proposed urban form, with land uses, proposals for buildings in some cases, and mix of tenures, and external spaces. These can be made for sites identified by the Local Development Plan, of over 2 hectares or for more than 50 houses. They may include design codes and a detailed schedule for delivery including a programme for stakeholder consultation. Another tool is the planning brief, site-specific guidances highlighting planning policies, constraints and opportunities of sites of various sizes. These tools must ensure that development fits the local context and creates a meaningful sense of space. In many cases an Environmental Impact Assessment is needed in tandem.

The masterplan’s modes of representation

Modes of representation in the fields of urban design and planning encompass the diagram, employing digital parametric tools, and more recently, social media and urban websites, each presenting new possibilities and functional limits. The traditional masterplan representing a one-off intervention was documented through a blueprint for one single client by one practice as the main designer and contractor. Compelling and influential, examples such as Le Corbusier’s Ville Radieuse (1935) or Ebenezer Howard’s diagram A Group of smokeless, slumless cities (1903), published in his treatise, *Tomorrow*,¹⁶⁵ were ostensibly complete visions encapsulating complex ideas seemingly solved.

It was far predated by diagrams with a simple, rational street grid, such as those of Hippodamus’s Miletus street grid, and diagrams depicting service area layouts, ruling class and religious sanctuary areas eg the cities of the Nile, Euphrates and Indus, Mayan, Incan and the Borobudur of Java. The diagram of the grid extended for future city development, for example, Philadelphia of the 1680s, a place conceived for a dualistic legacy of both divine order and profitable land speculation, and in the 19th century, Manhattan, 1811 and San Francisco, 1852, whose new map ignored both the coastline and topography,

¹⁶⁵ Howard, E, *Tomorrow: a Peaceful Path to Real Reform*, Cambridge University Press, 1898.

took on new significance at the time but were later discarded as suburbanization took root. Plans of megaregions became fashionable in the 1950s and 1960s, such as one continuous Northeastern megaregion from Washington D.C to Boston, and are now very common in an era of digital mapping and custom interactive cartography, analyzing a range of features and shifts, from broadband adoption to tree locations, exemplified by BERG's recent 'Here & There' drawing of a horizon-less Manhattan, perceivable both by the pedestrian at street level and as a bird's eye view, in ways that enable a deeper understanding of dense metropolises.

Other modes of representation used by urban planners include transects, visual tools to divide landscapes into multiple uses, and this means of conveying the rural-to-urban gradation between nature and dense urban zones is a popular framework with New Urbanists in the US. Diagrams by John Nolan for West Palm Beach, and Clarence Perry's Neighbour Unit diagram in the 1920s, showing 5-minute walks. New zoning laws in the early part of the 20th century and the introduction of skyscrapers led to set back diagrams to show how this would affect daylight reaching the streets below. 'Situationist' artists and architects in the US in the 1950s emphasized bottom-up citizen experience, for example, Kevin Lynch's 1961 map based on people's memorized experience of Boston. 'Nolli' maps, derived from Nolli's 1748 map of Rome from above without a single focal point, highlight the shape of a city's street network and public spaces, and today are manipulable via the Nolli Map Engine.

Today the masterplan blueprint has been supplanted in identity by exhaustive bodies of documentation describing through narrative and with extensive diagrams, an overall development concept based on mapping, analysis and plan. The 'plan' describes the client's vision for the future, and includes pre-design services, architectural, programmatic, financial, organizational, operational and fundraising plans. Just as there are variants on the task – masterplan, framework plan, area action plan – there are corresponding variations in the forms their visual and textual documentation take, incorporating renders of future places. The role of many of these modes of representation is promotional, and it must be both credible and compelling to nail the case for support from major donors, investors and partners through a detailed articulation of the outcomes, economic, cultural and ecological impacts, priority audiences, demand analysis, products, services, funding requirements and resources needed for it to be viable.

While diagrams of the existing site, with plot subdivision and ownership after development and prescriptions for building envelopes are standard fare for commercial masterplanning today, the role of analysis has hugely expanded from the days of Plan Voisin. A whole catalogue of diagram genres now exists, including analysis diagrams, figure-ground diagrams, scale comparisons, and process diagrams. Similarly, new tools, both physical and digital, are being designed and/or applied in the process of adaptive planning today. Diagrams link 'smart growth' and climate change, a new organising narrative in urban planning that is central to the current spate of 20-30 year masterplans made by city municipalities, for example, Abu Dhabi, New Orleans, PlanNYC (which is a policy document, rather than a masterplan per se, updated by Mayor Bill de Blasio as OneNYC), Singapore, Copenhagen, Brisbane, with smart city industries behind them.

Digital planning tools

The word 'tool' now today also invariably denotes a software application, increasingly being evolved to evaluate and monitor various aspects of sustainability, such as the Carbon Critical Masterplanning tool built on a CityCAD platform by Atkins. This customized application includes a centralized database of carbon/energy factors as well as transport modelling algorithms and energy calculations. With all types of geo-spatial parametric tools such as GIS (Geographic Information Systems) platforms, mapping, location analysis and modelling (including for catastrophe), data is updated in real time, allowing the rapid assimilation and evaluation of multiple scenarios and masterplan options. Land uses and the assumptions that underpin carbon factors can be tailored to anywhere in the world, and the 3d graphical interface allows the impact of changes to be seen and evaluated. It can be embedded with cost and programme information to assess project finances, residual valuation, infrastructure trigger points and cash flow. Others, eg The SuBET tool (developed at Dundee and Reading Universities) claim to enable planners to analyse over 70 different indicators of environmental economic sustainability and socio-cultural impact.

The utility of software continues to soar in versatility, but managing data intelligently requires the application of human values to organize design and make full situational assessments of relationships. Today's cartographic advances in relation to notions of power constitute valuable evolving conceptual

tools in understanding adaptive planning possibilities at a profound level. Moreover, there is within urban social science (Brenner)¹⁶⁶ an agenda to challenge assumptions about spatial organization, refocusing from urbanization processes that are city-centric to those which represent the whole planet as a space of urbanization.

These deploy geospatial information from increasingly sophisticated sources, and open up new modes of analysis of the wide range of sociospatial patterns. A historical drawing on planetary zoning, as Brenner advocates through a focus on Doxiadis's optimum settlements in his work in the early 1960s, long ago brought into focus a new environmental and global-scale approach to land use, balancing settlement and environment. It rejected the inherited model of the bounded city, in favour of new forms of planning to face the worldwide thickening of the urban fabric.

Planning processes, digital tools and use of data

The data revolution is radically affecting planning processes and representational techniques. Data, digitally sourced and manipulable, enables the evaluation and monitoring of environmental performance, patterns of flow and many other aspects of cities in use and as they evolve. It allows for sophisticated ways to share knowledge, data, scripts and imagery in real time. The new operativity enables data to be linked and aggregated, tagged to physical locations through hyperlinks and moreover shaped by many through social media in a process that is both the realm of the professional but also of the citizen, in ways that are increasingly porous in boundaries. For the urban design team member, it enables a plan to function dynamically as a digital platform, in a variety of ways, each with their specific value, for example:

a) absorbing and adapting to data sets added. This broadly cybernetic approach entails probability analyses, eg MVRDV's webtool allowing quantitative and qualitative analysis of urban 'performance.'¹⁶⁷ This is a promising trajectory when related to goals of social equity, but in many cases of commercial planning, the tool is used instead for evaluation of a plan's market reach.

b) allowing experimentation through simulation and scenario planning (open source simulations as opposed to use of simulation by the design team still being rare) eg. by Groundlab and MVRDV¹⁶⁸. The relational facility of Space Syntax, pioneered in the 1970s by Bill Hillier and colleagues, uses quantitative analysis and geo-spatial computer technology to show how patterns of movement, security and insecurity are affected by spatial design, and how the evolution of centres and sub-centres can be shaped, buildings can create more interactive organisational cultures, and spatial segregation and social disadvantage are related in urban spaces. While there is a risk of what philosopher Graham Harman has called 'over-mining', meaning heavily top down control of data gathered and processed, and commercial imperatives emphasise the performance aspects of a software in use, programming systems using localized data of all kinds can also reveal new contradictory and compatible relationships between elements.

c) 'Complex-sensitive' approaches to both the tangible and intangible aspects of the urban environment aim to combat urban identity crisis cited by Doreen Massey¹⁶⁹ and others, constitute a form of microsystem that can make urban variants intelligible and adaptable, exemplified by the work of Marichela Sepe,¹⁷⁰ whose eight phases of PlaceMaker combine the various types of data to be analysed, with updatable qualitative as well as quantitative parameters, resulting in two complex maps, one of analysis and one of design.

d) The emergence of a digital-physical threshold also opens up scope for collaboration between different disciplinary professionals and for a new means to share information. Interaction with local communities through social media via 'social hubs' on digital platforms creates another range of possibilities for inclusion. These often reflect feedback and ideas gathered through workshops and programmes of events, for example, Brisbane's three week long Ideas Fiesta for residents, visitors and businesses.

¹⁶⁶ Brenner, N, *Implosions/Explosions: Towards a Study of Planetary Urbanisation*, Jovis Verlag, 2014.

¹⁶⁷ MF, p23.

¹⁶⁸ MF, pp252-258;174-183 and 239-249 respectively.

¹⁶⁹ Massey, D, *For Space*, SAGE Publications, 2005.

¹⁷⁰ Sepe, M, *Planning and Place in the City: Mapping Place Identity*, Routledge, 2012.

The focus by Lynch on the perceptual aspects of urban design and mental maps bridged abstract notions of space and subjective experiences of lived space, which Frederic Jameson¹⁷¹ has argued that the cognitive map achieves. Henri Lefebvre's thesis¹⁷² that space is always socially produced relates to Kevin Lynch's interest in mental representation, and these ideas give rise to the present day role of locative media technologies which are becoming part of urban planning, but are also used by non-professionals for navigation and the subjective shaping of urban experience through various means.

However, didactic critics such as professional mappers shiftN, reviewing digital cartographer Nadia Amoroso's book *The Exposed City: Mapping the Urban Invisibles*¹⁷³ soul-search by asking how it is that 'mappers come to select the relevant variables to be included in their maps. Monitoring capacity will soon be pervasive, with sensors embedded in every nook and cranny of our urban environment. However, this data glut does not guarantee a 'better' picture of urban reality. How do we pick those variables that reveal the 'essence' of the city? That requires a mix of intuition and a deep conceptual understanding of what urban processes are about. Iteratively experimenting with maps can help us to an extent to form that understanding, but it is not enough. The practice has to be embedded in a much wider, systemic grasp of urban realities'.

Evaluating the impact of digitally enabled urban design and planning

Combined with the emergence of participatory placemaking, contemporary issues of representation need to take on board these complex questions, as they are not only part of the by whom/for whom problem, but about how societies work, or do not work, as systems, and what the non-linear role of the urban designer and architect is within that. The custom-design of hybrid 'soft space' platforms is a field I have studied, written about and curated public events on since 1997, for example, the 'Smart Practices in a Complex World' conference staged at the ICA, London, 1997. Digital media constructs have the identity of programmes of social infrastructure that can theoretically be applied in cross-scalar and –cultural ways to leverage adaptive goals of planning.

Today, unless the practitioner is a technophobe practitioner such as Quinlan Terry or steeped in more instinctive design-build, conceiving and making on site, planning is four dimensional, including digital, geo-mapped space. I argue that it is necessary to achieve cross-scalar social-ecological resilience through adaptive systems, and not only does this work best if it has some self-organising elements, like scope for self-build housing by citizens, for example, but this approach implies an ongoing synthesis in the direction of resilient bounding of global-local domains, generic and particular relations.

Hence the advantages (computational speed, inter-navigability) of tools such as simulation models and dynamic area atlases using GIS, GPS, and digital representations, as these represent enabling technologies assisting a better speculative understanding of the city. Situational research, and deeper and more layered forms of urban knowledge needs to impact on urban design as a conceptual process, so that activities can be better aggregated and local contexts can be connected to systems that dynamically frame mixes of ecological, social, cultural and economic patterns. This can be carried out by a team with suitably motivated impulses without new technologies, but it entails far more relational processes than representational ones alone. The facility digital means give urban design and planning remains one of enabling the authority of the practitioner, rather than predicting the future. It is significant for masterplanning that it supports drawing, the practice of thinking about possibilities and solutions.

