

Globalising sustainable urbanism: the role of international masterplanners

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Revised manuscript received 31 October 2013

How do you design a sustainable urban area from scratch? A growing number of urban development projects, marketing themselves as sustainable or 'eco' cities, claim to have the answer. This paper focuses on the companies who create the masterplans that guide the development of such sustainable urban projects. While these projects are appearing in a diverse array of locations around the world, they are largely conceived and designed by a small, elite group of international architecture, engineering and planning firms based in North America and Europe sometimes referred to as the global intelligence corps (GIC). Drawing on research into these firms, the paper examines the contemporary drivers of internationalisation in sustainable urban planning and design. These include enhanced professional reputations and satisfaction for designers and branding benefits for clients with a desire to be seen as modern and 'global'. The paper then considers the role of international masterplanners in the global dissemination of ideas in this area, concluding that the GIC and the plans they develop are playing a significant role in the development of an international model of sustainable urbanism. However, the way in which this model is actually expressed in material form is strongly influenced by the demands and priorities of the GIC's international clients. The paper concludes by reflecting on what this research demonstrates about what it means for a planning model to be both relational and territorial.

Key words: sustainable urbanism, masterplanning, policy mobilities, eco-city, global intelligence corps

Sustainable urban projects: a global phenomenon

In recent years, researchers and practitioners in urban planning and design have focused increasingly on two concurrent trends: the increase in worldwide urbanisation rates, and concern about the sustainability of urban areas. As demand for practical solutions to increase the sustainability of urban living grows, proposals for new urban developments designed along sustainability principles have begun to proliferate. These sustainable urban projects, from small urban infill projects to entire new towns sometimes called eco-cities, are today an international phenomenon (Joss 2011). While concern for the natural environment has been a common theme throughout the history of Western urban planning, contemporary sustainable urban projects bring this concern to the forefront of the planning process. Their plans and publicity materials

combine bold claims and ambitious targets with attractive designs and innovative technologies.

This paper focuses on the consultants working for the private sector architecture, planning, urban design and engineering firms that produce the strategic and land-use masterplans that guide the development of sustainable urban projects. Masterplans are lengthy documents usually produced in the early stages of project conception and development. A masterplan is seen as a useful tool to coordinate the objectives and actions of a wide range of actors and interests and to help reduce development risks (Bell 2005; Carmona *et al.* 2003). While rarely precise blueprints for future development, masterplans play an important role in establishing the objectives and basic parameters of an urban development project. Drawing on empirical research studying some of the world's most prominent masterplanners, this paper outlines the key factors driving the internationalisation of work in

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sustainable urban planning and design. It goes on to consider the role of international masterplanners in the production and dissemination of a standardised global model of sustainable urbanism. The paper concludes by reflecting on what this research demonstrates about what it means for a planning model to be both relational and territorial.

The global intelligence corps and the internationalisation of urban planning and design

Work on masterplans for high-profile urban projects is largely carried out by a relatively small, highly internationalised group of architecture, planning and engineering firms perceived as having expertise in this area. This group has been dubbed the global intelligence corps (GIC) (Olds 2001; Rimmer 1991). Olds defines the global intelligence corps as 'the very small number of elite architectural and planning firms that aspire for prestigious commissions in cities around the world' (2001, 42). The GIC's status gives it a disproportionate influence on large-scale urban development projects in major cities (S Ward 2005). The emergence of the GIC is linked to the internationalisation of firms involved in the built environment industry. In the second half the 20th century, architectural practices increasingly began to work abroad in order to service their globalising clients. By the 1980s and 1990s, a class of architecture firms with an international presence emerged (Faulconbridge 2009; McNeill 2009; Knox and Taylor 2005). Civil and structural engineering consultancies, who generally work as sub-consultants to architects, followed the path to internationalisation paved by their architect partners. Over time these firms began to develop the global networks needed to establish themselves in a variety of new markets (McNeill 2009; Knox and Taylor 2005). In addition to their work on individual buildings, most of these firms also do some work in urban planning and design. Indeed, most large global architecture and engineering firms have separate divisions dedicated specifically to urban planning and design, whose primary products are masterplans.

Many of the largest and most well-known GIC firms, from large multidisciplinary companies like AECOM to smaller 'starchitect' practices such as Foster and Partners, have their headquarters and largest offices in North America and Western Europe. Despite this, the international work of the GIC does not simply follow former colonial lines of domination. Rather there is an increasingly complex and multidirectional flow of ideas. In recent years firms from other regions of the world, such as Lebanon's Dar al Handasah and Singapore's RSP have achieved an increasingly global reach through expansion and acquisition. However, the research conducted sug-

gested that North American and Western European firms are disproportionately represented on projects where sustainability is a key element.

