Urban Research in the Knowledge Economy: Content, Context and Outlook

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As discourses of knowledge-based growth and their spatial implications have taken hold, the presuppositions about the relationship between urban research and practice require systematic re-evaluation. Universities have become implicated in local growth coalitions, not only as estate managers, but also as strategic actors, employers or providers of evidence to inform policy. At the same time, the role of research has been the subject of much debate, in terms of the need to demonstrate user relevance, impact and value-added according to a range of economic, social, cultural and environmental objectives. It is no longer only a question of what the city means for the researcher but what research means for the city – and how those concerns are mediated by the university as a site of knowledge production. In this concluding article to the special issue, we examine these concerns via a discussion of how changing socio-economic conditions create pressures on universities to 'build knowledge cities' and how they, in turn, relate to the contexts and cultures in which urban research is produced.

Researchers occupy various positions within their universities and are influenced by different intellectual traditions, biographies and sources of funding, as well as a desire for professional recognition among their peers for producing good work. They need to believe in what they do in order to lend their work authenticity and credibility, informed by the values attributed to its practice by different audiences, as well as the cultural and institutional contexts in which they work. For the urban researcher, these contexts have, in comparison with other areas of research, had a strong spatial component. Depending on the gaze and approach of the researcher, the city has alternatively been subject, object and location of study: a crucible in which broader socio-economic, cultural and political dynamics can be examined; a lens through which a route from the particular

to the general can be traced or a social construct – contested, complex and infinitely re-imaginable. As problem and playground, the city has provided the academic with 'a source of energy, of wonderful complex, intellectual problems and of non-academic intellectuals who have much to offer' (Bender, 1998, p. 22) and as such 'metropolitan academics ought not to work so hard at keeping the city at bay' (*Ibid.*).

In the broad field of urban studies, the relationship between urban research production and the city has been treated as a second-order question, a matter of method and process that should be acknowledged within good urban research but is not central to its role or importance. Reflexivity about the relationship between research, policy and practice has been one-way, via a *dyadic* concern with individual academics and the external world. Over time differential levels of detachment, engagement, critique and complicity have shaped these relationships resulting in more nuanced accounts of the dynamic interactions between research, policy and practice worlds. Yet as discourses of knowledge-based growth and their spatial implications have taken hold, the presuppositions about the relationship between urban research and practice require systematic re-evaluation.

Universities have become implicated in local growth coalitions, not only as estate managers, but also as strategic actors, employers or providers of evidence to inform policy. At the same time, the role of research has been the subject of much debate, in terms of the need to demonstrate user relevance, impact and value-added according to a range of economic, social, cultural and environmental objectives. The implications are two-fold. First, as universities adopt varying roles in relation to building knowledge cities, as outlined in this special issue, the ways in which organizational and occupational cultures influence the relationship between urban research and practice requires greater consideration. Not only spatial but also institutional contexts need to be taken into account. Second, this in turn necessitates reciprocal and triadic relationships between universities, urban researchers and the city. It is no longer a question of what the city means for the researcher but what research means for the city - and how those concerns are mediated by the university as a site of knowledge production.

This article examines these issues via a discussion of how changing socio-economic conditions, which create pressures on universities to 'build knowledge cities', relate to the contexts and cultures in which urban research is produced. It has three main sections that provide a retrospective, current and prospective view on urban research in the knowledge economy. The first section briefly considers how knowledge of the urban has been influenced by various per-

spectives and conditions over time. The second section examines the implications of changes in the political economy of knowledge for the production of urban research, with an emphasis on the changing role of the university as a site of knowledge production. The final section then considers the implications of the issues raised in the article for the future of urban research in the context of universities' broader engagements with knowledge-based development in cities. In the context of 'an increasingly globalized, neoliberalized and financialized formation of capitalism' (Therborn, 2008), the article reflects on how the conditions of possibility for critical urban research have changed in the early twenty-first century (Brenner, 2009). It therefore provides a fitting concluding discussion on the special edition (see Perry, 2011, this issue, for an overview).

In producing this article we draw on a wide range of materials. The relationship between universities, science, knowledge and different scales of action has been examined via documentary analysis and interviews with strategic university mangers and individual academics, with local chief executives, planners and regional development managers, with big science industries and small and medium-sized enterprises. Projects have drawn on national UK Research Council funding as well as local sources, with work carried out both for and on universities and their urban partners. The mix of these projects over a 10 year period, with work in Europe alongside engagement with international networks, has provided a rich vein of ethnographic insight, as we have both been immersed in our own local context, organized and participated in numerous focus groups and project advisory panels and sought to work at the interface between academic and policy worlds in our everyday working lives.

