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eprints@whiterose.ac.uk https://eprints.whiterose.ac.uk/ "May and Perry bring rare methodological skill and grounded political insights to demonstrate that it is possible to shift the urban knowledge economy to work for all citizens. Theirs is a creative partnership that foregrounds the transformative potential of universities (and scholars) as knowledge brokers and agents of economic change." — Professor Susan Parnell, African Centre for Cities, University of Cape Town, South Africa

"May and Perry go digging into today's dominant notions about what is good for a city, especially the much admired advances coming from the sciences and technology. They re-emerge with facts and possibilities that often run against 'what we know', to the delight of some and horror of others." — Saskia Sassen, Columbia University, USA, author of Expulsions

CITIES AND THE KNOWLEDGE ECONOMY

Cities and the Knowledge Economy is an in-depth, interdisciplinary, international and comparative examination of the relationship between knowledge and urban development in the contemporary era. Through the lenses of promise, politics and possibility, it examines how the knowledge economy has arisen, how different cities have sought to realise its potential, how universities play a role in its realisation and, overall, what this reveals about the relationship between politics, capitalism, space, place and knowledge in cities.

The book argues that the 21st century city has been predicated on particular circuits of knowledge that constitute expertise as residing in elite and professional epistemic communities. In contrast, alternative conceptions of the knowledge society are founded on assumptions which take analysis, deliberation, democracy and the role of the citizen and communities of practice seriously. Drawing on a range of examples from cities around the world, the book reflects on these possibilities and asks what roles the practice of 'active intermediation', the university and a critical and engaged social scientific practice can all play in this process.

The book is aimed at researchers and students from different disciplines – geography, politics, sociology, business studies, economics and planning – with interests in contemporary urbanism and the role of knowledge in understanding development, as well as urban policymakers, politicians and practitioners who are concerned with the future of our cities and seek to create coalitions of different communities oriented towards more just and sustainable futures.

Tim May is Professor of Social Science Methodology and Director of Research in the Sheffield Methods Institute, University of Sheffield. He has authored and edited sixteen books, including new editions, which have been translated into fifteen languages, as well as over one hundred and eighty articles, book chapters, research reports and policy briefings.

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Cities and the Knowledge Economy

Promise, Politics and Possibilities Tim May and Beth Perry

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Promise, Politics and Possibilities

Tim May and Beth Perry





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INTRODUCTION

Cities matter. Some 54 per cent of the world's population live in cities, with this number expected to increase to 66 per cent by 2050. Accompanying this is a growth in 'mega-cities' that have populations of ten million or more. There are twenty-eight across the world, with an anticipated further rise to forty-one by 2020 (United Nations 2014). Urban areas possess a density of population which has positive and negative consequences. They exhibit the effects of agglomeration: that is, the production and exchange of goods and services and housing within particular areas which is said to provide location-specific advantages to firms. Cities also create pollution and are sites of huge inequalities in income, wealth and health.

Concentration and connectivity are accompanied by hope, fear, opportunity and anxiety. Some cities operate at a supra-national level by being major sites into which capital has invested and is located. Finance centres, for example, exist in London, New York, Shanghai, Hong Kong and Tokyo. Others are left behind in the global race for success, characterised as lagging and dragging on national economies. Whilst some places have prospered in the shift from manufacturing to service economies, others have fared less well. As the flows of global finance continue to dominate the fates and fortunes of cities, such inequalities are reinforced. The assets held by UK banks in 2013, for example, were four times the value of its GDP. The result is a sector that pervades economic activity and concentrates power within a small group of countries (Newfield 2016).