As architect Alejandro Zaera-Polo, who began to use the computer as a way to generate, based on collected data 'inputs' in the early 1990s, has pointed out, 'architecture is a complex problem, has so many parameters, I will not say [it is] impossible, at some point, entering them into a computer and processing. The architecture itself is local, occurring in a given time and space. You have to programme the computer to read the history, location, topography, traffic frame, the idiosyncrasies of the client'. Judging the relative input of the human brain is vital. 'Some of us have [been] educated to solve such

¹⁷¹ Jameson, F, 'Cognitive Mapping', in Nelson, C., and Grossberg, L, (Eds.) *Marxism and the Interpretation of Culture*, Urbana and University of Illinois Press, 1988.

¹⁷² Lefebvre, H, *The Production of Space*, Wiley-Blackwell, 1991.

¹⁷³ shiftN (no individual author cited but potentially Philippe Vandenbroek, the Belgian bio-engineer founder), review, <http://www.shiftn.com>, 28 August 2010, of Amoroso, N, *The Exposed City: Mapping the Urban Invisibles*, Routledge, 2010.

problems faster and process that information. We have experience. The problem is in relying too heavily on the experience is that it is vitiated by previous experiences, while at the same time gives a series of springs to do things that otherwise we would not know how to do'. This concurs with the comments by ShiftN given above, while acknowledging the drawbacks of relying on past experience, if insufficient creativity in thought processes is applied. Hence the need for original research of contexts to enable the springing process Zaera-Polo refers to.¹⁷⁴

The complexities to unravel and make sense of a call for a relational urbanism stem from a mindset and application of mental skills that is intuitive, civic-minded and mathematically grounded. There can be scope to conceive a 'generative city' on a scale that Cedric Price, for example, through his millions of drawings, aimed at, based on new research into realities. That generativity must allow for minute nuances and shifts. Urban design as a profession today, to survive, needs to rely on political sensibility allied to a mature, critical use of tools. While my book, *Masterplanning Futures*, due to its case study format, could not accommodate a big-scale analysis of the creative relationship between digital tools and physical, material contexts and resources, this will be the subject of my publication, *Hyper-Local: a cultural tool kit for the open source city*, for AD, due out in 2017.¹⁷⁵

These themes also form part of my curatorial proposal (October 2014) for the future-focussed Oslo Architecture Triennale 2016. *Hyper-Local* will be devised as a cultural tool kit, with essays explaining and reflecting on the potentials of GIS, GPS, digital visualisation and so on to be applied in real world contexts and the political, cultural and economic implications resulting from these. The aim will be to transcend the limitations in analysis in existing literature, *The Exposed City* being one recent exponent that is in part easy to be ambivalent about for its lack of depth in grasping the relationship between mapping and the types of systemic thinking called for today.

Open source digital tools have been widely used in humanitarian and socially and ecologically beneficial open source ways for some years now. There has accordingly been a proliferation of open source innovative, interactive online/cross-media platforms enabling scaleable mapping processes to help chart solutions and address issues, including Green Map to Worldmapper, Walking-Papers (designed by Stamen,¹⁷⁶ to Mapping Change for Sustainable Communities, which, in partnership with University College London (UCL), founded the social enterprise Mapping for Change in 2008. These enable hyper-local investigations, not just by professional architects and urban designers, but by community agencies and members of the public worldwide. Evaluative examinations of territories have never been easier to carry out in an era of digital 'lenses', and this bottom up open source avenue of creative activity will bring forth new possibilities for adaptive planning, and hopefully professional planning more widely through more synthetic practices.

The growth of citizen-friendly online tools and computer games with their own blend of didacticism, self-determination and play, has led from SimCity to computer games such as Watch_Dogs. Set in Chicago, where a central network of computers connects everyone and everything, it explores the impact of technology within society. Players use the city as their weapon, as they embark on a personal mission to inflict their own brand of justice, to paraphrase the marketing literature.¹⁷⁷ Updating the role of the architect out for vengeance in Death Wish II, Chicago's overarching network, the Central Operating System (CtOS), controls almost all of the city's technology and information - including key data on all of the city's residents. The player hacking mentality, lack of rewards and narrow goals give the game the identity of an interpretation of citizen-operated distributed systems pre-programmed to a fixed narrative.

It is important to be clear that the current proliferation of tools suggests that the 'smart city' as a concept is a play on control and order. The 'smart city', correctly denounced by Richard Sennett as a 'stupifying' concept, in his 2012 lecture¹⁷⁸, by reference to phase one of Masdar City, Abu Dhabi, and Songdo in

¹⁷⁴ Alejandro Zaera-Polo, interviewed by Pedro Pablo Arroyo Alba, 30-60 on-line magazine, www.30-60.com.ar, reproduced in Plataforma arquitectura, plataformaarquitectura.cl, 22 January 2013.

¹⁷⁵ Bullivant, L (Ed.), *Hyper-Local: a cultural tool kit for the open source city*, AD, John Wiley & Son, 2017. In production.

¹⁷⁶ MF, p23.

¹⁷⁷ Watch_Dogs, <http://watchdogs.ubi.com>, Ubisoft Entertainment, 2013.

¹⁷⁸ Sennett, R, lecture at 'The Electric City', Urban Age conference, London, LSE Cities/Alfred Herrhausen Society, December 2012.

South Korea, denotes the city in a conceptually, digitally, physically altered and commercially/navigationally optimised conception through the means of a particular set of digital operating logics, hardware and software. These are the result of softwares, interfaces and hardwares created specifically as interrelated products sold 'as kit' (to use the terminology of Paul Westbury, former CEO of Buro Happold) by firms including Cisco, IBM, Siemens and others, predominantly to municipalities and developers thinking big and on a tabula rasa basis. Accordingly, their existence as products enabling a 'smart city' instrumentality has been promoted via dedicated trade fairs such as the Smart City Expo, an annual event in Barcelona, supported by the municipality, revealing also alliances of commercial players across all aspects of civic infrastructure (operating in the Basque region, for example).

While 'comprehensivity' in relation to planning stirs fears in some quarters of autocratic top-down activities, it is true that the concepts and practices characterising distributed, 'soft' infrastructure systems applied by urban designers and planners on a commercial and academic basis, collection and aggregation of information through the deployment of genetic algorithms represents a form of 'comprehensivity'. However, it is more accurate to denote a relevant identity and capacities through an interrelated set latent super-lenses-tools with which to undertake forensic research, speculation and creative aggregation of urban data and content. Their advantages include the capacity for socially beneficial deployment through open data platforms, and an advanced, sophisticated ability to quantify the performance of a city by connecting quantitative and qualitative parameters brings challenges, as I state in my review of *The Electric City*, The Urban Age's latest conference¹⁷⁹. A reported scenario of data collection concerning an urban site remaining as a dense Excel spread sheet on a computer at Newham Council may well evidence the lack of will to integrate differently trained practices.

Masterplanning projects now deploy social media and client-mounted websites with blog columns, such as that for the current scheme for Governors Island by West 8, and encompass speculative research using digital platforms, but the personnel behind the digital platforms need themselves to have adopted open systems of interacting with the lay public. When such tools are applied in contexts without democratic processes, for example, in the case of Neville Mars's BURB.TV collaborative research wiki on *The Chinese Dream*, a goal to create 400 new cities¹⁸⁰, it is clear that social impacts are restricted through censorship.

In terms of the professional-public interface, planning is generally regarded as relatively hermetic, intensely irritating, or at least steeped in do-goodism as a topic. With multidisciplinary professional and public bridging approaches in mind, designers are producing animations of value (as opposed to the bland fly-through made purely to excite clients) explaining prototypical masterplanning concepts and processes in a relatively accessible way, such as *Loop City*, Copenhagen, by BIG¹⁸¹, Slussen, Stockholm, by BIG, the making of *La Défense* and planning new housing in Brussels (Rotterdam International Biennale, 2012). The dynamic nature of information in a format beyond technical drawings makes it easier to look comparatively at different models (possible through *Sim City* for anyone with a computer in this era) and those from different time periods.

Critical overview of planning tools and processes in the context of urbanisation

My hypothesis is addressed in the context of the combined impacts of economic and ecological crisis, perceived as crises of systems. During the period 1997/8 onwards many masterplanning projects have been halted or stopped permanently due to lack of financial equity and/or corruption and other factors, but equally, many have come on stream through new deals on equity support and, distinctly, as the result of severe ecological disasters.

¹⁷⁹ Bullivant, L, 'Technology is the answer. But what is the question?', *Electric City*, the 11th Urban Age conference, Urbanista.org, issue 1, 2013.

¹⁸⁰ MF, p251.

¹⁸¹ MF, pp 6 and 42-44.

Many people do not realise that 90% of the urbanisation occurring as bottom up urbanisation in the form of informal settlements, a number of which I have visited, and others of which I have read about, which include settlements made on the margins of new developments of socially dispossessed/excluded communities, subject to a newer form of temporality and disconnection, and I have interviewed Paul Virilio about aspects of these phenomena. The economic crisis perceived through its spatial dislocation and fragmentation opens a space for critical thinking about the limits of the instrumental identity of urban planning as a vehicle for social equity.

Some professional commentators¹⁸² maintain that the traditional masterplan is consequently a weak vehicle to draw investment today, and has a high chance of not being implemented; furthermore they comment that in fact the focus has fallen on individual schemes in which the architect-planner becomes akin to 'a Disney imagineer'.. Because of the prevalence of old methods – free market applications to advance 'city as product', and the increasing reliance by the public sector on private sector-funded solutions, it is also vital to ask whether market-based solutions can drive the planning of the city in ways that are ecologically and socially responsible without in a number of instances severe displacing of communities? A key part of my critical narrative, based on my empirical research, is that new media, whether applied via participatory mapping and simulation, or other means, is being employed by urban planning teams to help to enable this shift to accommodate social infrastructure and therefore lifelines to information and resources (as seen through Kenyan IT platforms, for example), which allows a potentially greater responsiveness to current global crises without use of the Internet, in a non-network fashion (as the app used by the Occupy Central with Peace and Love in Hong Kong in October 2014 enabled communication between supporters otherwise liable to network blocking).

The expansion Hans-Georg Gadamer made of the 19th century concept of the 'hermeneutic circle' is applicable here. I have tried to understand and interpret the meaning of the masterplan as a framework and/or strategy, as manifested by the use of tools and processes, by approaching them as wholes, or entities, examining their parts and related activities of communication and evolution. Setting a wide self-brief across continents, regions, cities and contexts, I have then reapplied what I have understood via my comparative urbanistic research in order to reexamine these instruments, and others coming into my orbit or which I have found. This is also related to the post-Kantian concept of thesis, antithesis, synthesis. Gadamer seeks to overcome this legacy of Enlightenment theory-practice by returning to Aristotle's *phronesis* and a notion of practice that is embedded in cultural conditions, what he calls 'wisdom'. I understand that my process of learning and reunderstanding in this field is never-ending but hopefully approaches certain valuable truths as time goes by and the momentum builds.¹⁸³

The nature of my research and the setting of a dialogue between research and concrete initiatives – research by practice – is about unpicking plans' methodologies in order to understand better the chains of decisions made constituting systems ostensibly of political agency within contexts. It brings many lessons, both for settings in which masterplanning is practiced in an almost imperial manner; as well as those in which planning is ambiguous, either because tools are loosely sketched, basic, and/or open to subservience by market forces. In the end, there is an optimistic sense of the tools and processes as vital equilibrators, coded in such a way that dysfunctionalities can be diminished, not through fixed blueprints but via a more flexible means of intelligently conceived protocols in force. Is that so far from the resolutions set by NATO, or other networked geo-political entities?

As Marshall McLuhan pointed out in *The Age of Anxiety*¹⁸⁴, as he characterised the era of the late 1960s, stems 'for the most part, the result of trying to do today's job's with yesterday's tools!', as Zygmunt Bauman has more recently concurred with, prompting the need to analyse what are better tools, and how they can be formulated. Jan Gehl can be acclaimed for moving social science tools into the toolkit of architects, urban designers and planners. Cities and parts of cities are culturally specific, but in many of their tendencies they are heading for generic, middle-class branded topographies, at a time when the 1% economic elite is expanding its share of society's wealth, and the informal city is on the rise. At the same time, Assuming that all aspects of what is typically deemed 'complex' could be subsumed under moral/political criteria, it is fair to say that the tools must be hugely diverse in nature.

¹⁸² Cuff, D, and Sherman, R, Ibid.

¹⁸³ Gadamer, H-G, *Reason in the Age of Science*, The MIT Press, 1983.

¹⁸⁴ McLuhan, M and Fiore, Q, *The Medium is the Message: An Inventory of Effects*, Penguin Books, 1967.