Content: Contours in Urban Knowledge

Our brief foray into the history of urban research is shaped by the tensions between

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community, competition and character and starts with the influence of a strand of pragmatic thought that is informed by a liberalreforming humanism (Mounce, 1997). This is predicated on the fact that science becomes moral when it is concerned with improvements in the human condition. The city is thus framed as a site of encounters between communication and competition, with the former providing the basis of unity among social groups in urban space-time. In the case of competition and in order for it to function in the first instance, we find an emphasis upon specialized divisions of labour to organize and collaborate. The arena of competition over time, however, becomes wider and more inclusive than those relations characterized by communication; including intimate relations which are moral in form and content.

As competition expands at a faster rate than the realm of understanding, a cultural lag arises in which social problems are increasingly evident. Despite this, the communicative dimension: 'invariably modifies and qualifies competition, and the cultural order imposes limitations on the symbiotic' (Park, 1972, p. 104). Hence in the interactions between communication and competition in understanding urban development we can see a desire to understand the origins and dynamics of communities, as well as the so-called 'hidden hand' of the market in urban growth.

To competition and communication was added an interest in changing 'character' in Western economies. Tensions between the desire for autonomy and utopia may be detected in ways of seeking to transcend and adapt to the pressures of modern society. In a study published in 1950, alternative trajectories were characterized as being lost in the wake of a strong desire to conform. Planners encountered the instrumentalisation of the city through an emphasis on narrow economic concerns, in contrast to the need for leisure and the maintenance and expansion of the aesthetic dimensions of urban life. One becomes triumphant over the other with the power of veto then placing: 'even the most imaginative of city planners under great pressure to show that they are practical, hardheaded fellows, barely to be distinguished from traffic engineers' (Riesman *et al.*, 1989 [1950], p. 306).

A growing recognition of the role of instrumentality in urban life led to a change in framing explanations of phenomena. The faith in planning as a solution to urban problems gave way to the city being seen as a site of injustice and inequality in which administrative interventions were nothing more than an expression of dominant capitalist interests. With the background of the late 1960s uprisings, we see a growing emphasis in urban research on social conflict, power, access to and control of resources and systems of production, consumption, exchange and distribution in the city. With this came a turn towards critical theory in the unfolding history of social and political theory (May and Powell, 2008).

Under the auspices of its second director, Max Horkheimer (1895-1973), the interdisciplinary Institute for Social Research at Frankfurt came to centre its interests on a number of areas. These included an examination of the nature and consequences of capitalist crises and the relationship between the political and the economic spheres in modern societies (Marcuse, 1968). Those influenced by a positivist outlook in research turned human relationships into nothing more than abstract categories through a failure to examine the conditions under which they develop and are sustained. Such an approach represents part of an increasing desire to control the social and natural worlds in the name of profit (Adorno et al., 1976), whereas the fundamental aim of critical theory is the dismantling of existing forms of oppression (Habermas, 1989 [1968]). The content of the knowledge produced is not divorced from social reality and values given that: 'The flood of detailed information and candy-floss entertainment simultaneously

instructs and stultifies mankind' (Adorno and Horkheimer, 1979 [1944], pp. xiv–xv).

Such an impulse in urban research was apparent in the 1970s from writers who were united in their concern with the unjust consequences of urban trends. At root they were responding to the strains and contradictions within the history of the Western city to create a realm of pleasure in the final attainment of pursuing a fantasy in which the whole and the one were conjoined; all of which is part of: 'a long struggle between this civilized possibility and the effort to create power as well as pleasure through master images of wholeness' (Sennett, 2002, p. 373).

Such reforming zeal, mobilized through a problematization of the surface appearances of urban socio-economic conditions, met with the intransigences of an economic system whose forward march embodied in the desire for consumption was to continue, without check, in its colonization of all aspects of urban life. As one writer on this period in urban thought has put it, reformers then:

gave up political engagements, reconceptualized their own identities and continued with 'normal' science, developing already raised questions. Moreover, since their own theories successfully replaced the 'old enemies' in the hegemonic position in the field, they were no longer perceived as radical. (Milicevic, 2001, p. 773)

As this scene unfolded in urban research and as the roots of modern crises of capitalism were unfolding in the 1960s (O'Connor, 1987), governments adopted different urban policies in response. A confidence in the idea of planning as a solution to complex problems waned. In its place, particular ideas of communities as the basis of communication and upon which our lives depend also met with the realities of lifestyles that were so influenced by the economic sphere that they led, overall, to a more defensive mentality (Ward, 2004).