The internationalisation of the built environment industry has been the focus of a number of studies in recent years. Previous research has focused on who these actors are (Sklair 2005), where they are located (Knox and Taylor 2005; Rimmer 1988 1991), the drivers of internationalisation (McNeill 2007 2009; S Ward 2005) and the impact of internationalisation on these professionals, the companies they work for and the architecture and urban development industries as a whole (Faulconbridge 2010; McNeill 2009). This paper builds on this body of work but focuses explicitly, as Lerner and Laurie (2010) and Olds (2001) have done, on the role that key actors, often working in the private sector, play in the international diffusion of ideas about and models of urban development. Specifically, the aim of this paper is to explore how and why a small group of largely North American and European firms have come to be involved in so many sustainable urban projects internationally, and whether their work is leading to a convergence around a standardised model of sustainable urbanism.

The role played by transnational professionals in the global diffusion of ideas is one focus of recent work on the mobility of urban policy ideas. The policy mobilities literature argues that urban policies are not fixed, concrete entities, but social constructions produced and enacted by networks of human beings (Peck 2011a; McCann 2011). As they travel, policies change and mutate, but they also must become fixed to a degree in order to be implemented in the places where they land (McCann 2011; McCann and K Ward 2010). Thus as McCann and K Ward argue 'urban policy-making must be understood as both relational and territorial; as both in motion and simultaneously fixed, or embedded in place' (2010, 176). Methodologically, studying mobile policies requires a somewhat anthropological approach, moving with transfer agents who 'produce, circulate, mediate, modify, and consume policies in their daily work practices' (McCann and K Ward 2012, 46). The research underpinning this paper adopts such an approach. The paper draws on research carried out in 2011 and 2012, which involved over 50 interviews, observed practice and participant observation. The research subjects were practitioners in firms that are recognised leaders in sustainable urban planning and design in North America and Western Europe, as well as their international public and private sector clients, who are largely based in Asia and the Middle East. This research also involved reviewing a number of masterplans produced by some of the research subjects for large sustainable urban projects. The remainder of this paper presents some of the findings of this research.

Contemporary drivers of supply of and demand for international expertise

Currently the GIC are involved in the majority of high-profile sustainable urban projects around the world. This section explains why this is by exploring the drivers of internationalisation on both the supply and demand side of these projects. To put this more precisely, it looks at why GIC firms want to work on large urban projects abroad, why there is a continued international demand for their services and how this is affected by demand for expertise specifically in sustainability.

For many GIC firms the motivation to work internationally is driven by an economic imperative either to grow, or simply to maintain turnover levels. Many have faced shrinking local markets for their services as a result of the recent financial crisis. While planning projects do not usually command high fees, several interviewees reported that for some companies the planning side of the business is seen as a 'loss leader', because getting in on a project at the masterplanning stage can help secure the more lucrative commission to design iconic or signature buildings for the development. Many firms also find working in a foreign context satisfying, as new markets offer opportunities to try novel and innovative designs that would be less likely to be built in their more traditional markets. Locations rife with wealthy clients looking to put a mark on the urban landscape, such as Kuwait in the 1980s and Dubai in the 2000s, have provided something of a playground for architects (Provoost and Vanstiphout 2011; Mahgoub 2004).

The relative lack of regulation in such environments can be enjoyable for designers accustomed to the long, drawn-out processes required to gain planning approval in their own countries. Sustainable design and technology are rapidly evolving with a constant stream of new ideas and innovations. Unfortunately building codes and planning policies, not to mention attitudes towards new and different ideas, are, in many contexts, not keeping pace. This creates a frustrating situation for designers who may genuinely want to try out new ideas, as well as to be seen as being at the forefront of innovation in sustainable urban planning and design. Projects that offer the opportunity to challenge the status quo and try out new ideas and technologies are an attractive prospect for an ambitious and at times idealistic sub-segment of the GIC. As one US-based engineer put it, 'we are able to be super experimental in places like China. We're learning a lot and we're doing things there that we couldn't do here because of policy barriers'.

There are also reputational benefits to working abroad. Boutique, 'starchitect' architecture firms in particular build their reputations by working on high-profile, prestigious commissions. More commercially driven firms

often use conventional commissions to subsidise more exciting but less profitable projects, which can significantly enhance their reputation and lead to additional work (McNeill 2006; Olds 2001). Projects branded as 'eco' or zero-carbon, which often attract a great deal of publicity, can certainly have such an impact. This is the case even for some projects that are never built. The London-based engineering consultancy Arup, designers of the now moribund Dongtan Eco-City project, developed a reputation as early leaders in this industry despite the fact that the project was never constructed.