I perceive one reason for the need for my research focus to be the numerous instances of cultural scenarios in which tendencies have led to a diminished architectural culture. The Norwegian Urban Design Association, Bergen, for example, operating in a culture in which attitudes to urbanism are lacking, rightly states¹⁸⁵ that 'both local authorities and property developers are facing a call for better and integrated urban planning, with master plans covering long term visions and sustainable development and through analysis of how the built space integrates with its surroundings, its inhabitants and its progress to wealth'. This accords what McLuhan said in the 1960s, and Bauman says now: new tools are needed. Through progressive, adaptive planning instruments and processes, and what, with the accommodation of digital/open source across societies, increasingly hyper-local modes of social connection, facilitation and aggregation, such innovations can and are being applied to a range of cultural, economic, physical, and social conditions.

Apart from during the short period of making cities during the time of the Hanseatic League, there has not been any necessity to create dense urban centres in Norway, as opposed to in Denmark, which has a strong architecture and urban design culture, albeit with each masterplan carrying its own risks and blind spot, as evidenced by the process of bringing Ørestad, the district south of Copenhagen, into being, as discussed in my chapter on the city in *Masterplanning Futures*¹⁸⁶, and consequently proximity to immense powerful nature has influenced how people relate to their habitat.

In the early 1920s Norway was the poorest country in Europe, and only began urbanizing in the 1960s as the result of the discovery of oil. Valleys were preferred over the barriers of mountains and fjords for development, and now, amidst the country's building boom, there is the scenario of weak municipalities and dominant market forces. So, as in the UK, and more so, shopping centres become town centres, public space is lacking in quality (apart from certain parts of Oslo, the capital), the suburbs are mono-functional and mono-spatial, and car driving has not been reined in by other options. Urbanisation has brought pre-fab timber housing from the US, to an egalitarian country with ironically no tradition of social housing, in a generic form produced by a monopoly of volume house builders. Architects have insufficient recognition despite the big names (Snøhetta), and the imperative to innovate is not strong, including how to create building that relate to the landscape, and mountains are blown up to create flat land.

This phenomenon merits looking at other mountainous areas in European contexts dealing with densification and urbanization. The assets of nature do not automatically bring an equilibrating, strong urban design culture, as Norway's example shows, and an oil-rich economy also seems not yet to have been a motivating factor; so the question of whether its intelligentsia's love of debate and societal pragmatism can be marshaled to extend to a subject so far seen as not much on the radar, is one I am pursuing through my proposal for the Oslo Architecture Triennale 2016, rather than the trope of Nordic cultural identity, and whether it extends to Greenland and Estonia.

Accordingly, 'Bergen on The Move', a NUDA exhibition (February 2014-May 2015), aims to be 'a new toolbox for great visions, big plans and a strong integrator for new networks of knowledge. Structuring the program as apolitical – not influenced by policies and short term perspectives – sets the project in the driving seat for new visions. It will be a project with no direct involvement by politicians, government or the city. The project is not to be regulated by policies and restrictions, and hence to that [extent] we know it will succeed'. However the drawbacks on not involving any politicians or municipal planners in such a dialogue are that these parties are not personally scrutinized or questioned, or invited to put their plans forward, in such a way that all parties can disseminate the perceived inadequacies. There are community meetings with developers (for example, one held for the Spitalfields Market adaptation by Foster + Partners some years ago, which I attended, where the local priest was present) in which the developer representative says nothing, as it is not necessary, to achieve the firm's aims. Without council representatives and politicians, the discussions can become hugely isolated.

Masterplanning today is Janus-faced: an object of projected fantasies and anxieties. For Terry Farrell, one of its chief UK architect proponents currently engaged in a number of big scale developer-led projects in London, it should last for 100 years. Enrique Norten, founder of TEN Arquitectos, Mexico City,

¹⁸⁵ NUDA, <http://www.nuda.no>.

¹⁸⁶ Bullivant, L, *MF*, pp27-44.

responsible for the Xochimilco plan¹⁸⁷ uses the word 'vision' rather than masterplan to engage citizens. Paul McGillick, the Sydney-based architectural historian, and Editor-in-chief of *Indesign* magazine, calls the masterplan an oxymoron, as one plan is inevitably replaced by another. Each one is discussing its instrumentality in the same breath as the value of its principles. In societies in thrall to neo-liberal economics, the economic effectiveness of the instrument far outweighs other factors; change effected by a plan is for that end.

Irrespective of what is entailed by the realization of an urban plan, the value of the concept of adaptive planning lies not in arriving at a fixed vision of city, but in finding ways to enable it to grow and change incrementally in desirable ways in a context of wider change. This pre-supposes that the city in question already exists in some form, rather than the existence of a relative *tabula rasa* (the beach that became Dubai, for example). Such a process cannot be uniform, but involves different levels and times of growth/change appropriate to the social, cultural, economic and ecological context. Some things remain for centuries, like blocks or streets, or a city's relationship to a river; others change on various cycles: in one century, during which time NYC went from being an immigrant slum to a set of quasi-gentrified 'neighbourhoods'; between 50-100 years; five years (new buildings); seasonally, daily, from night to day. There are also different constituents, for example, the present dominance of old city centres by gentrification seems to be the paradigm for most visions of renewal, yet contemporary research into smaller Spanish and Italian cities and towns shows advanced commitment to navigability, legibility, pedestrian priority, and the use of new digital operativities to leverage heritage, education and cultural assets.

The potential role of architectural schools, evolving from the bridges already extended through their curricular activities and summer schools, could further serve to break down procedural boundaries between urban design, planning, architecture, engineering, landscape architecture, and work further on greater integration of management, business, economics and real estate courses, with scientific inputs in addition, ranging from urban geology to other natural sciences. Municipality-wide projects involving local construction and development industry are fostered by relatively few Deans (Michael Speaks' work in Kentucky while Dean of Architecture at the University being one exception), which the regeneration of Medellín began with workshops in the local University. Organizations like Siemens pushing 'Smart Cities' and their products for the Smart City, and IBM, are corralled into academically-driven debates at a time responsibility for the 'SimCity' is increasingly devolved to private firms.

Another dimension to this issue is that planning and urban design are deeply related to economics, a field in which academic methods have of late rigidified learning in a way that will further impede policy reform. If many academic economists argue that the core of their subject is an established, settled science, and their curriculum an agreed 'tool kit', this is a major obstacle to 'meaningful reform', as the Cambridge economists Ha-Joon Chang and Jonathan Aldred recently wrote. 'If reforms involve issues that the existing theories cannot explain well, they are rejected, because they would take the curriculum outside the domain of economics'.. 'Many observers advocate 'economic pluralism': students should be introduced to different approaches...[they] need a wider range of empirical skills...these are not radical departures, but 'back to the future' topics and skills that used to be routinely taught in undergraduate economics degrees'. The authors are militating against the current UK governments' ambitions, stated as merely that 'government economists need to know how to drive the car, not build it'.¹⁸⁸

If ethics are fundamentally understood through the humanities, the basis for dialogue with the paradigm of 'technology and art', or with the nebulous 'social', is not focused around any single panacea or 'knowledge economy'. Allegiances, connections and possibilities can be seen as unconscious, under the radar, contextual, and cross-related.

Today's outputs addressing the social role of architecture and planning, mobilised in the course of research can be seen as insights gleaned from a *mélange* of social urbanist meetings, kits, architectural school projects, scholarly journals, webzines and blogs and other online platforms, conferences, exhibitions, festivals and the activities of organisations at UN level. These endeavours stem from architects, planners and their fellow multidisciplinary practitioners who can together build 'the car'. They could simply drive their car, denoted here as a metaphor for planning tools and processes, as

¹⁸⁷ *MF*, pp.211-6.

¹⁸⁸ Chang, J-C, Chang and Aldred, J, 'After the Crash, we need a revolution in the way that we teach economics', *The Observer*, 11 May 2014.

handed down to them by generations prior to, and including, the baby boomers. But the pressure to reinvent it as an adaptive mechanism relating to different perceived interdependencies and needs, as an evolved species of tools and processes called for by progressive commentators since the 1960s, seems both greater and clearer than ever.

Portfolio

Introduction

My portfolio includes some of the most significant of my research projects. My investigations include empirical, original research in the form of analysis of decision-making procedures and outcomes through first-hand, original interviews and evaluation of masterplanning and framework documents.

In each case I have provided:

- i. A short statement as to what it is/was.
- ii. Dates of duration of work and date of publication.
- iii. Topic/research questions.
- iv. My role.
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc.

1. 'Space Invaders: Introduction', in Space Invaders: 15 emerging new British architects. Introduction to Space Invaders, exhibition catalogue, British Council, 2001. [presented as softback publication]

- i. Catalogue of a major international touring exhibition about the emerging generation of UK architects currently extending and redefining their discipline, featuring the work of David Adjaye, atopia, Block, dECOi, de Rijke Marsh Morgan (dRMM), East, FAT, Foreign Office Architects (FOA), General Lighting andPower (GLP), Klein Dytham architecture (KDa), Muf, Piercy Conner, softroom, S333 and Urban Salon. The exhibition was accompanied by a catalogue of essays by me (one introductory essay, and texts about each practice) and one essay by my co-Curator, and a video - see below for details.
- ii. December 2000-September 2011; exhibition tour: September 2001-October 2003.
- iii. Architectural and urban design schemes, both commissioned and speculative, responding to and deepening the blurring of public and private space reveal strategies for generating new spatial propositions at every conceivable scale, from the micro level of the temporary installation to the macro scale of the urban masterplan. The combined skills of architecture, landscape design and urbanism are set alongside and in some cases fused with interdisciplinary experimentation, applying tactics from the visual arts and interactive design.

New tools, mechanisms and industrial processes from outside the field are helping to generate proto-phenomena of the new culture of architecture. Changing needs for hybrid building landscapes, streetscapes and other urban and ex-urban environments, such as the Green Belt, may also admit new short term, ambient or reuseable possibilities. Synthesising social and physical conditions, mixing functions and addressing changing lifestyles, the exhibitors' desire to communicate ideas about culture in the here and now has surpassed the idea of eternal value in architecture.

Exhibits included Foreign Office Architects' paradigmatic Yokohama International Port Terminal; the Elektra House in East London by David Adjaye; Muf's Hypocaust building in St Albans; new designs for affordable housing by Piercy Conner; the interactive project Aegis, a real time dynamic surface for cultural buildings, designed by the multi-disciplinary practice dECOi (Paris/Boston); and KDa's projects in Tokyo hybridising public space and retail culture. The growing convergence of architecture, landscape and urbanism is exemplified by the work of S333 (Amsterdam and London), for instance Schots 1 and 2 at CiBoGa, Groningen in the Netherlands. Public art projects include FAT's New Civic project for central London.

A documentary film, directed by Milk with a series of in-depth interviews with the directors of each practice by me was made as part of the exhibition to provide an exploratory journey into the architects' worlds, transiting through many of their recent projects, some while on site, and existing environments that have been an inspiration to their work.

- iv. Co-curator, director of the films produced for the exhibition, author of catalogue with co-curator Gadanho, lecturer, giving talks in Tokyo, Prague and Los Angeles during the exhibition.
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc. Deepening awareness of the identity of architecture and urban design as bespoke, hybrid communication systems, and the ways in which this has more value in specific contexts than architectural principles aimed at statements for eternity. The outcome of the two year international tour was the building of an informed audience in this field, multiple events, including a round table in Los Angeles at which I spoke and a personal lecture in Prague; extensive press reviews; and an expanded body of knowledge about the exhibitors themselves.

Client: Art Architecture and Design Department, the British Council, London; Curators: Lucy Bullivant and Pedro Gadanho; Exhibition manager: Lucy Swift; Exhibition design:

Urban Salon; Graphic design: bump; Video direction: Elliott Chaffer, Milk; Tour dates: 2001-2003; Venues: Experimentadesign, Galeria Central Tejo, Lisbon, Portugal; Museum of Architecture, Tallinn, Estonia; Fragner Gallery, Prague, Czech Republic; Williamson Gallery, Los Angeles; TN Probe, Tokyo; Espaço Cultural dos Correios, Rio, Brazil.

2. ‘Cumbernauld New Town: Tomorrow’s Town Today’, essay in *Happy: Cities and Public Happiness in Post-war Europe* (Ed. Cor Wagenaar), NAI Publishers, Rotterdam, 2004.