With the obvious benefit of hindsight, this is not surprising. In the early 1960s, when Jane Jacobs (1993 [1961]) published her classic

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study on American cities, she characterized the government and administration of large metropolitan areas as 'crazy quilts'. In so doing she was to point out the redundancy of past strategies and tactics for dealing with new urban problems of a more intense and complex nature. While the American highway was to provide mobility for those who could afford cars, this symbol of so-called freedom came to be its own nemesis leading to calls for non-traditional urban forms like those of Los Angeles (Hall, 1998). Nevertheless, if hope was to be invested in this way then here was a city in which the same clash between community, character and competition led Mike Davis (1998) to characterize one of its suburbs as a 'junkyard of dreams' and Edward Soja to write:

Increasing income inequalities and social polarization, massive legal and illegal immigration, the magnification of cultural diversity and intercultural tensions, the squeeze on middle-class households, increasing homelessness, and the rising urban densities in both Inner and Outer Cities created a much more volatile 'new' Los Angeles. (Soja, 2000, p. 144)

In these cities the results of moves from Keynesian to supply-side post-Fordist strategies witnessed a shift from a politics based on legitimation, to one of increasing coercion leading to economic marginalization and an insatiable thirst for real-estate and property development in cities (Lash and Urry, 1994). Writings then turned to the causes and consequences of globalization (Madsen and Plunz, 2002; Marcuse and van Kempen, 2000; Sassen, 2006). In the face of such pressures, the city intensified as a site of conflict and tension, but there were also those who uncovered the possibilities of vibrant, novel and resistant cultures (Franklin, 2010; Featherstone and Lash, 1999; Pile and Keith, 1997). As Sharon Zukin (1995, pp. 260–261) put it, this search for a more inclusive vision of the urban was part of a: 'visible struggle to enter the 21st century'. Reflecting these global times, the intellectual content of urban studies also diversified as the dominance of Western academics has given way to more work emerging from South America, Eastern Europe, Africa and Asia (Bagnasco and Le Galès, 2000; Beauregard and Body-Gendrot, 1999; Eade and Mele, 2002; Gugler, 2004; Logan, 2002; Srinivas, 2001). The emergence of different, hybrid or contradictory forms of globalization has also impacted on the production of knowledge in urban research (Marcuse and Van Kempen, 2000).

The content of the knowledge produced about the urban has reflected upon shifting and turbulent times. From the Chicago School with their focus on urban ecology, to the 'radicalism' of New Urban Sociology emphasizing neo-Weberian and neo-Marxist approaches (Bulmer, 1984; Faberman, 1979; Saunders, 1986), researchers have positioned themselves as prominent critics and reformists of urban society, intimately connected with the identification and resolution of endemic problems and social issues. The field of urban studies has been a major intellectual arena in which alternatives to the idea of nation-state control have been articulated, through debates on globalization and world city formation, where cities are seen as localized nodes within a global hierarchy of inter-urban relations, rather than being neatly enclosed within national spaces (Brenner, 2004; Jessop, 2008).

The city is a field of encounters and exchanges among individuals and groups who accord different levels of significance to spaces and places within it, while themselves being afforded recognition in ways that relate to their positions within its social-structural composition. Yet while research on the city has diversified, as lens or as site for the production of critical knowledge (Sassen, 2005), the city has not been attributed significant agency over the content of that work. Methodological concerns have been distanced from intellectual debates. For instance, while acknowledged as producing the single most impressive account of globalization and social change, Manuel Castells has also been criticized 'for introducing an over sharp

division between the global and the local ... for failing to develop a clear critical vision of urban studies ... so failing to provide a clear exemplar of how to conduct contemporary urban research' (Savage, 2005, p. 361). More critically, while the content of work has evolved, this has tended to be separated from the context in which it is produced; the major site of which is the university (May and Perry, 2005). In the twenty-first century, the potential of harnessing knowledge for profit and competitive advantage in emerging global hierarchies, embodied in the discourses of the knowledge economy, renders this a potentially unsustainable position.

Excellence, Relevance and the University

As spaces for critical reflection, universities are held by many to provide for sustained periods of contemplation of issues in an age in which there is a frenetic search for adaptation to new demands that are taken as self-evident, rather than subjected to sustained scrutiny. If universities are not able to provide legitimacy for the distinction of the knowledge they produce relative to other sites such as consultancies, think tanks and the research and development arms of multi-national companies, then their absorption into the neo-liberal mainstream seems guaranteed. For some this may not seem problematic. Nevertheless, as communities of communication which inform their distinction, universities reflect the pragmatic idea of cooperation as a basis for preventing them succumbing to the pressures of increasing competition. In line with such a view, advances in understanding, of which knowledge is a part, are valuable for their own sake (Graham, 2005), while 'useless' knowledge is vital for the cultivation of a contemplative mind (Russell, 2004 [1935]).

As places of expectation, however, universities are informed by the demands of the environment and this drives the idea of being a 'service' to the economy. The trends of globalization and knowledge-based development have reshaped expectations of universities and with that the roles of research in society (Odin and Manicas, 2004). As in the case of the urban, these forms of commodification produce tensions and are played out in contexts with different consequences for the content of the knowledge that is produced (Allen and Imrie, 2010; Radder, 2010). Universities in Europe have been told that they cannot continue with some medieval conception of their role in present times and that they should be more like businesses through access to 'third stream funding' outside research and teaching: this is represented by the discourses on 'enterprise' (Marginson and Considine, 2000). These conflicting pressures, as with many urban dwellers, often leave researchers bewildered about the development of universities, and reactions to this state of affairs may be manifest in withdrawal, denial and retreat (May with Perry, 2011).