Although an increasingly geographically diverse range of practitioners are working on large urban projects, the research conducted suggests that the services of the GIC remain in demand internationally for sustainable urban projects for two reasons in particular. The first is branding. In architecture and property development a plan developed by a prestigious firm or celebrity architect can help increase a project's profile and help it obtain the political support and investment necessary to take the project forward (Abramson 2010; Wu 2007; McNeill 2007; S Ward 2002; Olds 2001). Explaining his company's repeated use of a United States-based firm to do masterplans, a senior manager at a large Chinese property development company claimed that if he used a domestic masterplanner 'we'd . . . just end up with something like what everybody else has, and so it also came down to the market differentiation aspect'. Discussing the reasons foreign clients come to his company, a British engineer put it down to two factors, what he called 'kudos', that is, 'architects who are generally speaking more expert at creating a public image and publicity', as well as track record because Western companies 'have done it before'.

This engineer's point about track record speaks to the second driver of demand for the GIC's services in sustainable urban planning and design internationally, that is, the perception that local expertise is lacking and/or that a global approach is needed. The research found that foreigners are often hired specifically for their 'global' approach and aesthetic. Rather than travelling around imposing a homogenised urbanism, international practitioners are often sought out by clients who see them as best placed to deliver the modern, global design that they believe will help them attract the desired people and companies to their development. Related to this is the fact that sustainable urban planning and design is a relatively specialised field. Interviewees emphasised that among many property developers there is a perception that to get the newest and most innovative ideas or simply the necessary expertise requires hiring experts from elsewhere. There are relatively few urban development projects around the world that have incorporated ambitious sustainability objectives, meaning that the consultants that have worked on these projects are in demand.

This situation creates an opportunity for those consultants who can successfully sell their expertise in the field of planning and sustainability. For the moment at least, this dynamic appears to be operating to the advantage of large international companies with both experience working on sustainable urban projects and the marketing prowess to successfully promote this. This situation may change as domestic markets evolve. As others have observed, the international nature of the built environment industry is driven in part by a belief that foreign practitioners will bring in new ideas that local professionals can learn from (Chen *et al.* 2009; Wu 2007; Olds 2001). Eventually, there should be no reason why local firms can't do the work themselves. Similarly, developer preferences may change as geographies of land ownership and influence shift; in particular, the increasingly global reach of property developers from Asia and the Middle East is likely to alter the composition and operation of the GIC.

The GIC and sustainable urban projects worldwide: convergence or divergence?

Given the breadth of their work on sustainable urban projects around the world, is the GIC contributing to the emergence of a standardised model of sustainable urbanism? International consultants in the built environment industry have in the past been seen as agents of structural forces, in particular globalisation and neoliberalism. Such forces, and the interurban competition they engender, it is argued, can drive the replication of similar patterns of urban development around the world (Percival and Waley 2012; McNeill 2009; Bunnell 2004; King 2004). The work delivered by international consultants may be more globally than locally oriented, and ideas initially developed for one context may be presented again in another (Bunnell and Das 2010; Banerjee 2009; Adam 2008; Haila 1997).

The research conducted found that masterplans prepared by GIC firms do contain a fairly uniform and consistent set of ideas for enhancing the sustainability of urban development. They repeat a similar menu of options such as bicycle lanes, bus rapid transit, sustainable urban drainage systems, combined heat and power systems, and renewable energy. These plans also tend to cite a small group of precedents and examples of 'good practice' that sustainable urban projects should aspire to. These include projects such as Hammarby Sjöstad, in Stockholm, Sweden, Vauban in Freiburg, Germany, or particular interventions such as Bogotá and Curitiba's bus rapid transit systems.

Such ideas move rapidly among the relatively small group of companies working on masterplans for sustainable urban projects. This occurs as these companies work

in consortium with one another, or on design competitions where aspects of their work are made public, and as individuals move between companies. The appetite for new and innovative ideas is so great, and the exchange of ideas between GIC firms so rapid, that new options may be added to the menu even before there is much evidence that they work. Such is the case with the personal rapid transit system (PRT) incorporated into the Foster and Partners plan for the zero-carbon Masdar City. PRT was quickly taken up by other firms and presented as an option in masterplans even though it has yet to be successfully implemented at an urban scale.

The tendency to repeat ideas across multiple masterplans is related to the constraints imposed by the commercial environment of the urban planning and design industry. Fees for masterplanning commissions tend to be low, particularly given the volume and complexity of the work involved. Interviewees at one firm studied in the research described preparing masterplans for cities of a million or more in just eight weeks. Project budgets rarely allow much scope for research into new and innovative designs and technologies. The result is that practitioners sometimes recycle sustainability content from one masterplan to the next. Their repeated referencing of the same ideas and precedents as good sustainable urbanism, or 'ideas that work' (Peck 2011b), contributes to the impression that there is a global consensus on what constitutes sustainable urbanism.