- i. An essay in the above-mentioned 512 page book which followed an exhibition (2002) of the same name in Berlin curated by the Akademie der Künste, Berlin, and supported by the Netherlands Architecture Institute and the Stichting Architecturalia. The essay was also published in German in an earlier, abridged version in the exhibition catalogue published in October 2002 as *Glück – Stadt – Raum* (Romana Schneider, Rudolf Stegers, Eds.), Akademie der Künste, Berlin.
- ii. 2011; published 2002, updated and extended for 2004 publication.
- iii. Topic/research questions: the topic was the development and reception of Cumbernauld, the Scottish New Town (first phase completed in 1966) 14 miles outside Glasgow, whose futuristic design included a megastructure town centre by Geoffrey Copcutt; the questions concerned the nature of its design principles (distinct from any applied in Glasgow), its advantages and disadvantages (among these, lack of legibility in cultural planning), at the time, and subsequently, mediatisation and media feedback, and its relationship with the Scottish system of mass housing provision and planning; the role of the suburb as hindrance, rather than as metaphorical gateway to social satisfaction, along with the political, social and cultural factors that led to the relative diminishment and partial destruction of an once ‘shining’ model of urban development.

This 2004 research project on Scottish urbanism preceded two subsequent pieces of writing I did: a published interview with Terry Farrell and Riccardo Marini, for the Italian magazine of architecture and urbanism *AND* (Florence), May 2006, about the development of Edinburgh through masterplans (coastal, relationship with transport infrastructure) today, and an extensive essay, ‘Gross.Max’s pitch for a sublime new world’, in *Northern City, between Light and Dark* (exhibition catalogue), The Lighthouse Centre for Architecture and Design (ed. Morag Bain), Glasgow, 2006, on the topic of Edinburgh’s urban planning visions, past and present, and the strategies of Gross.Max., the landscape architects, in the city.

- iv. Researcher and author. This work will lead on to an essay for two academics at Dundee University’s Urban Planning Department, ‘From Master Planning to Adaptive Planning: a conceptual framework and social instrument of mediation’, in *Placemaking: Rethinking the Masterplanning Process*, Husam Al Waer and Barbara Illsley (Eds.), ICE Publishers, 2016, in production. This will include critical commentary on *Clone City: Crisis and Renewal in Contemporary Scottish Architecture*, Miles Glendinning and David Page, Polygon, 1999, and the ways in which its themes have played out through attitudes to masterplanning and adaptive planning in Scotland since 1999, when the book was published.
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc: the theme of the fragmentation, and diminishment or ‘debasement’ (to use the word used by Glendinning and Page), of the Scottish urban context as a result of market-led globalization, calls for a close critical study of the contestatory means applied via plans of various kinds. While planning’s systemic crisis is pervasive in Edinburgh and Glasgow even while each city has strong urban marketing identities, the identification of alternative narratives, such as those by Gross.Max’s narrative-driven landscape architecture, brings certain ameliorating factors. The critical work I did on Gross.Max led to my published introductory essay ‘Activating Nature: an introduction to Gross.Max.’, in *Gross.Max.* (book), C3 Publishing Co, Seoul, 2007, an English/Korean publication, and ‘Activating Nature: the magic realism of contemporary landscape architecture in Europe, in *Landscape Architecture: Site/Non-Site*, ed. Michael Spens, AD, Volume 77, No. 2, March/April 2007, pages 76-87.

3. 'Istanbul: Talking Over the Strait', Volume, The Guide issue, #4, December 2009.

- i. An essay on contemporary Istanbul's urban horizons and self-identity as European Capital of Culture 2010, globalised city and would-be member of the EU.

My published features range from critical investigations of historic city plans eg 'Sun, Space and Verdure: the Making of the Indian City of Chandigarh', a+u, October 2007; to contemporary challenges in urban evolution, for example, 'Gross.Max's pitch for a sublime new world', in *Northern City, between Light and Dark*, The Lighthouse Centre for Architecture and Design (Ed. Morag Bain), Glasgow, 2006; 'Chengdu, China: big city symbiosis', *Urbanista*, February 2013; 'Istanbul: Talking over the Strait', in *The Guide*, Volume, #4, December 2009; 'Elsewhere Envisioned - Global Design NYU', *Urbanista.org*, February 2013, in which I analysed a specific scientific approach to urban design; 'How Barcelona is banishing urban ghettos with its collaborative ethos and open planning system', *Architectural Review*, January 2011.

A second category of my published features has encompassed evaluations of developer-driven schemes, for example, 'Las Vegas: the most expensive development in US history tries to redefine junkspace urbanism on the Strip', in *Architectural Review*, 1358, April 2010, a critique of CityCenter, a new development in the city; and assessments of tensions between planning legislation and social needs, for example, 'Fluid planning: urban planning in the UK', *Archis*, 1, 2000.

- ii. November 2009; published December 2009.

- iii. In the absence of a solid overview of the city, but a dominance of fast-track, market-driven urbanization, do you unite urban fabric or do you divide and fragment? I researched this issue during my visit to the Urban Age Istanbul 2009, taking on board the dysfunctional identity of architecture, treated as engineering rather than art, or indeed socially relevant, self-determining presence of the *muteahhits*, developers who also design and build their own projects, through an internalized business model, and abundant car dependence.

I visited a TOKI housing estate on the outskirts of the city, signifying the proliferation of generic blocks procured by central government's Housing Dept on the periphery. This followed a research trip I did in 2006 to the Levant Business District of Sisli, Istanbul, a joint venture of the Eczacıbaşı Group and İŞGYO of Turkey. It was designed by The Jerde Partnership of Los Angeles, USA, who collaborated with Tabanlıoğlu Architects of Istanbul, Turkey, for which the city council opened a new Metro station.

My research question at that point was to do with the nature and impact of retail enclaves of this kind in terms of dislocation, knowing that Jerde is commonly engaged to create whole urban complexes (Bellagio, Las Vegas; cities in Japan) and invokes Jung's collective consciousness (ostensibly biddable for the purposes of consuming) in support of his urban design visions. In my subsequent discovery of the film *Ecumenopolis* directed by the Turkish director Imre Azem (2011) I was able to further deepen my awareness of Istanbul's dependency on the World Bank, and its cultural fractures, with lack of planning regulations spelling chaos in the near future, and social dissent which came about at Gezi Park.

I interviewed Emre Arolat about top down planning at the opening of the Istanbul Design Biennale in 2011, and Bozana Komlevic, partner at Zaha Hadid Architects, on the protracted logistics of the Kartel-Pendik masterplan of theirs for the Asian side of Istanbul. I used the film and my critique of Istanbul in my Syracuse teaching and have subsequently written about the Turkish collective HiM which was active at the Gezi Park workshops during the time of the protests (*Recoded City: Co-creating urban futures*, 2015).

- iv. Researcher, author, lecturer.

- v. The contribution to knowledge includes information about new methodologies of schemes

that propose new urban spaces without recourse to predetermining building codes, by young practices such as Superpool and GB, who themselves have created masterplanning guides for alternative uses that do not exclude local people. I gathered evidence that retaining cultural and anthropological readings of the city becomes vital as a counteracting force to developmental processes outlined above, and that in the absence of top down self-images of democracy (the Mayor announced a third bridge plan across the Bosphorus in 2011 without any consultation), the bottom up platform would in any case surely grow through various means of compensatory measures, so progressive practices need to play a strong propositional role to help break down barriers between politicians and locals, by applying various types of leverage.

It also necessitates deeper analysis of what is entailed in being a 'global city': what should the aspirations ensure to include? However the key issue is lack of awareness by many parties of contemporary adaptive planning/progressive masterplanning frameworks, and of ways in which things could be done differently due to the heavy presence of old models.

Speculation can only be guided responsibly if legal structures for land and property ownership work well, and ambivalence in land use, prevailing in Istanbul, has a pernicious (and unconscious) influence that needs to be countered by detailed analyses of the biggest tension points and architects and urban designer's insights about how land use can be adjusted to allow for present day societal patterns. I will include Istanbul as a case study in my next book on adaptive planning (this is a feature of my application to NYU's Faculty of Humanities for an Associate Professorship in urbanism), following subsequent research trips and further research into the treatment of land plots in the city and the urban design and architectural work of Arolat, an activity of mine that is ongoing.

4. 'A message to transform urban futures: 'everything fits here but not everything goes': Barcelona, Spain', The Architectural Review, 1368 February 2011.

- i. A features about Barcelona's urban development since the days of the 1992 Olympics, focusing on its current challenges and opportunities.
- ii. October-November 2011; published February 2011.
- iii. The topic is the leverage of architecture and urban design at the official level of local municipality, the official reason for Barcelona's inclusion as a case study in the Global Metro Summit held in Chicago in December 2010, which I attended, an event organized the US body, the Brookings Institution in conjunction with the LSE Cities and Alfred Herrhausen Society. I focused on the economic, social and cultural conditions through which the 22@BCN district at Poblenou has come into being, and visited new local affordable housing at the site (which borders a underprivileged area with which stakeholders made efforts to communicate on potential adjacent public space benefits) with Coll Leclerc and BOPBAA, the architects responsible, and interviewed the previous Mayor Jordi Hereu as well as Enric Ruis-Geli, Founder of Cloud 9, the architect of the zero-energy Media-TIC hub building in the district (I separately reviewed this building for *Architecture Today* and for *The Plan* magazines). I studied the role of El Consorci, the public company with plans for community schemes, an entity of a type that does not exist in London.

My research questions concerned the mechanisms and means through which the urbanizing city is evolving, both in terms of self-protection and optimization of its resources (including at the Zona Franca) and through the regeneration of districts, beyond the ongoing work of urban marketing, given that Mayor Hereu asserted to me that 'the market creates ghettos', and he wanted to avoid any of the city districts becoming ghettos, which would also weaken the pioneering work done by Cerdà, already arguably challenged by the mixed quality of architecture and urban design at the Barcelona Forum. An alternative mixed use development model designed by architect Alejandro Zaera-Polo in the ZF district was discussed in *Masterplanning Futures*.

- iv. Researcher, author, lecturer (at the Smart Cities Forum, Barcelona, Dec 2013; IAAC, Barcelona, many times since 2005).
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc: the insights gathered through discussions, especially with architects, demonstrate the need to rethink the building design-construction model but also typologies of hub buildings such as the speculative Spiralling Towers, an El Consorci project at Barcelona Forum intended to house both universities, businesses and government. Furthermore, the processes by which regeneration processes of inner-city areas such as the Ravel, are undertaken requires conscious attention to testing, prototyping and mobilization of architecture and urban design's synthesizing capacities.

Also, the unique hybrid nature of El Consorci is a model deserving closer focus for its value. While architect proponents of regeneration such as Beth Galí, whose urban design work is part of HafenCity, Hamburg, featured in a chapter of *Masterplanning Futures*, continue to test out methods; others across different districts may become in thrall to the mantra of Smart Cities, the subject of an annual forum staged in Barcelona with support from the City Council, while already local taxi drivers are up in arms against their online competitor undercutting them, Uber (noted at the LAB10 event in the city this summer).

I gave an invited talk on adaptive planning at the Smart Cities Forum, Barcelona, 19-21 November 2013, in the 'Rethinking Cities: Liveable Cities' session, Smart City Expo World Congress with Maria Aiolova, Co-Founder, Terraform ONE, New York and Melanie Nutter, Urban Design Director, Urban Redevelopment Authority, San Francisco.

Architectural Review republished my essay with a small extension and a new title, 'Barcelona, Spain: How Barcelona is banishing its Ghettos with its Collaborative Ethos and

Open Planning Systems', in a pamphlet produced for the World Architecture Forum in Barcelona, 2012, by which time there was a new Mayor, and did this without consulting me on the re-write. I have therefore not included this revised, unapproved version in this portfolio, but continued to research the Deputy Mayoral perspectives of Antoni Vives, who spoke at The Urban Age, Rio, in October 2012, and his Chief Architect Vicente Gualart, whose plan to change the bus route pattern for the city to relate much more closely to living patterns, is one of a number of meritorious micro-interventions of value.

Proliferating and incubating neighbourhood level projects in a way that could be seen as a fragmented and less targeted answer to issues appears to be the chief Mayoral approach to urbanism in Barcelona, when the aspiration is to empower the citizen into a new generation civic player. To this end, I accepted an invitation to be video interviewed for 'Big Bang Data', a major exhibition investigating a range of issues relating to this topic at the CCCB curated by José Luis de Vicente and Olga Subiros, curators, included in the show staged from May-October 2014, on a range of issues concerning Big Data and creative mechanisms for citizen involvement in urban projects.

The role of a more engaged form of urban design and intensification of the social fabric of the city in recent years, and since spring 2015 under the new Mayor of Barcelona, Ada Colau, is a theme I will continue to explore.

5. 'Urban Age Hong Kong', 12 December 2011, Domus website, Domus Editoriale.