A financial system exists across the globe, which has been characterised as resembling: "nothing as much as a vast casino. Everyday games are played in this casino that involve sums of money so large that they cannot be imagined. At night, the games go on at the other side of the world" (Strange 2016: 1). This is assumed to be informed by rational calculation with little concern for places, only global flows. In the process, attempts by liberal democratic nation-states to regulate practices for the benefit of their citizens can be undermined; the former variably lacking in political

will, or else concerned about the mobility of capital, given its enormous power and influence over democratically elected governments. The global economic system is based on and perpetuates specific systems of value and exchange. Forces of globalisation shape the focus and direction of cities. They produce a 'global consciousness' in which we see: "the compression of the world and the intensification of consciousness of the world as a whole" (Robertson 1992: 8). Fear of the 'other' mixes with the intensification of economic aspirations and the manifestation of environmental degradation. Urban strategies are unavoidably saturated by these dynamics, raising questions of what to embrace, for what reasons, according to which values and for whose benefit.

Structural inequalities, the power of mobile capital, the intensification of economic activity and inactivity, financial crashes and global recession: these are the essential backdrops to our exploration of cities and the knowledge economy. The knowledge economy is not separate from the global economic system, but is part of that system – actively produced and reproduced to enable globalisation, economic liberalisation and the movement of financial capital. The key shift is the movement from knowledge *about* the economy to knowledge *for* the economy as part of a broader set of processes designed to reify all possible resources as objects amenable to commodification and control. For Cornelius Castoriadis, reification is an essential tendency of capitalism which: "can never be wholly realized. If it were, if the system were actually able to change individuals into things moved only by economic 'forces', it would collapse not in the long run, but immediately... Capitalism can function only by continually drawing upon the genuinely *human* activity of those subject to it, while at the same time trying to level and dehumanize them as much as possible" (1997: 16. Original italics).

The knowledge economy is a powerful aspirational device in the face of the ambivalence created by global change. It can encompass many activities that depend on generating and deploying knowledge to reach their goals. The knowledge economy provides evidence for urban policy that seeks to shape the city and enables a critical evaluation of existing conditions in terms of their causes and effects and thus, possible solutions. It is held to be dispassionate in its content and removed from the realm of values. Neutrality thereby works to provide a distance from the realm of political strategy through clearly bounded relations between knowledge, value and choice. However, the idea that the knowledge economy remains neutral and disinterested in the face of the intensification of aspirations, or that it is separate from political and economic spheres, is difficult to maintain. After all, those who produce knowledge have a sense of what will, and will not, be acceptable to those for whom it is produced and for what reasons. Those who receive that knowledge will, in turn, consider some forms of knowledge more relevant and useful than others. Knowledge is therefore poured into the mix of ambivalence between aspiration, expectation and use.

Against the backdrop of a movement from manufacturing to service economies in the West, the knowledge economy is a mobilising image for cities to create opportunities for their futures. In so doing, its promise rests upon the concentrations

of services and economies of scale through generating a critical mass of expertise intended to lead to innovation and wealth creation. Can the promise of the knowledge economy provide a recipe for success in an uncertain world which, despite the effects of global forces, remains reliant for its success upon location? What are the expectations placed upon knowledge and how are these mediated in different spatial contexts? What is the overall purpose of the knowledge-based economy? Is it to enhance democratic aspirations by bringing political control closer to urban citizens, or a technocratic fix to enhance the efficiency of urban political apparatuses to pursue particular economic agendas? What does this mean for the strategies cities pursue, in terms of who is setting the agenda, according to what kinds of rationales and mobilising whose knowledge? Most importantly, what are the mediating factors that shape the outcomes of knowledge-based change? Who wins and who loses?

These are the central questions that underpin this examination of cities and the knowledge economy. Our distinctive contribution is to take these issues into the heart of the traditional knowledge-producing establishment. As major sites for knowledge-producing activities, universities cannot simply remain insulated and privileged from the obligations which follow in terms of contributing to urban economic vibrancy and growth. As a result: "the chill winds of economic necessity that is the encompassing weather of most people's lives blow a little more searchingly into the too-protected groves of academe" (Collini 2017: 32). Hence, we are also centrally concerned with how universities are implicated in the knowledge-based economy and with what consequences for social scientific knowledge production.