What is at stake is the relationship between excellence and relevance in the international political economy of knowledge. Throughout the twentieth century, the forward march of instrumentality that was apparent in the urban realm increasingly led to the treatment of knowledge as a tool in the management of economic issues. Against global discourses of post-industrialism and knowledge capitalism, criteria of 'relevance' and 'usefulness' assumed an increased importance in defining what knowledge should be produced and *how* it should be judged. Rather than seeing the role of the state predominately to protect curiosity-driven research as a cultural obligation, a greater emphasis on strategic research priorities that met the needs of industry and the application of knowledge for economic gain was apparent (Gibbons, 2001). While relevance had been on the stage for a long time, it has now entered the production arena in a more intensive fashion as an allocation and evaluation tool (Barnett, 2000, p. 41).

A focus on relevance appears to sit at odds with excellence-driven basic research

with its 'one-step removed' from the varying constructions of economic 'necessity'. Indeed, a connection between *relevant* and *relative* knowledge is often made in academic cultures. This works to devalue the former by rendering it more contestable than knowledge produced through the excellence mode. Perceptions such as these stem from the range of criteria that might be taken to constitute relevance, whether the strategic-military interests of states, the economic interests of commerce, the political interests of parties, or the social interests of various groups. The view that relevance implies the involvement of different interests in the research process and therefore a 'contamination' is commonly held. A concern for relevance, along with recognition of its inherent contestability, involves a greater degree of preparedness to enter into a domain of uncertainty with its corresponding challenges to the attributed value of expertise.

Increasingly, these pressures drive, fund, shape and validate work, requiring reflection not only between and within academic communities, but also the individual researcher concerning their assumptions what is constituted as the 'outside world' according to the contexts in which they work. In particular, as relevance criteria grow in importance, the disjuncture between content and context becomes ever more problematic for an academic identity that is based on the pursuit of excellence. Context increasingly informs not only what work is funded, but how it is performed, the increasing number of organizational processes through which it is attempted to be captured, and the conditions in which value judgements about its ultimate worth are made.

Questions that define the boundaries of work are not only what research, how, why, and with whom, but where? Indeed, as evidenced in other contributions to this special issue, contexts of knowledge production are increasingly spatial. Regions and cities are devoting increasing resources to participating in the knowledge economy, redirecting funding from policy objectives relating to housing, regeneration or traditional business support. The aspiration here is that excellence and relevance can come together in particular contexts; in other words, the 'embedding' of academic institutions and scientific expertise can occur in particular places. In the face of these pressures, context becomes a conduit in which issues of politico-economic, institutional and disciplinary affiliations react and collide (May, 2006).

As context shapes content, so the reverse is true. The increased economic and social relevance attached to knowledge leads a plethora of actors, whether within national states, regional or local environments or university governance structures, to consider the relative strengths and weaknesses of the pre-existing knowledge base. Across Europe we see efforts to reshape regional and local identities by harnessing the 'brand' power of science and technology both for the purpose of local economic development and crisis management (Brenner, 2004). Knowledge capitals, silicon alleys, bio valleys, digital cities or, more broadly, capitals of culture have sprung up, as pre-existing strengths within the knowledge base become the foundation for broader socio-economic strategies for competitive success. A similar rebranding can be seen at the institutional level with, for instance, the specialization of academic institutions in niche areas or around clusters and centres of excellence. Cities that aspire to be global want global universities in order to climb up the symbolic ladder of international league tables (Marginson, 2010). Put crudely, if cities have been passive sites, lens or objects for study, they began, in the latter part of the twentieth century, to 'speak back' (Nowotny et al., 2001). This implies a reciprocal relationship between the city and the researcher, mediated by the university as a site of knowledge production, potentially disrupting traditional notions of expertise: 'the city offers as many lessons for the university as the university does for the city' (Bender, 1998, p. 23).

How then can we understand the dimensions at play in shaping the relationship between traditional notions of academic excellence and a reinforced notion of relevance in a spatial context? The above conditions lead to differing dimensions in the excellencerelevance relationship that, in turn, affect the spatial and institutional contexts in which urban research is produced. Five nonexclusive discourses on the excellence/relevance debate can be outlined which shape the relationship between urban researchers and the city (Perry and May, 2006, 2010).

First, there is disembedded excellence. This may be seen as traditionally non-spatial and amenable to global logics in which processes of knowledge production are divorced from the context in which they are produced. Distributive issues are secondary to quality as judged by peer-review. Academics in particular institutions have a stake in the reproduction of this form of knowledge production as it celebrates content and the mobility of expertise and ideas without concern for context. Relationality then evaporates and the idea of an absolute space in which excellence takes place, reigns supreme. Knowing about practice then tends to be separated from knowing in practice.