- i. An essay on the top down and bottom up planning cultures of Hong Kong.
- ii. Sept-October 2011; published online 12 December 2011.
- iii. Author, and attendee at Urban Age Hong Kong conference, including visits to social housing and interviews with speakers. Questioning the logistics of HK's current planning norms, and the degree to which a set of norms in practice can accommodate a range of health needs and aspirations. With entrenched planning practices, ecological remediation gets pushed to the wall, and that in turn threatens economic development. The complex tasks of making high density work calls for greater cross-silo collaboration, which arguably in turn reveals more about citizens' differences, so the collection city by fits and starts brings calls for better planning visions.

The fine-grained analysis carried out by Urban Age at three differently dense neighbourhoods of Hong Kong shows land requisition patterns to be sharply in variance to the social patterns on small plots, and the cosmetic surgery metaphor of pushing the bits deemed unattractive into oblivion seems apt here. Ultimately this brings questions back to the social policies of the Hong Kong government, revealed dramatically to be following the 'one party, two systems' in October 2014, and it seems that local bodies such as SoCO (the Society of Community Organisations, referred to in the feature) is obliged, under the current circumstances, to continue by stealth to find ways to circumvent the disparities of the Goliath development system operating in the city, continuing to announce and publish government policy defects through social media and other means as widely as possible (we also know from the media coverage of Occupy Central that a non-network app exists in HK for communication that cannot be censored by the authorities), but hopefully also in time coopting certain HK moneymen that some of the existing Occupy supporters may go on to become, well before D-Day of 2047. What is clear is that the desire of Shenzhen's local government through forge closer bonds with HK across borders and systems is a complex, multi-faceted phenomenon that calls for its own research trip.

- iv. Researcher, author as outlined above, curator of a related exhibition below. I have continued to discuss my research in Hong Kong and mainland China in subsequent lectures.
- v. This is a mix of an eventual essay on China included in *Masterplanning Futures*; proposal to the Shenzhen Biennale of Architecture and Urbanism (UABB) which has led to interest in me curating a collateral exhibition for UABB 2015, an essay on the work of Joshua Bolshover and John Lin, Professors at the University of Hong Kong in the prospective *Recorded City* book, and insights above and beyond, further fuelled by a new set of dialogues with contacts with on-the-ground experience of working in both cities, including Adrian Lahoud, in charge of the March in Urban Design programme, Bartlett School of Architecture/UCL, London, Brendan Comier, Curator at the V&A for the new Shekou Museum, Shenzhen, Mary Ann O'Donnell, anthropologist and activist, Shenzhen, and many others. In April 2015 I was formally invited by the curators of the Shenzhen Biennale of Architecture and Urbanism to curate the UK pavilion at the event (4 December 2015-4 March 2016).

6. *Masterplanning Futures* (Routledge, July 2012), winner of Book of the Year, Urban Design Awards, February 2014. [presented as hardback book]

- i. See below.
- ii. September 2008-January 2011; published July 2012.
- iii. In the past, spatial masterplans for cities have been fixed blueprints realized as physical form through conventional top down processes. These frequently disregarded existing social and cultural structures, while the old modernist planning model zoned space for home and work. At a time of urban growth, these models are now being replaced by more adaptable, mixed use plans dealing holistically with the physical, social and economic revival of districts, cities and regions. Through today's public participative approaches and using technologically enabled tools, contemporary masterplanning instruments embody fresh principles, giving cities a greater resilience and capacity for social integration and change in the future.

I analyse the ideals and processes of international masterplans, and their role in the evolution of many different types of urban contexts in both the developed and developing world. Among the book's key themes are landscape-driven schemes, social equity through the reevaluation of spatial planning, and the evolution of strategies responding to a range of ecological issues and the demands of social growth. I draw on first hand accounts and illustrate analyses throughout with colour photographs, plans and visualizations.

The book includes twenty essays introduced by an extensive overview of the field and its objectives. These investigate plans including one-north Singapore, Masdar City in Abu Dhabi, Xochimilco in Mexico City and Waterfront Seattle, illuminating their distinct yet complementary integrated strategies. The book is aimed at those interested in today's multiscalar masterplanning and conceptually advanced methodologies and principles being applied to meet the challenges and opportunities of the urbanizing world.

It was a key priority of mine to discover advanced work being done, albeit by largely extensively experienced practitioners, while also grasping some of the research techniques, and analyse to what extent each project contained an imperative to consult local citizens and strategies in accordance with that. The impact of the global economic crisis and nature of new public/private models was also a high priority. My research was enabled by grants from the Commission for Architecture and the Built Environment (CABE), the SfA (the Netherlands Architecture Fund), the Danish Embassy and support from the Alfred Herrhausen Society.

- iv. Author, researcher, lecturer, curator of related talks.
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc: The insights are largely outlined in the text above. A series of thematically grouped case studies, such as found in *Masterplanning Futures*, produces a taxonomy that establishes a process of classification. This may seem a little post-rationalised to fit the projects rather than a pre-determined schema for a categorization of urban practice, but was not. Landscape and landscape infrastructure-driven plans, for example, contain multiple projects, enabling both comparison and overview. While projects such as one north Singapore and Saemangeum Island City in South Korea are outliers, not directly comparable with any other recent plans, and need to be to be judged on their own terms.

I have given extensive lectures from an early moment in my research on its themes, intending to incubate an open discussion on questions, at venues ranging from IAAC, Barcelona, to Syracuse University, and these continue. The themes have also fed into the Urbanista.org events (see below).

The book was awarded Book of the Year at the Urban Design Group Awards in February 2014. Alastair Donald (British Council, Art, Architecture, Fashion), Chair of the judges, commented, 'I handed the award to Lucy for her book *Masterplanning Futures* because, as unanimously agreed by the judges, it was the best researched, most interesting, and opinionated book we viewed. The panel described it as 'forward looking, design focused and exploratory' and lauded its celebration of 'the struggle for innovative form'. An outcome was the invitation to co-write a book on participatory placemaking (*Recoded City*; see cv) and new plans for a publication on digital tools in placemaking (AD; see cv), as well as proposals for both the Shenzhen Biennale of Architecture and Urbanism and the Oslo Architecture Triennale on aspects of my overall research theme.

7. Urbanista.org webzine (www.urbanista.org), founded December 2012.

- i. Urbanista.org webzine is a webzine I founded as a new platform for the discussion of urban design and planning across cultures – liveable urbanism - in relation to economic, cultural, social and ecological issues. Perceiving the choice of webzines on these topics to be limited to US publications such as Planetizen (excellently researched, yet lacking in visual appeal), and those deriving from existing print media (Architectural Review, The Guardian, which has a new Cities section), and moreover finding opportunities for commissions in these areas to be diminishing, I decided to invent a new mechanism for myself in order to research and express ideas, and create whole issues.

I funded the design by &&& myself, and found a social entrepreneur to support the first two issues. The first issue was almost entirely written by me; the second was a mix of commissioned essays by writers, many of whom had recently obtained their doctorates (and an MPhil in one case). They included contributors from Tallinn, Lisbon, USA, and London. The themes covered to date relate closely to the overall themes of my research.

- ii. Researched and prepared from March 2011; Founded December 2012.
- iv. Topic/research questions: see above.
- iv. Researcher, writer, Editor-in-chief, fundraiser, marketer, curator, chair. I commissioned contributors, the web editor and &&&, the web designers.
- v. The contribution to knowledge ie. insights, outcome, impact eg. awards, take-up by official bodies etc: The versatility of the medium allows a wide variety of visual material to be shown to illustrate points made, and it enables an incrementalism in strategies, with making each issue enables new insights about diversification of formats in future. Having a complementary Urbanista.org Facebook page from which Urbanista.org's Twitter account is automatically fed with the posts also enables another facet of activity, namely an ongoing selection of other relevant coverage, extending to news features about related political issues as well as those tackling design and planning questions. This becomes a tri-facetted exercise of regular research/publishing relay/marketing.

While the platform has not yet extended to interviews with developers and politicians; nor has blogging columns been initiated due small technical issues and the need for a monitor, I plan to evolve Urbanista.org to deal with these, and two further issues are currently being planned on London and on NYC, for which support from a major engineering firm is being sought.

Apart from support for the first two issues I was also able to obtain support for a series of public events staged by Urbanista.org in collaboration with the Recode Gallery at the LimeWharf cultural centre, Vyner Street, London E2. Since December 2012 we have held 5 events: a launch event, Framing the Future (2013), and Rebooting the Masterplan 1 and 2 (2014), a two part analysis of progressive masterplanning held in collaboration with a third partner, Urban Design Group, one at LimeWharf, and one at The Gallery, Cowcross Street, EC1, both sell out events with approximately 80 attendees, and enabling Urbanista.org to reach a wider audience of planning specialists and members of the Urban Design Group, such as directors of Rogers Stirk Harbour. In these public talks staged with international participants I have sought to critically explore the accommodation through urban design of civic values.

The UDG collaboration includes videos of talks published on Urban Nous, the UDG online portal (David West and Paul Karakusevik; Liza Fior wanted to speak off record, so no video was made; the videos of events held at LimeWharf are awaiting editing, but the plan is for them to be published). The February 2015 event featured Alessandra Cianchetta, partner of AWP, the award-winning French urban design practice, and we hope to invite the Directors of Igloo, the developers, with whom they are working on the urban design of a district of Newcastle, and thereby compare strategies, assumptions and funding mechanism

cross-culturally as well as cross-sectorally. The impact of Urbanista.org has been excellent, with many comments attesting to its valuable role in filling a gap; its existence also enables me to continue to gain access to events, and to publish freely, only limited by my need to fund my time and recompense contributors which Urbanista.org from issue two did as a matter of policy, not wishing to call on people for pro bono work.

From November 2014-March 2015 I curated 'Urbanistas: women innovators in architecture, urban and landscape design, an exhibition commissioned by Roca London Gallery, on the work of five practitioners in this field. We made six short films, a publicity leaflet, a microsite and staged two topical talks to support the project, and I sent the leaflet to a list of MPs and local government staff to widen awareness of it. I have negotiated for the exhibition to be shown at the Core, a new science and technology centre in Newcastle, in association with the Northern Architecture centre, which will stage a number of talks, workshop and seminars in association with the showing in September/October 2015.

Conclusion

My research methodology, selection of interviewees and process of analysis; my role as researcher and positioning within the research; my definition of tools and processes in relation to the research

My research methodology derives from my values and priorities, and corresponding self-appointed role as researcher/documentarist and investigative writer and journalist committed to transmitting specific knowledge about liveable urbanism on a wide stage, and being of service to the world in this respect. I necessarily position myself as a comparative urbanist, and regard my thinking and evaluation as the seed of my eventual outputs, which concern alternative tools and processes of urban design as qualitative methodologies, for ethical cultural reasons relating to social equity, self-determination and heuristic – trial and error - processes.

I regard city making as a perpetual process, and my research, writing, curating, advisory, lecturing and moderating activities are accordingly continual and global in scope, while all my original research is for a particular output eg a book, a feature, an issue of my webzine *Urbanista*, or an exhibition, with my lectures largely elaborating on research already done.

Exemplars identified in the developing world are of equal interest to me as those in the developed world. I am also keen to investigate new interpretations of the urban, peri-urban and the rural (rurban) and their corresponding capacity for the incubation of new civic ecologies and related economies. This interest in the convergence between design processes and achieving a greater degree of self-determination is developed further in *Recoded City: Co-creating urban futures* (2015).¹⁸⁹

My position is that, instead of supporting imperatives of endless growth and the kinds of plans that accompany them, the impacts of globalisation, the identities of north, south, east and west have converged to a point where common themes – of liveable urbanism, distribution, social equity, sustainability and adaptive planning tactics – are of key importance. Rather than the perfect process designed to achieved a pre-defined vision of aesthetics intended to endow the city with a certain operational efficiency (functionalism), many of today's plans of value design discursive processes around social realities and imperatives. Given the corrosive effects of today's deepening social inequality in cities globally, this activity helps to reinvent notions of local value.

My research also detects how masterplanning has the damaging effect of reducing complexity, while bringing generic notions of density, aggregation and segregation of civic elements. It foregrounds instances of intelligent approaches to density, sometimes termed intensity, and the idea that complexity, inherent in the city as a set of systems, can be enhanced through design in a number of ways: existing systems improved and made more efficient, and more interdependent, and/or smoothly interdependent in ways not explored hitherto; attitudes to place and to history; new systems introduced eg waste to energy, sharing schemes, legislation to assist self-build housing and new tenure arrangements; systems that, often in conjunction with digital platforms, support education and cultural and small business collaboration and development.