Promise, politics and possibilities

This book is our response to these issues. It offers a critique of how the dynamics of the knowledge economy have unfolded to embrace so few and exclude so many. It is about where, what and whose knowledge matters in this latest stage of capitalist development, about who gains and who loses. If expectations outstrip what can be delivered, what is the result? Is disappointment inevitable as knowledge falls short of expectations to solve policy dilemmas? Or are such failures pre-emptively avoided through the mobilisation of particular forms of knowledge? Overall, this is a book concerning what happens when expectations of knowledge, forged to realise images of the future in an uncertain world, become blurred and divorced from the realm of public, political deliberation. Circuits of knowledge are created in which analysis feeds aspiration and the desire for recognition based on forms of expertise, but is separated from public deliberations concerning the desirability, direction and consequence of urban futures. Yet this book is also about how things might be different if we move from politics to possibility through engaging with, and moving beyond, our current conditions.

The arguments in this book are based on over fifteen years' experience working in and for cities and universities which have sought to embrace the knowledge economy promise. We have analysed these experiences elsewhere (May and Perry 2017). In

this book, we outline how the promise of the urban knowledge economy (Part I) is mediated by key factors – scale, institutions and expertise. We argue that it is the politics of these factors which both delimits the promise (Part II) and raises hopes of alternative possibilities and practices (Part III). Our argument navigates between promise, politics and possibilities and weaves key themes throughout the book: convergence and divergence, capitulation and resistance, control and freedom, certainty and doubt. In contrast to easy pronouncements about its form and character, we illustrate the Janus-faced character and nebulous quality of the knowledge economy. It is restless, contradictory, weightless and laden with heavy and variable expectations that can be populated from different sources.

The distinctiveness of the book lies in its recognition of this ambiguity alongside identification of lines of tension and difference. Our critique is positioned against the backdrop of accelerations in capitalist development which shapes our interest in illustrating how forces are mediated through scalar relations, institutions of knowledge production and values attributed to different forms of knowledge and expertise. For this purpose, we draw upon our national and international work and experiences to illustrate our argument, along with studies from varying disciplines – geography, economics, sociology, political science, anthropology, social epistemology and management and organisation studies. The literature on knowledge and urban development is frequently fragmented across disciplines and has hitherto not been made accessible in a single book.

In moving into analysis of universities as sites of knowledge production and the values attributed to different forms of expertise, the book also extends beyond the usual boundaries – into reflexive territory that may be uncomfortable for some. This is not to irresponsibly lay bare institutional complicities, nor to tar academics with labels based on simplistic self-interest. Rather, we believe that universities and social scientific knowledge have more positive roles to play in sustainable urban transformations that can only be realised through deep reflection and alterations in the social organisation of knowledge production. In an era marked by supposed 'post-truth' politics, a questioning of expertise and an apparent revolt against globalisation whilst voting for those who have benefited from it, ours is not a relativist position. Expertise and social science matter, but we contend we need to be more attentive to the conditions of knowledge production and practices of research if we are to contribute to an economy for the many not the few.

The structure of the book

To chart these dynamics, we examine their international manifestations and urban contexts through an investigation in three parts. The first part of the book, *Promise*, has two chapters, each summarising, analysing and illustrating literatures on knowledge and urban development. In the first chapter, we chart the rise of the knowledge economy. We examine its origins in more detail against the backdrop of global forces and the general shift from industrial to post-industrial societies. As part of this discussion, we look at the changing expectations that are placed upon knowledge and the key factors that frame the potential of knowledge *for* the economy: spatial developments, universities and expertise. We briefly outline how these have become the targets of policy, reified into objects to be managed for economic success.

Cities around the globe are seeking to harness the power of knowledge in creating science cities and urban innovation platforms to develop new visions upon which to base their strategies. Chapter two therefore examines how cities have embraced the promise of the knowledge economy. For this purpose, we consider the urban strategies that have emerged to harness knowledge through the acquisition of talent, promotion of research expertise, marketing and image management. We seek to further understand the relations between knowledge and the city in terms of its attributed value informed by uncertain and uneven development, dancing between convergent and divergent pressures.