Second, there is *competitive relevance*. Here we find a de-contextualized interpretation of relevance that places emphasis on application to specific economic or social issues and strategic priorities as a precondition for global success. The focus on biotechnology, nanotechnology and genomics is symptomatic: research may be 'applied' but does not give a direct advantage to any particular community or group. Once again, context evaporates in favour of an exemplary politics that privileges the transferable model in a marketplace of ideas.

Third, a *relevant excellence* discourse highlights the indirect benefits of science and technology to particular places and spaces. This does not relate to changes in processes of knowledge production, rather it seeks to exploit, extract and attract knowledge products

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and institutions for territorial benefit. Here universities who position themselves as, or are seen as, significant economic actors in their own right in their localities can capture and exploit the product of research process through the construction of spinoffs or patents. The local or regional then becomes a space of funding, with the consequence that it becomes a place that benefits through an indirect consequence of research activity.

Fourth we see excellent relevance. Here we see a concern with the generation of coproduced research priorities and agendas through a linking of content with context. The distinction between relevant excellence and excellent relevance is subtle but important: it is not the criteria of excellence that are at stake, rather the extent of interpenetration into processes of knowledge production itself and how its benefits are understood among different parties. Issues associated with the integrity of process, divorced from product are taken seriously in this scenario. However, it is also the consequences of knowledge for significant actors/organizations that inform the impetus for the research itself. Knowledge is not just context-sensitive, it is potentially revising. For all parties concerned, therefore, it is a challenge to the normal ways of producing and receiving research.

Finally, there is *contextual relevance*. Here we find research investments being driven by narrow political or economic objectives, with less concern for the quality or content of the work. Yet this articulation of the relationship between science and sub-national economic development can only be found at the periphery of policy opinion. It is not a clearly expressed or implicitly held preference, rather it works to inform a negative fear that the growth of a territorial dimension to science policy will lead to 'second-rate' science. Equally, it can lead to the ability to capture and mobilize resources at different spatial scales for the purposes of reproducing excellence in terms of the idea of 'untainted' interference from outside forces as a result of the mobilization of institutional power.

Universities have varying capacities to position themselves in relation to these pressures and therefore to mediate their effects on academics and researchers. Most universities would reject a discourse of 'disembedded excellence', claiming instead to have overcome narrow polarizations via a position in relation to relevant-excellence or excellent-relevance. They point to numerous examples of successful partnerships between academics and stakeholders at local, national and international scales, from business, government and community groups. Clear intra-institutional differences exist between disciplines and their position within faculties as captured in the idea of 'degrees of epistemic permeability'. This is particularly the case when it comes to appropriate levels of resource allocation. Yet inter-institutional differences also play a significant role (May with Perry, 2011). Research-intensive universities, for instance, are positioned very differently in the knowledge transfer game (PACEC/CBR, 2009, 2010). Beyond the strategic statements or exemplars of university-community partnerships, our research highlights the tensions between individual academic engagement and institutional positioning, where the former is clearly shaped by the latter.

University managers, acting at the boundaries of their institutions, perform a number of roles, capturing external resources, insulating institutions from external pressures, or even amplifying them, leading to increased uncertainty. As universities have sought to market themselves through their embeddedness in place, strengthening linkages to local contexts, so cities have simultaneously become more concerned with branding, global success and positioning in urban hierarchies. This is hardly a mix in which critique is likely to flourish (Brenner, 2009). Of course, a way round this is to seek a symbiosis in which interests are mutual around a tolerated existence of differences. One of these can be seen in the concept of the 'ideopolis' - or 'city of ideas' - which has found particular resonance with policy

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and practitioner communities as a means to capture the essential ingredients of a postindustrial city. The 'ideopolis' was initially seen to have three fundamental elements: a set of key physical and economic features; a particular social and demographic mix and specific cultural climate; and a series of commonly-held values underpinned by the 'ingredients' that need to be acquired within cities as the basis for competitive success (Canon et al., 2003, p. 16). Knowledge itself as a process or product has a role, but this is within a broader vision in which the acquisition of talent, research expertise, the development of assets and external symbols of success or marketing and image are equally, if not more, important - as tools in global positioning as much as the content of urban research (Perry, 2008).

Indeed, in mediating, mitigating and refracting external pressures, it is this notion of acquisition that so often dominates. Universities are seen as tools, instruments, assets and status symbols to be acquired, harnessed and their benefits extracted through impacts. Universities may be one among many participants in urban growth coalitions, operating on an institutional basis within strategic alliances. In such cases, there may be little formal engagement with individual academics. The same urban growth coalitions may exclude universities completely – as it is their existence that is deemed important, as assets in a city aspiring to global status. That the knowledge they produce may also have value for local communities is largely overlooked. 'Knowledge' derived from research is of secondary concern. At the forefront of these activities is an understanding of the 'knowledge city' as being clever, smart, skilful, creative, networked, connected and competitive.