My research interest lies in win-win objectives of greater liveability and well-being, and I have been keen to look at the triggering unprecedented dialogues between specialists and wider publics, either on topics rarely discussed before in the same frame (eg ecology and social justice) or suppressed in the past as not considered of importance.

I have selected interviewees on the following basis: persons of interest who were significantly involved in specific projects were approached, and an interview by email, telephone, Skype or meeting format was set up. In the case of a meeting, this was occasionally in tandem with a visit, as in the case of a key planning officer at the Danish Architecture Centre in Copenhagen for a discussion concerning Ørestad. In many cases I have already witnessed the interviewee giving lectures.

¹⁸⁹ Bullivant, L and Ermacora, T, *Recoded City: Co-creating urban futures*, Routledge, 2015. In production.

Other opportunities have come to me via my presence at conferences eg LSE Cities' Urban Age, on press trips eg. Brisbane, Chengdu, Barcelona, Los Angeles, Istanbul, or prior invitation to a city to give a lecture. Interviews with client representatives are usually only possible during press trips, and these and interviews with related persons with extensive knowledge have to be set up, usually at short notice and for a limited period of time. Their answers are largely far more anodyne and official than I need, without a high degree of revelation about processes failing or being faulty, but in some cases, as with the mayoral clients of the Milan and Almere masterplans dealt with in *Masterplanning Futures*, they can be detailed and informative about the particular approach adopted, and how it matches the protocols and legislation of a specific country in which it is being carried out. I have not made a point of interviewing personally all masterplan/framework clients, but I envisage that in the future I will track specific projects in different ways, depending on the priorities for the output.

My process of analysis involves collecting and documenting exemplars of liveable urbanism and qualitative methodologies resulting from masterplans, frameworks and other forms of tactical urbanism, accepting that the experimental, prototypical and speculative nature of such projects means that some are unfinished. My research therefore concerns proposals and speculations that in many cases have not been tried before, and/or realised in full, and is attentive to positive steps made towards the realisation of new methods and processes.

The kinds of documentation I have gathered include: architect/designer/planner-conceived frameworks, only available from them in PDF or large publication form; promotional material from clients; website documentation from both parties; videos of lectures by, and roundtables involving, protagonists; lecture notes from events, and notes on relevant exhibitions personally attended in different countries; magazine and newspaper articles on projects; my personal interviews with selected architects/designers/planners; books and catalogues including relevant material on projects where available. Each context has a file created for it, and in the case of publications acquired in other languages, eg Portuguese, for Rio and São Paulo, I ask appropriate contacts for outlines in English. Furthermore I have initiated discussions on themes with students of mine at Syracuse University, and commissioned many essays on aspects of the topic, as well as given lectures on aspects of my work in progress over the years, for which I keep copies. I also commissioned a video to be made of an international roundtable on masterplanning I staged at RIBA in 2012.

In my research I recognise the deep limitations of 19/20th century masterplanning approaches, which were largely non-consensual on the part of those planned for, from which much can be learned. I accordingly approach today's methods and processes willing to see the advantages of an heuristic approach, ie trial and error, with rules more loosely defined, and set up in such a way that people can discover and learn something for themselves through involvement. This has nothing to do with favouring the small scale or the large, because a heuristic plan can be city or region-wide, but today's tools, processes and interests in bottom up/network urbanism allow for speculative thinking of value at any scale.

Since my research operates within a personal context of consultancy in various forms (as opposed to one of a funded academic research project), it is geared towards outputs that have to be put out into the world relatively fast (ie in timeframes ranging from one month, in the case of an article, 2 months in the case of my webzine, to 3 months to one year in the case of an exhibition, and 1-4 years in the case of a publication), each with their own audience, I tailor my methods and language to the particular context each possesses. I try to be conscious of the need to advocate without giving the impression that any tool or process is a fait accompli; to apply empathy regarding the relative needs of audiences (research data must be translated into narratives, if not fables, in order to register emotionally; language must be sufficiently explanatory to reach across cultures);

I apply an empirical, comparative urbanistic approach, considering a mix of factors encompassing proposals and processes, proposed and actual: nature of contexts (social, political, cultural, environmental, climatic, geographical), nature of client/client body, stated and implicit reasons for plans and how quality in urban design and planning is defined, and for whom, identity of plan/framework (as a set of concepts and designs presented for approval by the client and by statutory planning, with varying scope for change ranging from a set of control features to entire pieces of city, using specific types of media, and proposing a specific form of implementation process) how, and to what extent mediated with the wider

public and/or other potential stakeholders, the nature of the contribution to the enhancement of the public realm, to local social and to natural capital (proposed, and actual, if known), the role of soft planning (eg cultural events programmes, meanwhile uses etc, proposed and actual), actual nature of process of implementation (incremental, for example), how far implemented according to plan), media response (to presentations, and to realised phases), and management ethos (presented and actual). In each case, every step of the process involves challenges unique to the particular context and conditions.

The breadth of examples I have gathered is vital in order to carry out a sufficiently authoritative investigation of applied tools, as the matrices of practice are diverse (and as part of a future professorship I intend to map these matrices in a new body of diagrams). It is not simply a double polarity of top down and adaptive, but more of a continuum on the side of adaptive planning, as modes are proliferating, and different 'species' now exist. This diversifies the range of questions arising, which consider the trial and error nature of plans (with their strengths, weaknesses, opportunities and threats), their use value within specific contexts, and also their capacity for survival in a particular socio-political ecosystem. For example, how does tactical urbanism combine its impacts with a longer term masterplan (Detroit being an example)? How does a 'meanwhile use' group best negotiate a long-term land use? (Canning Town and Eastern Curve Garden, east London)? What impact does a new set of tools have in a context in which there have been none of this kind before? (eg Johannesburg).

Definition of tools and processes in relation to the research. How I distinguish between tools and processes of masterplanning

The tool, in relation to planning, has a number of meanings, while, broadly speaking, these are united under the definition of a design construct intended to facilitate, enable or lever change. Tools signify instruments and frameworks (integrated conceptual plans into which transdisciplinary intelligence and applied research is fed, intended to achieve a set of quality-related objectives that are wide in scope: aesthetic, regenerative, and sustainable), as well as individual tools of representation eg transect plans, and are today strongly associated with digital parametric software both pre-defined for planning purposes and customised by the designer for specific uses. There are limitations to such tools. For example, modelling tools are increasingly important in design. They help designers, clients and the wider public to understand situations, but they do not help to predict future scenarios beyond a significant capability for catastrophe risk analysis and extensive modelling of possibilities.

A good masterplanning framework can be a powerful tool, which through its public consultation processes, has the ability to acknowledge and opening up local issues never before approached in such a cross-sectoral way. This has the effect in many cases of also opening old social and community wounds, and those leading the process, as Elemental have shown, through their work in various urban contexts in Chile, find themselves having to proceed with great care, so that community members feel heard, issues are properly addressed, and sound solutions found. Toolkits of information, advice and graphic items are increasingly used in community planning, with the Center of Urban Pedagogy in NYC being responsible for some of the finest resources of this kind for members of the public to use for their empowerment.

A masterplan is also invariably seen as a marketing tool, a persuasive, communicative device to convince investors, partners and citizens of its merit whose slogans and CGIs appear in time on construction hoardings. However the masterplan documents that are created for the client, and those created for citizens, for example online, or at consultation meetings, may differ in their level of detail. This can cause a fragmentation in perception and expectation, and few plans have a commitment to consistent consultation with citizens throughout the entire process (Ecosistema Urbano's plan for downtown Paraguay and Elemental's plans in Chile are exceptions).

'Processes', by comparison, connotes the range of planning activities proposed and generated by masterplans and frameworks, each of which has been devised with an anticipated cause and effect. One example of a process would be the remediation of land, increasingly needed to prepare contexts such as brownfield sites for use; another, the public consultation process; a third, the implementation of new cycles of reuse of resources, either recognised ecological strategies such as Cradle to Cradle, including waste to energy systems, or retrofitting; reconceptualisation is also a process, for example, of the use of land, resources and facilities, or the ways in which cultural value can be built, which can be defined in a myriad of ways, including support for local businesses. A distilled message taken from the reconceptualization is used in masterplan marketing.

I differentiate the words 'tools' and 'processes' while also recognising that the ways these terms are used also creates an overlap in meaning. Each connotation of each term can be scrutinised in terms of its identity/mode, goals, focus, methods, principles and rules, and intended modus operandi. Both must be put to the test, and both must gather information and both need to possess and build adaptability. The ways in which a process can gather information is, I contend, potentially more multi-modal and therefore of greater use than one software tool alone, but both need to inform each other through real world application and feedback loops.

Going beyond the distinction between the two terms, a tool is also definable as a framework plan, which must have a process, I have accordingly placed focus on the implications of various processes. A major distinction in types of processes of plans that is significant for my research is between ones that have a linear, reactive process, with a very limited number of people defining the quality that will accrue, and those with an adaptive process bringing with it the imperative of pro-activity, and the potential for a more widespread recognition of quality. However the outcome can reflect an alternative twinning of mode and quality.

The first is top down, and heavy with standardisation, and could in some circumstances, ie transport infrastructure or a new park, produce very socially widespread quality, along with urban qualities that benefit a small sector, for example raised property values around the site; the second, built to be rather more de-centralised and collaborative, holistic and responsive to context, and geared towards building capacities of users, and carrying out monitoring and evaluation. Such a project can provide benefit to a particular social sector, so long as its management ethos is a fair one at the same time. It is fair to say that today's software tools aim to emulate this degree of intelligent analysis of contexts and options, but in a field where overriding human intelligence is critical at this point. The adaptive plan is optimally a collaborative process, and the fault lines between the values of those involved are often revealed as planning activities progress, and objectives put under stress as a consequence.

At one end of the spectrum historically has been mono-functional zoning, a machinic model, breaking up the use of land and local connectivity, and in many cases bringing with it an element of 'social cleansing'. At the other end, is an approach of 'genius loci', as promoted by Christian Norberg-Schulz¹⁹⁰, valuing the sense of place, its conditions, character, authenticity and potentials, as well as the particular interaction by humans in places, as studied by Jan Gehl and his wife Ingrid from the early 1960s as a means to build a counter-practice to Modernist planning. Norberg-Schulz's definition is not the same as the more contemporary typification of place as a local 'asset', a context in which many connections and synergies can be nurtured, building what groups such as the US-based Project for Public Spaces (PPS) and others have called 'place capital'.

The zoning process favours delivery in terms of parcels of land, numbers of housing units and smart solutions alone, with no attention given to the task of nurturing citizen activism in any form; the second is concerned with liveable urbanism, wellbeing, complementary facilities and with the building of resilience for the future, which includes a keener sense of civic responsibility.

The above definitions are described in my research outputs as both severely limiting the impact of top down planning and preventing beneficial bottom up planning, consistent with my line that top down planning has many drawbacks. However in my research I have also searched for constructive hybrids of top down plans with bottom up tactics, and while the two have not yet connected fully, or rarely do so, there are more instances of the top down plan incorporating bottom up approaches. My research methodology concerning this phenomenon has looked at the versatility of the masterplan/framework as a tool and as a process, in the context of socially beneficial priorities.

At the same time, the mind is the ultimate tool, producing mindsets (habitual ways of thinking) applied in planning, which lead to processes, or the actions, usually collaborative, resulting from thinking. In this sense overcoming detrimental mindsets, restrictive patterns, prejudices, ignorance and fears of the past in processing thoughts and mobilising action, is central to my research.

Today the terminology used mixes tools and processes in a way that brings thinking (and the thinkers) into the activity process, setting a much wider group of protagonists in the role of conceptualisers. For

¹⁹⁰ Norberg-Schulz, C, *Genius Loci: Towards a Phenomenology of Architecture*, Rizzoli, 1980.

example, architects and planners such as the Spanish group Ecosistema Urbano, in relation to their new, ongoing masterplan for the historic downtown of Asunción, Paraguay, emphasise the ‘master process’ as opposed to the masterplan. A ‘master process’, consisting of both ‘tools to deal with complexity, conflicts and changes’ (conceivably, ways of thinking) and actions, the first of which is the creation of an Open Lab in the downtown as a hub at which all stakeholders congregate to take part, especially citizens invited to co-design acupunctural projects, allowing for the capabilities of those involved. It is my contention that such groundbreaking models that combine top down and bottom up processes like this, and allow for a high degree of citizen involvement, if singled out and studied as models, have a lot to teach other groups about devising tools and processes that are sufficiently adaptable to cope with complex political situations.