The second part of the book, *Politics*, examines the political reproduction of the idea of the knowledge economy and its consequences for cities. Continuing our interdisciplinary understanding and comparative analysis of cities, we look at how political-economic imperatives limit or constrain the realisation of different visions of knowledge-based development. Part II comprises three essays elaborating in turn the politics of spatial development (chapter three), universities (chapter four) and expertise (chapter five) in order to construct an explanatory framework for how the knowledge-based economy is mediated to produce diverse outcomes for different groups. Our argument here is that in order to construct alternative trajectories, there is a need for a critical urban practice to understand how the promise of the knowledge economy is reproduced across different sites and scales of action and for varying reasons. We examine the forces that inform and sustain particular techno-centric views of knowledge and urban development, identifying ideas and practices that find institutional and cultural expression in government, business and universities.

Despite differences between the Global North and South, globalisation can work to constitute interdependencies manifest in claims to the exceptionality of world cities that act as exemplars for best practice. How contemporary pressures on cities in relation to globalisation and the development of capitalism shape aspirations and expectations of urban development is of central importance for understanding and building alternatives. This, therefore, is the focus of chapter three. Whilst global flows seem to favour the content of the knowledge economy over the contexts of its application, places remain vital to realise its potential. Hence, we see how context both matters and has been simultaneously devalued in the search for knowledge-based advantage. As ideas circulate around the globe, this creates ambivalence between the exogenous influences of the promise of the knowledge economy and its endogenous realisation manifest in a game of scales. In the process, "new spaces of knowledge, such as universities, science parks and cultural quarters ... are created side by side with the new spaces of consumption and new patterns of social inequality" (Madanipour 2011: 1–2).

In our journey to understand the politics of reproduction, we continue our analysis of universities in the knowledge economy in chapter four. As throughout the book, we note the differences in political economy between universities and cities, but note a general aspiration they have in common: that is, to become global and participate in the generation of competitive advantage. Those who are concerned to recover the time for contemplation within universities have observed: "Concerns about the future of the university may vary by stakeholder. While some may be shared across continents, others are nationally specific. But they nevertheless emerge from a common set of pressures, and lead to some common organizational responses" (Popp Berman and Paradeise 2016: 3). The knowledge economy challenges the idea that universities are distinctive because of their distance from the economy; instead, they are centred in its potential and must participate in its reproduction as a condition of survival. At an organisational and cultural level, we see a movement from a public service to a performance and audit-based ethos in which success can be measured by particular sets of indicators and ideas of urban development. What emerges, we argue, is a missing middle between expectations, organisational structures and cultures with particular consequences for the recognition and production of different forms of knowledge: "A system with so few 'winners' and so many 'losers' is toxic for democratic society and should not be allowed to persist" (Levin and Greenwood 2016: 196).

In chapter five, we turn to questions of expertise and the relationships between the justification and application of knowledge. We particularly focus on the geographies of knowledge production and how particular ideas of expertise and knowledge are reproduced within certain groups. To examine this in detail and the relations between the content and context of knowledge, we present a typology for the spatial dimension of expertise in terms of the relations between excellence, relevance and scale. Our investigations are about what happens when the boundaries between values, knowledge, action and the present and future start to move and blend for particular purposes. We then see popular examples of success that hold an exemplary status as cities and universities seek to replicate the same outcome to achieve global recognition. However, what of those who are left out of this race? Whose knowledge matters?

Having highlighted the politics of reproduction that inform the practices of knowledge-based urban development, we move into Part III of the book, *Possibilities*, to understand the consequences for urban communities and the formulation of alternatives for the future. What alternatives might exist to the frenetic pace of change in the pursuit of growth? What kinds of knowledge and expertise are required for more sustainable and just urban futures? How can we create new and value existing knowledge in cities for the many and not the few? Part III therefore considers the relations between knowledge, control, participation and coproduction. We examine the sources and dynamics of potential alternatives to city trajectories and university futures and ask what we can learn from them. In the process we emphasise the possibilities to transcend, transmute and disrupt dominant relations between knowledge and the urban and open these up to different forms of experience, justification and application in the pursuit of urban justice.