Knowledge is rarely expected to have a positive transformative effect in relation to understanding, tackling inequality or even the quality of the environment as a whole. Instead, it is conceived of as an asset (physical), an emblem (symbolic) and a magnet (additive). The power of attributed value leads to a symbolic politics, with positions in national and international league tables commonly quoted as evidence that urban interventions are 'working'. Once again this relates to how the relationship between excellence, relevance and place is regarded. A concern with distribution, equality or social cohesiveness is undermined by the pursuit of scientific prizes as symbols of urban identity and growth, which limits the extent to which context and content come together in practice. In this it is the search for the exemplar of good practice, such as Silicon Valley, that can be transplanted from one context to the next that dominates, rather than concern for the difficult and yet also necessary conditions for success: that is, the creation of contextsensitive strategies and actions that include those urban communities whose silence is deafening in their usual absence from such processes.

Fears that contextual relevance automatically leads to second-rate research, or knowledge of no generalizable value, have proliferated. Coupled with the complexity of demands on the university, we have seen in our work the rise of a predominant discourse around disembedded excellence and competitive relevance. The extent to which different universities can provide 'shelter' to their academics is as important as issues of disposition and orientation in determining the context for the production of urban research. The power of attributed value can work to provide a shelter for those disciplines and institutions whose relevance is assumed to be derived from their excellence. Despite warm words to the contrary, excellence is a game in its own right, embodied in an emphasis on positioning in international league tables, investments in emblematic science projects and the pursuit of prestige. The global is invoked as necessity by those within institutions who operate more like sports teams, seeking position as a demonstration of capability (Marginson, 2010). The result is a competitive situation in which an increasing concentration of research excellence in particular localities leads to a 'survival of the fittest' mentality, without due regard to the actual concentration of expertise, or even the benefits that such areas may derive from this. The logic of the global finally meets the pursuit of excellence to inform a pervasive managerialism within universities whose power is bolstered by its academic cultures.

The dominance of disembedded excellence or competitive relevance discourses gives rise to assumptions about connections between research, teaching and what are termed third mission activities in the UK context, which dictate 'appropriate' measures of success for the university. Matters of organizational accountability are set according to targets; performance is judged by the ability to attract resources; economic impact is mediated through the production of spin-out companies, patents and the attraction of inward investment, while research and teaching scores are taken as demonstrable indicators of assumed success.

A confusion of expectations and incentive structures leads to demands from policymakers, politicians and university managers for programmes in the short-term to demonstrate relevance. 'Quick hits' are seen to drive demands for knowledge to service the economy, as if nothing has been learnt from this short-termism; the result being what some have characterized as 'academic capitalism' (Slaughter and Leslie, 1997). Equally, the search for excellence produces hierarchies according to abstract league tables. While their flaws are apparent, this does not stop the frenetic drive amongst universities to attain a place in the rankings and for academics, who place a premium on their critical capacity, to repeat them as if they were an unproblematic representation of activities.

As a result of these pressures, institutions tend to compete, rather than collaborate, aiming for the elusive label of being 'worldclass', except in cases where collaboration is itself a stepping stone to global visibility. This allows managers to enter institutions with the promise of delivering them to new heights in a struggle for supremacy, the purpose of which is never questioned. For these reasons, we continue to find many universities that are 'in', but not 'of' their localities, as the intangible goes in pursuit of the unattainable and academics themselves exhibit ambivalent attitudes towards the places in which their institutions are located. Those elements of 'third mission' activities that support this world-class role, such as collaborations with industry or the receipt of regional monies, are embraced as a stepping stone to global position; the result being that the less visible, yet arguably more socially relevant, activities that are not seen as excellent are relegated to the domain of the less prestigious universities.

Outlook: Reality, Critique and Resistance

The relationship between community, communication and competition, emphasized by those urban researchers influenced by pragmatism, saw the gradual erosion of the first in favour of the dominance of the last. That same tendency is apparent not only among politicians and officials who seek to place their cities in a global hierarchy, but also those university managers who seek the same for their institutions. Of course, if all those that wished to achieve such a status did so, the criteria would change in order to provide a new hierarchy of relations in the oscillations between aspiration and ascription.

These aspirations play into the hands of the notion of 'flows' and 'connections' where we see the effects of a disembedded globalization that is not assumed to discriminate on the grounds of place. In effect it works in a positive fashion to bolster the ideology that markets do not discriminate; history has no significance for contemporary conditions and political governance is powerless in the face of such forces. Nevertheless, while urban research may, at times, have reproduced an ideology that saw the global as determinant of the local, writers have documented how the state was actually part of this problem and so alternatives are always possible (Hirst and Thompson, 2000; Jessop, 2008).

To tackle such issues, at least in those places that recognized markets needed regulating for the purposes of generating and sustaining quality of life in cities, policies have been transferred like commodities. Yet any importation of policies from one context to another is highly problematic, particularly in the case of 'inner city' initiatives where we find different urban spatial configurations. Despite this, we have a marketplace of ideas in which 'models' are transferred in a spectacular conflation of the model of reality with the reality of the model. Cities in search of global status and academics in search of attributed expertise are then aligned according to the perpetuations of particular visions.