My focus has been on how the city can be approached as a complex system with a potentially ethical civic order. I have applied the following questions to the variety of planning tools and processes: what, how, ‘by whom?’ and ‘for whom?’ These are problematic refrains, but essential if the forensic approach to adaptive planning tools and processes is to be regarded as incisive.

How far tools and processes are transferable between cities and countries at different stages of development

I have been concerned in my research with what strategies for emerging adaptive plans by architects and urban designers through the means of specific new tools and processes identified during the course of my research demonstrate on a practical, yet conceptual basis. I place focus in my particular study on process – events in the making – and the uniqueness of events, processes, practices and plans, serves to introduce a more wide-ranging and nuanced way of thinking about planning as a historical phenomenon, not a set of aggregates, regarded as mere templates which can be copied across cultures.

The thinking behind colonial planning was that plans were transferable, eg ‘bidonvilles’ of North Africa and Europe, and the legacies of these and the type of urban laboratory approaches, continue to be unpicked (eg the exhibition *The Desert of Modernity: Colonial Planning and After*, Haus der Kulturen der Welt, Berlin, 2008). Planning traditionally often overlooked climatic and contextual variations; the same accusation can be made of the most extreme cases today, although there is a much greater sensitivity to these issues. One widely transferred form of planning is the gated community, evident everywhere from Mexico City to South Africa, the satellite towns outside Cairo, and many developed world contexts, and its stock in trade is segregation, a model that needs to be replaced by planning that recognises the value of symbiotic relationships between communities in cities.

It is not the case that contemporary plans supporting informal communities globally can be directly and easily applied in the developed world, and vice versa. The basic level of infrastructure, predominance of housing and relative absence of complementary facilities lacking in informal settlements calls for a very specific, acupunctural form of intervention, and/or network urbanism geared towards social sustainability to achieve the goals of a project. The introduction of metro cable transport, or a combined rainwater harvesting infrastructure/educational campus has specific merit in the context of an informal settlement; its facility has far less relevance in developed world urban contexts. In developed world contexts, and/or especially in environments with considerable historic fabric or specific landscape/ecological conditions, the objectives of a credible plan will be different, closely geared towards the site and its cultural/historical assets. As my research shows, development in South Africa favours suburban, car-centric planning as solutions for townships ie precisely the imposition of developed world models in developing countries, and those such as planner Michael Hart ¹⁹¹ contesting these approaches with their own models, are having difficulties making headway.

However the tactical urbanism, allied to educational programmes, applied in many informal contexts has also been applied in the developed world – in Christchurch after the earthquake, for example, and its value lies in affordability, fast-track measures realised with local people. Its test bed approach is also equally valid in cities and countries at different stages of development, encompassing developed contexts in the aftermath of disaster, as well as context where a fresh approach without the comprehensivity of a masterplan would be beneficial.

¹⁹¹ MF, pp129-140.

Instead of a top-down, colonial and technocratic approach, what can be transferred today in a way that is potentially more achievable than ever before is the intellectual capital of transdisciplinary, multi-cultural teams and willingness to forge robust, responsive and democratic relationships with local communities, so that adaptations can be carried out in a way that is socially and environmentally significant. The mindsets concerning tools and processes evolved through strong input from communities are consequently open to change and adaptation in a way that was not the case in the past, and imported standardised materials and solutions can be challenged. Accordingly the role of the designer and planner becomes one of facilitator and steward.

A commentary on all publications submitted in the portfolio

The group of publications submitted demonstrate the growing depth of my analysis and critical appreciation of *all* alternative practices in architecture, urban design and planning addressing the multiple territories of the city and its cultural life, of which masterplanning in particular is singled out as a subject by the one book included in the selection, *Masterplanning Futures*, a project that I researched over 5 years, and the Cumbernauld essay (2004), an analysis of the ideals and fortunes of an early 1960s New Town created through top down means, and overcome by historical events. The focus of the body of work over more than 15 years has enabled me to widen my reading and exposure to contrasting examples and viewpoints concerning specific urban contexts and subject matter, and build an arsenal of critical comparative urbanist thinking that allows me to formulate questions to help shape other subsequent output.

What each example shares is an investigation of the social roles of design practices, in devising and applying tools and processes as different types of methods to make sense of cultural and political change. Above all, many of them share a focus on intervening in the context of stark polarities identified in terms of urban futures, to which professional practices need to adapt.

For the *Masterplanning Futures* project the breadth of strategic ambitions behind different planning processes, and their creative options (conceptualisation, identity of tools and processes), scope for trial and error, level of public participation, intentionality and goals set, have been scrutinised. My prognosis in the book is that multi-scalar planning is necessary, and today's tools give designers unprecedented capacities to understand and analyse issues.

Therefore it is urban design and planning as a practice capable of reinventing and resituating itself as an adaptive practice of great versatility, responsiveness and commitment to honouring the symbiotic relationships and realities of cities, irrespective of whether it operates in the developed or the developing world, that I have been concerned. I regard this as the means of creating liveable urbanism, and one of the main reasons I set up my webzine, Urbanista.org, which demonstrates my work proliferating analysis of topics and examples of top down planning and alternatives in Chengdu (the garden city coopted by local government), Rotterdam (questioning more traditional processes of city making, and the forging of new alliances in the face of austerity), London (the credibility of 'smart city' ideals and tools), Tallinn, Lisbon and other urban contexts, including work published by other writers, a number of them PhD candidates or post-docs. Unlike a published book, a webzine can grow, and I intend to introduce an index in the near future as part of publishing issues 3 and 4 to assist reader navigation further.

While *Space Invaders* (exhibition and catalogue, 2001) explored the extension of architecture's remit to wider, more responsive forms of social engagement through the study of 15 different practices for an exhibition, the three essays on cities – Istanbul, Barcelona and Hong Kong – analyse the growing pains of the global city as urban body (Istanbul, 2009), political commitment to effective urban design to support social cohesion (Barcelona, 2011) and the interdependency of ecological, social and economic issues, and pressures on liveability and well-being to which urban design and planning needs to respond, and examples of such practices (Hong Kong, 2011). This trio underscores the pressing need for urban design and planning – including masterplanning – to develop and refine its strategies to fully respond to these complex realities, instead of following client wishes to produce urban transformation that symbolises the growing social inequalities cities globally face today.

Their collective contribution to knowledge

An aggregation of critical thinking, qualitative methodologies and exemplars of alternative urban design

and planning departing from anachronistic models ie the rationalist city, ripe for reinvention and/or irresponsibly applied in ways that exacerbate social segregation. The exemplars are not emphasised in order for them to be replicated, but to assist more profound understanding of the complex issues of cities they take on board and respond to. The publications presented underline a mix of advances made in responsive and situational urban design and planning, and help to widen urban debates which often leave design and planning out of the picture, or misperceive it as a purely a matter of tectonics, or city as brand, alone. They also point to the need for 1. continued investigations of activities in this field, which includes a forensic analysis of how land in cities is treated and social spaces of higher density, intensity and connectivity can be better designed to counteract generic placelessness, in the name of a social contract for urban design and planning, 2. new alliances across fields of practice related to city making, and 3. new bodies bridging the threshold between formal policy and governance and alternative design practices that address issues of social cohesion and civic liveability and well being. 4. impact on policy through reappraisal of priorities.

A summary and conclusions relating to masterplanning in general: its evolution and modes of practice

The masterplan, more appropriately called a plan, urban framework or strategy plan, retains validity as a three-dimensional conceptual tool, mobilising the application of transdisciplinary processes for the improvement of the city. But it suffers from being generic, and tools and processes need to be fully adapted to cities as communities and ecosystems undergoing continual change. This puts great stress on the quality of stewardship, to avoid anti-civic procedures and consequences. While there can be such a thing as a financial/business masterplan alone, the complex magnitude of the challenge for an urban masterplan means that it can only be fostered by a certain range of disciplines. It also needs to incorporate as full as a process of public consultation and involvement as possible, so that communities feel involved, and trade-offs avoid fragmentation of land and dislocation of neighbourhoods.

Many forces in and impacting on cities cannot be controlled through planning, but without the work of masterplanning in urbanism, laissez-faire processes bring about many unintended consequences that can, with appropriate intervention on a range of scales, be adapted, ameliorated or stopped.

Many global cities today still do not have a culture of city-wide masterplanning, and the practice of developing small private plots is prevalent, for example, in Istanbul, creating small 'fortified' gated communities (the Turkish architect Emre Arrolat is obliged to work in such a way, attempting to adapt this format). However unprecedented examples emerging of progressive mixed-use plans in development, ranging from Perm (Kees Christiaanse/KCAP), to Oklahoma (AHMM) and others, demonstrate that a much wider set of goals connecting plans to social objectives of value to the whole city, are becoming more common in city planning.

Masterplans continue to be deployed by developers as mechanisms to crystallise intentions to bring about 'comprehensive' large-scale planning developments over the long term, to accommodate new housing and other commercial space (offices, retail). Their constitution has an urban marketing, as well as a planning identity (variously constituted as masterplans, parameter plans, frameworks, 'visions'), making them speculations about future urban identity as well as plans to bring about a certain set of pre-defined goals. Their goals can be seen as ranging from those set largely by the client, and supported by the architects; devised by the client with significant input from the architects; as before but also with public consultation; or much more significantly shaped by public consultation, and voted on by the public; devised entirely by a community group. As processes they are set in motion over the long term (5-20 years, usually in stages), in contexts necessitating land requisition, removal of structures and existing residents and in locations without built development which may nonetheless need remediation.

The plans can be at the neighbourhood scale, eg Farrells' plan at Earl's Court being developed on the 28 ha site of the historic trade fair buildings (approved in 2013; likely to take 10-15 years), based around the theme of 4 villages with a street¹⁹², or at the scale of a city quarter, or an entire city. In the second case,

¹⁹² 'I don't think this masterplan is about the buildings. That's starting at the wrong end of the process. Issues of height and density aren't starting points. You have instead to talk about things like the street and its width and what makes a good city. Towns and places are not the result of design. Design ends up with products. Masterplanning ends up with processes. Masterplanning is not big architecture.' (Terry

the plan is about reusing the vast numbers of disused industrial sites, for example the main industrial harbour of Stockholm Royal Seaport, a 236ha former gasworks site, one of northern Europe's largest areas, being developed through a masterplan by Adept and Mandaworks with 3 new neighbourhoods, a new cultural district and including a new man-made peninsula, over 20 years (starting in 2017).

At the scale of an entire new city, King Abdullah Economic City (KAEC, announced in 2005; first phase completed in 2010; due for completion in 2020; 173km), 60 miles from Jeddah, Saudi Arabia, including a new port, is a major contemporary example. One of four cities planned to help diversify the economy which is over-dependent on oil and to reduce sprawl in existing cities, the plan targets the under-30s currently studying either at home or abroad, and is being run by an Economic Cities Authority. The incrementalist approach applied by Farrell – creating new villages in London's central urban context of villages – is unlikely to be the case at KAEC, which will be fast track, but in both cases individual buildings will be designed by different architects.

The innately speculative nature of masterplanning, usually beginning with a competition, often creates expectations by the participating architects about their role in future building commissions, as the case of Daniel Libeskind, the winner of the masterplanning competition, at Ground Zero shows. Entrants to the masterplan competition, including Libeskind, were asked to design buildings for the plan to heighten its attractiveness, and Libeskind's comprehensive design with its juxtaposition of practical and commemorative elements led him to be singled out as the winner. However, before his win was announced, Larry Silverstein, the developer, had already commissioned David Childs at SOM to design the Freedom Tower on the site. An awkward attempt at collaboration by Libeskind and Childs failed, and eventually (in 2004) Libeskind sued Silverstein for unpaid early work on the Tower. Today Libeskind says he was always aware that he would not get to design all the buildings and had been prepared to compromise but it is likely that he had found it difficult to relinquish control of the identity of his masterplan vision, which, as encouraged by the client, included designs for all the buildings within it, along with the plan itself.¹⁹³

The architects and planners involved in such schemes are not encouraged to question the strategies of the clients involved, but to create plans that symbolise an identity and accommodate future facilities for a speculative customer base. The narratives of value vastly contrast to alternative masterplans carried out by and for existing residents, for example, by the Dudley Street Neighbourhood Initiative's community land trust in Roxbury, Boston, a body created by citizens. Modes of communication about masterplanning by clients and other potential institutional and community stakeholders generally work on the basis of negotiation, with trade-offs. Instead a more collaborative, democratic approach would avoid trade-offs for communities and other partners that cannot, in fact, be afforded.