Based on the preceding discussion it is possible to see the GIC as a powerful globalising force, encouraging a convergence (around a Western model) of ideas about what sustainable urbanism means, possibly at the expense of local ideas and innovations. However, the idea that planning ideas can be imposed on weak and powerless locals is outdated; as a number of authors have demonstrated, today planning ideas are actively imported as much as they are exported (Perera 2010; S Ward 2010; Nasr and Volait 2003; Verdeil 2003). Contemporary urban leaders use ideas and models from elsewhere shrewdly, interpreting and adapting them to suit their own purposes (Faulconbridge 2009; Chen *et al.* 2009; Shatkin 2007; Olds 2001; S Ward 1999).

Unlike when foreign ideas were introduced under conditions of colonialism or development aid with all the power disparities this entailed, today the clients who hire the GIC are active agents in, rather than passive recipients of, the globalisation of urban planning and design practice (Sklair 2005). The perceived expertise of GIC firms in sustainable urban planning and design can be used as a justification for hiring an international firm, even if there are other reasons for this decision. In addition, the incorporation of sustainability into a project is often done quite strategically. As discussed above, interviews revealed that property developers may use sustainability creden-

tials to attract the desired tenants, or to differentiate their project from other, similar developments.

Generic ideas about sustainable urbanism will need to be translated in order to be incorporated into a project in a particular place. In this process the GIC's ideas about sustainable urbanism are adapted by their international clients. A high-ranking government official in a city in Asia explained, '(consultant name) has come in and worked with me but I must tell you that even when he worked with me I have already refined and honed his initial ideas because some things work and some things don't work'. This process of adaptation may go on for some time. Urban development projects can take years or even decades to complete. As GIC firms command quite high fees, it is rarely cost-effective to retain them beyond masterplanning stage. International designers, then, are almost always long gone before the ideas they propose are implemented. Decisions about what is incorporated into a final masterplan and ultimately built are likely to be made by the client and the local designers and contractors who take on the project after the work of the international firm is complete. This then goes some way towards explaining why masterplans prepared by the GIC can appear to look somewhat generic. These plans are more a starting point than a prescription for what will actually be built. According to some practitioners interviewed, there is a certain element, particularly in the early concept development stage of the masterplanning process, of showing the client a large number of possibilities. Clients then get to decide which of the many options presented to them make sense for their project. While outsiders can highlight and encourage particular ideas, ultimately those that will be taken up are likely to be those that best serve a client's interests.

Conclusion

The model of sustainable urbanism that is emerging from the work of the GIC in sustainable urban planning and design exists primarily as an idea, or an ideal. It does not have a point of origin, or an original form from which to mutate. Rather, it develops and evolves through the day-to-day work of international practitioners. Sustainable urbanism is what Roy (2011) has referred to as a 'model in circulation' composed through transnational references and cross-border borrowing. The sustainable masterplans that the GIC produces encapsulate the relational/territorial dialectic of contemporary urban policymaking highlighted by McCann and K Ward. These plans are often quite literally in motion. A masterplan created by a busy firm of international consultants might take shape on a laptop on a flight from New York to Shanghai. Yet, as this paper has demonstrated, masterplans are also substantially influenced by the interests and concerns of the

people who commission them, as well as myriad factors in the places in which they are ultimately translated into real urban places.

How can such an apparently fluid set of ideas constitute a planning 'model'? Peck (2011b) suggests that we understand a model to be a crystallisation of a bundle of practices and conventions, linking particular problems with supposed solutions. In this context, the bundle of practices is the relatively standardised menu of options found in GIC masterplans. Seeing the model that the GIC is taking around the world as a bundle or menu of options helps to explain local variations in sustainable urban projects. The production of a masterplan is just one step in a long process of translating this model into material form. Large urban development projects are developed over a long period of time and are shaped by the aims and objectives of their developers, of which sustainability is only one. As a project evolves, it may take on a shape substantially different from the model of sustainable urbanism employed in the original masterplan. This raises the question, which bears further exploration, of how much a model can mutate before it becomes something else. As Faulconbridge (this issue) points out, such mutations may mean that the impact of a completed project on sustainability may be very different from those that the GIC intended when developing a masterplan.

Very few of the sustainable masterplans developed by the GIC will ever be translated into real urban projects. For those that are, the ideas and designs contained in the masterplan will be changed and adapted over time, leading to localised interpretations of an international model. Still, through their role in deciding which ideas to peddle internationally, the GIC in sustainable urban planning and design wields considerable power in both establishing a discourse about what is unsustainable about current urbanisation patterns and defining the set of solutions that can and should be used to address this.

Acknowledgements

The research underpinning this article was supported by an engineering doctorate studentship in the Centre for Urban Sustainability and Resilience at University College London, funded by the UK Environmental and Physical Sciences Research Council and Happold Consulting. I am grateful to Susan Moore and Andrew Harris for including me in this special section, and for their helpful comments on an earlier draft of this paper. I am also indebted to two anonymous peer reviewers whose comments helped me improve and clarify my arguments. Any mistakes or omissions are of course my own.

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