In more centralized democracies urban policies are often 'space-blind' with consequences for how city officials and politicians then act within policy frameworks (May and Marvin, 2003). With the backdrop of neoliberalism's naturalization of competition, communication and community are written out of the picture with the gap being filled by the latest trend in implementation. The idea of 'partnerships' enjoyed this status. However, as a panacea embraced by policymakers and academics in the name of managerial and technocratic logics, its openness to democratic scrutiny is highly questionable (Davies, 2007). In the UK we now have the 'big society' and 'localism'. Now more than ever, 'urbanists must work to clarify and continually redefine the "critical" character of their theoretical engagements, orientations and commitments in light of early 21st century processes of urban restructuring' (Brenner, 2009, p. 206).

We must also ask just how the study of and engagement with urban phenomena can be the province of particular disciplines within a university? This is not to suggest that they do not bring their own distinctive and even valuable perspective to bear upon issues. It is, however, to suggest that the urban, as with all phenomena, is not amenable to study through the gaze of those whose training refuses to see the limits, as well as strengths, of their modes of analysis. Despite this and the changes charted in this article, the 'silo' mentality within universities prevails within departments and faculties and there is little incentive for inter-disciplinary working. While that enables administrative control as an end in itself for those predisposed to see their organizations in that way, it is antithetical to imaginative and innovative ways of working that are a precondition for the sustainable futures of institutions of higher education, as well as imaginative responses to contemporary urban problems.

These situations have led to calls to 'open' disciplines (Wallerstein, 1996) through a challenge to 'habits of thought' among academics (Strober, 2010). Indeed, in the last 10 years there has been a body of fresh, forwardlooking studies that come from political science, geography, economics, sociology, comparative literature, planning, anthropology and architecture (for example, see Amin and Thrift, 2002; Cameron and Palan, 2004; Drennan, 2002; Leyshon et al., 2003; Madsen and Plunz, 2002; Massey, 2005; Watson, 2006). We can see this as due, in large part, to how changing concepts have been generated through the global to an examination of action in context.

We have witnessed an increasing recognition of the need to work across professional and organizational boundaries in tackling urban issues (Cochrane, 2007). To realize the possibility for exposing global dreams as contingency rather than necessity, a greater interdisciplinarity in urban investigation is therefore required, especially as the world does not conform to the epistemic frames that are imposed upon it. Such a mix provides for new avenues of inquiry and prevents disciplines becoming stagnant, as well as acting as a check upon exaggerated claims. Accompanying this is a more general issue: a diminished belief in the power of science to solve our problems. Of course science could never live up to the expectations placed upon it because it is held to be the only human activity: 'to resolve questions without raising any' and in so doing 'it would be released from the need for questioning as well as from any burden of responsibility. A divine innocence it would possess, a marvellous form of extraterritoriality' (Castoriadis, 1991, p. 263).

Oscillations between pessimism and optimism are not options in facing these challenges. One leads to paralysis and the other to complacency. The disposition needed to inquire is meliorism, expressed as the belief that current conditions, whether good or bad, can be improved. It thus:

encourages intelligence to study the positive means of good and the obstructions to their realization, and to put forth endeavour for the improvement of conditions. It arouses confidence and a reasonable hopefulness as optimism does not. For the latter in declaring that good is already realized in ultimate reality tends to make us gloss over the evils that concretely exist. It becomes too readily the creed of those who live at ease, in comfort, of those who have been successful in obtaining the world's rewards. (Dewey, 1957, pp. 178–179)

In this respect urban scholars have emphasized the continued importance of localization processes in the context of intensified global economic interaction. However considerations of the consequences of research cannot be the province of the few. To produce such work for urban elites is antidemocratic and we should not confuse the content of research with its consequences for how others might live. We need different forums to discuss and debate ideas, as well as examine their implications for actions beyond the narrow confines of policy-makers and academics. To practise a radical agenda of this type within a university is highly problematic and requires different forms of working and organization. Institutional

absorption is a typical response within universities when faced with radical and innovative programmes of work (see, for example, Messer-Davidow, 2002).

Those scholars who sought radical change did so through the institutional shelter that universities provided from the dominance of capitalism. That shelter was informed by a culture of dynamic conservatism which provided a critical distance from the political and economic forces that were the objects of their analysis. Those same forces have now come home and there is a need to think differently so as to provide a distinction for the knowledge produced. We are now faced with the collapse of welfare states in advanced industrial economies in a spectacular display of historical ignorance concerning why they were invented in the first place. For some commentators a moment of truth may now be approaching: 'they wanted real change – now they can have it' (Zižek, 2010, p. 90).