What can be defined as a city plan is broadening, and a more responsible approach to long term strategic thinking is evident. The rise in the phenomenon of municipal plans for the future, providing guidance, assessing infrastructure and setting measurable goals to address climate change, includes in some cases a conflation in the identity of a strategic urban masterplan with that of a mayoral policy document eg. London, NYC, Abu Dhabi, New Orleans. The nature of the consultation behind each one varies hugely. OneNYC involved 40 stakeholders from development, clean energy, environmental advocacy, philanthropy, new technologies and government. OneNYC's plan will require updating every four years, and looks more like a strategic masterplan than previous versions, including new initiatives for public spaces and sanitation. It also includes a focus on overcoming income inequality, representing political will to move to close the gap between environmental policy and social justice.

Is masterplanning changing to complement adaptive planning or is it being replaced by more localised processes?

The answer to this question is yes and no, because examples of masterplans as a simplistic and pre-determined tool persist, but at the same time there is strong evidence of plans with sophisticated adaptable capacities in relation not just to phasing, but diversity of elements and capacity for some to be advanced in a fruitful way. The above mentioned municipal level plans generally strive to complement

Farrell), 'Grand Plans are afoot in Earls Court as Terry Farrell reveals his masterplan', Sutherland Lyall, Architectural Review, July 2010.

¹⁹³ 'Daniel Libeskind's World Trade Center Change of Heart', Elizabeth Greenspan, New York Times, 28 Aug 2013, <http://www.newyorker.com/>

adaptive planning by setting goals relating to liveable urbanism and resilience.

At the level of district and/or site masterplans, in many cases they are becoming more adaptable, but not more complementary to adaptive planning. The two often work on conflicting tracks. Also, as public consultation is increasingly factored into schemes, new conditions emerge that could not have been planned eg media influence and pressure group impact. Highly bespoke local processes involving design skills are becoming far more common, and one field in which this is strongly evident is in disaster relief, at sites without precedents in terms of international, multidisciplinary aid. They are also expanding in areas of haphazard planning. However localised processes are not yet replacing masterplanning.

How masterplanning might evolve in the future, and the changes am I observing/involved in

The nature of the challenges of urbanisation increases the onus of responsibility to understand more about how to carry out urban design and planning and their ethical implications. The context has changed greatly since I started work on *Masterplanning Futures* in 2006, and global economic crisis, ecological pressures, climate change-related and other disasters, and population growth have put urban centres under huge stress. Masterplanning remains a globally practiced commercial activity for ‘managing change’, to use the euphemistic term favoured by developers. However change in a city by parties attempting to bring it about is usually difficult. It is clear that plans for implementation are increasingly incurring critical commentary and civic action (the Gezi Park scheme, Istanbul, where a shopping mall development was planned by the authorities, later cancelled in the face of civic protest, being one major example). The power of social media is growing, and backlashes on Twitter command widespread attention, even if they do not produce immediate results.

The privatisation of urban space (via global capital and interests often scarcely physically present in a context) has a de-urbanising effect, which limits options as the severe zoning and tenure plan further fragments neighbourhoods. Unprecedented forms of urbanisation challenge practitioners to find a more holistic approach to the complex systems of the city and its natural assets. The marshalling of democracy as part of masterplans will be an existential challenge for cities and regions, as the adaptive planning I argue for is not about the quick fix for the few, without consultation, but urban renewal in the long term, and for all, involving community members.

A lot of masterplans went on hold in the economic crisis, and newer ones are a mix of older types and newer adaptive ones, but each triggers its own narratives as attempts are made to accommodate it, for better or worse. Participatory processes and budgeting are having a growing impact on global practice, both in the developed and developing world. Public municipalities have shown signs of resilience and innovation and of being denuded of skills and powers to act in favour of communities (allowing demolition of estates and the eradication of social housing). The third sector will become more empowered, and the Janus-faced reality of the open society will continue to both excite and perplex. I believe that localism – the increasingly self-determination of local groups, organisations and networks sharing skills across the professional-layperson spectrum – if empowered by adaptive planning processes as well as a widespread generation in communities of local ‘think and do’ sharing/interactive activities, will grow as a global force, constituting a major part of future planning. This will entail a major learning curve for all those involved, but it represents a form of empowerment and engagement with considerable advantages.

As the writer William Faulkner has written ¹⁹⁴, ‘the past is never dead. It’s not even past’. The Medellín story (as narrated in *Masterplanning Futures*, and in an updated form in *Recoded City*) shows that, in dealing with the legacy of drugs cartels and high murder rates, a mayor cannot eliminate certain realities completely, but other ‘windows’ can be opened, through education and public realm urban design, that significantly change civic perceptions of the identity of the city (and urban centres in the wider region) and people’s role within it. The example of the London Olympics masterplan underlines a shift towards creating legacy plans in tandem with preparing the ground for a major event of this kind, moving away from a tradition of little planning for the future of land and venues used for the Games, resulting in ‘white elephants’. The incidence of ideas competitions in which land mapping (eg Sarkozy’s ‘Le Grand Paris’, 2008) reveals new potentialities for use and identity deserves to receive greater support.

¹⁹⁴ Faulkner, W, *Requiem for a Nun*, Random House, 1951.

Masterplanning in the last 10-15 years has become increasingly bound up with ecological and liveable urbanist goals, inevitably also accompanied by hype and questionable agendas concerning 'resilience' (ie how many 'unknown unknowns' can a city safeguard against? Especially as the ways in which critical systems might fail becomes increasingly unpredictable) and 'affordability' (the term is a relative one). The growth of a strong focus on resilience, however, is very interesting as part of the study of the evolution of urban design and planning, because it encourages participants to think in terms of complexity, and how to unpack it, and to consider quality of governance, and a much greater transversality, as part of processes, where once a study of planning processes would have considered their determination in their own right.

Whether the current interest in measuring everything (or also electronic self-monitoring and adaptation) is really going to boost resilience, is hard to say, but in the context of fast-growing urbanisation, alongside all the other related phenomena, thinking in terms of resilience framework provides an unprecedented lens. A greater awareness of vulnerabilities exposed shifts the onus of responsibility on the part of stakeholders. It also means that urban design is fuelled by a newer discourse of resilience, complex systems and the need for interdependence, and that the use of resources and notions of retrofitting become far more prominent. Resilience as a discourse has also brought back the long-term view, but without the high degree of aesthetic and technical pre-determination of old-fashioned masterplanning. Furthermore, being a mathematical concept embedded in Chinese and Indian cultures may help to give it an enduring cross-cultural DNA.

In many contexts, the wider public has become used to playing a more vocal role in projects, and masterplanners pursuing these goals for clients who only applied limited community consultation are detected by the media/via social networks (BIG's The Big U masterplan for Manhattan, being one example). The various forms of subjugation applied by clients in order to advance plans are met with increasing opposition from public-led alliances and in some cases organisations and firms. Some UK examples from the last year include: Earl's Court, west London (Farrells), Bishopsgate Goodsyrd, east London (Farrell), the Aylesbury Estate, south London (HTA Design, Hawkins/Brown and Mae), and, although not technically a masterplan, the Garden Bridge over the River Thames, central London (Heatherwick), as well as the masterplan for the centre of Winchester (Allies & Morrison). These are beneficial phenomena resulting from an open society, that call into question otherwise largely hermetic processes.

Cities facing growth in population are increasingly likely to form public-private alliances to respond with measures to build investment. Urban growth imperatives and need for competitiveness, with in the UK a focus on devolution to the regional cities eg Manchester, also means that global urban examples are drawn upon for influence. Plans' objectives are often city-wide and strategically related to amenity and reinvention in ways that improve conditions for residents and visitors, encompassing prioritising urban spaces for the pedestrian and cyclist, public gathering and waterfront space, improving connectivity between districts and upgrading infrastructure (for example, the Liverpool city centre masterplan).

Much higher levels of awareness of all the constituent factors for a resilient and popular urban plan, has meant that city planning has become a more complex and sophisticated process of uniting the social and the spatial. Ongoing challenges include judging how best the facets of a plan fit together, priorities in phasing, dominance of retail and business objectives over social provision (ie improvements to infrastructure and air quality without an equivalent focus on mixed-tenure housing provision demonstrate a lack of commitment to social equality).

More private developers need to work with local government to get their schemes advanced, and that is a problematic relationship, and a lot of advances have been made by local governments in envisioning urban futures in a much more dynamic and socially oriented way. However there is in many contexts in the UK and mainland Europe far less public money. Consequently private sector objectives are strong drivers of masterplans, with a focus on business-friendly urban projects, and a equilibrium of focus on visitors and residents has also opened up for discussion.

In the developed world, large-scale masterplans for whole mixed use neighbourhoods will continue to be as good as the quality of the clients behind them, and therefore changes in the mix of protagonist organisations and bodies operating in a particular neighbourhood and district, boosted through new local

initiatives (the Waterbanks Schools in Kenya by PITCHAfrica being one example¹⁹⁵) are likely to strongly influence the trajectory of outcomes. In cases of purely private developments in political contexts without a democratic base and a lack of alternative visions, masterplans as simplistic formulas for development are unlikely to be challenged. Along with the above-mentioned shifts, there has been a rise in focus on resilience and disaster relief as urban design priorities, the former becoming a central priority for masterplanning frameworks and the second as a growing field of bespoke practices, but in some instances also a key driver of masterplans. I took part in a masterplanning workshop led by Charles Ledward, Global Lead, Planning, Design + Development, AECOM, at the 'Designing City Resilience' conference staged by RIBA in conjunction with the Association of Commonwealth Architects on 16/17 June 2015.

The rise in participatory placemaking in the context of disaster relief and more widely in urban communities has been a dedicated research area of mine since December 2012, involving me in the co-authoring of *Recoded City: Co-creating urban futures*¹⁹⁶ with Thomas Ermacora, a regeneration specialist. In this book we devote 7 chapters to critically charting a history of attitudes towards the ethics of bottom-up activities in society, across cultures, and I have been responsible for writing 43 essays about contemporary initiatives across the world. The rise in localism and new collective organisations demonstrating a convergence of interests in ecology and social justice, and initiatives supporting the open society, are just some of the related phenomena I have studied as part of this major publication.

Part of my focus in *Recoded City* has been on issues of building social and natural capital through urban design strategies. In order to give greater visibility to a range of current urban design projects prioritising innovation in ecological tactics and the support of social relationships, cultural history and memory, I curated 'Urbanistas: women innovators in architecture, urban and landscape design', an exhibition for Roca London Gallery (March-June 2015, which tours to The Core, Newcastle, organised by Northern Architecture, in Sept/Oct 2015)¹⁹⁷ including the work of Alison Brooks and Johanna Gibbons of J&L Gibbons. With a focus on tactical urbanism, rather than masterplanning, I am currently curating the UK pavilion for the Shenzhen Biennale of Architecture and Urbanism 2015, which this year has the theme 'Re-living the City'.

With regard to the above-mentioned contentious plans in the UK, in London I was the guest speaker at an event in September 2014 staged by the Bow Arts Trust at the Balfron Tower, east London on masterplanning and adaptive planning in London, and I have studied and written about schemes such as Bishopsgate Goodyard (*Recoded City*), Canning Town Caravanserai (*Recoded City*) and a new essay for a University of Dundee publication, *Placemaking: Rethinking the Masterplanning Process*, eds. Husam Al Waer and Barbara Illsley, ICE)¹⁹⁸ and 'Making Space in Dalston' by Muf Architecture + Art and J&L Gibbons (*Recoded City*).

London's changing urbanism – strategies and processes – ranging from the Olympic Park to new infrastructures, have been focuses of field trips I have led as part of my teaching of urban design history and theory in the Department of Architecture, Syracuse University's London branch (autumn 2013, with lectures given in London and at Syracuse University, 2014-15)

In summary, the changes I am personally involved with currently are multi-modal, and engage with a diverse range of audiences across cities and sectors. They break down the barriers between specialists and non-specialists, and aim at a better understanding of the relationships between top down and bottom up processes, through continued original research, and the relay of narratives through books, lectures, essays and teaching.

¹⁹⁵ Bullivant, L, 'The rural Kenyan school that collects water for the community', The Guardian, online, 6 May 2015.

¹⁹⁶ Bullivant, L and Ermacora, T, op cit.

¹⁹⁷ 'Urbanistas: women innovators in architecture, urban and landscape design', Roca London Gallery, <http://urbanistas.roca-exhibitions.co.uk>

¹⁹⁸ Al Waer, H and Illsley, B (Eds.) *Placemaking: Rethinking the Masterplanning Process*, ICE, 2016. In production.