The relationship between knowledge, context and action is informed by these changed forces. While often beset by 'devilish dichotomies' (Perry and May, 2010), knowledge needs not just to be produced, but actively communicated and understood according to different contexts. The city is not simply a unit of analysis, but a place in which knowledge is created in different places, disseminated in various ways, acted upon, denied and ignored. To this extent the challenge of urban sustainability is about bringing into being new ways of interacting between producers and receivers of research, and organizing those activities. After all: 'the chances of translating knowledge for action into knowledge in action are immeasurably improved once it is recognized that the probability to realize knowledge is dependent on context specific social, political and economic conditions' (Stehr, 1992, p. 121).

Despite these challenges, it is exceptionality, rather than collective capacity, that often rules the day and acts as an impediment to the creation of such cultures. What is lost

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is the opportunity to examine the value of different types of knowledge in terms of the speed, content and context of their production, transmission and reception. A triumph of process and product, over that of purpose, drives this forward with the overall result that the relations between the 'what' and 'how' of knowledge are subsumed within the narrow confines of particular measures (May, 2001): for example, external income generation, citation indexes, staffstudent ratios, league tables and 'journal list fetishism' (Willmott, 2011).

Highlighting the issues that surround and inform urban knowledge production is problematic as it flies in the face of the paralyzing rhetoric that surrounds knowledge, cities, universities and our futures. Necessity is invoked as a way of denying choice and responsibility, particularly among those who have the power to make alternative choices. As policy-makers, academics and those 'consultants' who appear to find shelter in the academy seek yet another solution or model to sell in order to resolve the issues of the urban - and thus expand their spheres of recognition and reward according to institutional logics - we should remember that:

Democracy is neither a form of government that enables oligarchies to rule in the name of the people, nor is it a form of society that governs the power of commodities. It is the action that constantly wrests the monopoly of public life from oligarchic governments, and the omnipotence over lives of the power of wealth. It is the power that, today more than ever, has to struggle against the confusion of these powers, rolled into one and the same law of domination. (Rancière, 2006, p. 96)_

Urban Research into the Future

As critiques of instrumentalism in urban development arose in the 1960s and 1970s, the possibility of change reared its head. The same developments that were forging the urban, however, came to rest in the site of activity from which most of these critiques were launched: the university. As global forces shaped the urban, so too did they shape the means of knowledge production, with the desire for academic excellence according to aspatial views finding their parallels in world-city hierarchies. It is this alternative narrative of the relationship between university and city that shapes and forms the possibilities for individual academics to engage with their localities, dependent on institutional position, strategic mission and the internal structures and cultures that value different forms of academic work.

The geography of the knowledge-practice relationship is varied. Relevance and excellence exist in a dynamic tension which may be both productive and negative. It can be productive in the sense of parties recognizing not only the strengths of their knowledge and practice, but also their limitations and so how each can learn from the other. It can be negative in the sense that practice remains impervious to change, while knowledge production is geared to the demands of agencies that are only marginally connected to the knowledge needs of different communities. If universities are at the heart of the knowledge economy and the knowledge economy is urban, then urban researchers must pay heed to how they are increasingly implicated as political actors in, rather than critics of, territorial projects. Without this, the ability to critique what are often loosely articulated and inadequately theorized new urban visions in the knowledge society is limited, not only by the potential benefits of silence, but by a complicity in the project of creation and the complex sets of relationships between those who practise and those who fund research.

The need for the integration of what is already known in cities is now greater than ever. But in the search for the new, we must not forget the past. Disparate knowledges can be integrated, seen alongside each other and recontextualized. Sharing individual understandings can generate new social learning. Only then does it become possible to know when and how knowledge has had particular outcomes that are seen, by different parties, to have had benefits or contain potentials. Considerable effort is needed in order to learn from processes and there are no quick routes towards this end. This implies taking lessons from the past and not ignoring them in the name of slogans such as 'innovation' and 'enterprise'. It also means sharing an understanding of orientations and institutional positions, discussing their value as well as their limits to seeing. To tackle this means stressing the importance of understanding the relationship between content, context and consequence.

Our discussion supports Brenner's insistence that 'another more democratic, socially just and sustainable form of urbanization is possible, even if such possibilities are currently being suppressed through dominant institutional practices and ideologies' (Brenner 2009, p. 198). To achieve this possibility we need first to recognize the ways in which institutional and spatial contexts shape the content of work and consider workable alternatives through such ideas as 'active intermediation' between communities and their universities (May with Perry, 2011). To do this it is essential to see how the researchpractice relationship between the university and the city mutually reshapes and defines each other, as well as understanding the consequences for the quality of academic work and the quality of life within a city. The issues discussed in this article pose a significant challenge to those academics and academics-turned-managers who work in this field, but collectively constitute a research agenda worthy of further study, if the distinctive roles of the university as an excellent and relevant knowledge-producing institution are to be better understood and valued.

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ACKNOWLEDGEMENTS

The support of the Mistra Urban Futures Centre is gratefully acknowledged. Mistra Urban Futures aims to achieve a better understanding of the challenges and possibilities facing urban areas and to establish a world centre for sustainable urban development via new forms of collaborative knowledge production between urban researchers, policy-makers, practitioners and communities.