Chapter six starts by considering alternative knowledge-based urbanisms that may be emerging from within the shadows of the knowledge economy. Grassroots initiatives, experiences, struggles and experiments aim to produce social, cultural and ecological knowledge outside of the narrow constitution of the economic, which has sought to colonise their differences. We ask how knowledge can be opened up as a common good and challenge the narrow and destructive individualism that pervades the contemporary landscape. For this to happen, the focus needs to be on deliberation within civil society rather than analysis and justification being the preserve of defined political groupings. Chapter six opens up the possibility that alternative ways of knowing and seeing might challenge hegemonic rationalities.

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, the 'silo' mentality within universities prevails within departments and faculties and there is often little thought given to the organisational cultures needed for interdisciplinary working. Administrative control over bounded units, as an end in itself, 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. Thus, in chapter seven, we focus on alternative institutional designs and go in search of the 'real' university. Of course, our title is ironic, but as with urban development, we see possibility in drawing out progressive ideals and actions that also easily unsettle any sideswipes at notion of the 'ivory tower'.

In drawing attention to possibilities in chapters six and seven, we do not claim that alternatives have been realised, nor do we downplay the power of the forces we have examined. We do argue, however, that it is only by recognising, actively confronting and exploring and learning from efforts to transform current trajectories that change can be brought about. There is no quick fix and dangers lurk in the long shadows of the knowledge economy which threaten potential alternatives through cooptation and control, bolstering the status quo or bracketing politics through creating delusive bubbles that apparently keep economic forces at bay. Chapters six and seven ask how things might be different if the politics of scale, institutional power and transformative knowledge can be harnessed in pursuit of more sustainable urban futures.

We have not been content in this book to just chart the 'what' and 'where' of the knowledge economy, but to also illuminate the 'how', 'why' and for 'whom'? We find changes indicative of an excess of expectations going hand in hand with the abdication of any general – or indeed specific governmental – responsibility for mediating change, harnessing inclusive potentials and distributing opportunity. Instead, time and power are implicated in global flows of ideas where quick fixes, short cuts or technical solutions, rather than the work of understanding and learning, is assumed appropriate to urban development. In the process, knowledge is expected to produce something it cannot possibly deliver. A narrow deployment

of concepts of scientific expertise and its relationship to place means knowledge is configured to transform the nature of democracy from a politics of sovereign citizens to circuits of epistemic privilege.

This is why our final chapter turns squarely to social scientific practice and what it might contribute in the face of contemporary forces. In chapter eight, we reprise our critique and the key themes we have examined. We explore the conditions of uncertainty, doubt and complexity and the 'wickedness' of urban problems. We then consider what different outcomes we might envisage and how social scientific knowledge production might be placed in service to a different kind of society. Deliberative spaces, exchange between groups and the fostering and upscaling of learning are all central aspects in realising this alternative promise. If we take seriously the 'devilish dichotomies' that beset relations between knowledge and action and focus on the knowledge needed for more sustainable and just urban futures, then we must also create spaces of mediation and participation to examine whose knowledge matters and what implications that has for research practice. We argue that what we term 'active intermediation' plays a key role in developing the civic university as a distinctive institution in which the integration of forms of knowledge for deliberation on urban futures might take place.

The search for just, sustainable futures requires organising cities in such a way as to connect knowledge about an area to the capacities and capabilities to make desired changes. Our experiences have taught us that conceptions of knowledge and the economy exert pressures upon expectations that cannot be downplayed through simple dismissal. The knowledge economy discourse has become "so pervasive that it has assumed the status of truth, to the extent of denying that alternatives exist" (Kenway et al. 2006: 4). We deal here with tendencies, the outcomes of which can be real in their effects. Economists often introduce knowledge as a commodity, "rendering invisible the social nature of knowledge and its fabrication" (Stehr 2002: 7). This book is a corrective to this oversight. We argue that ideas of the future are a spur to the present and what we examine is not all determining. We thus examine the practices of those who seek alternatives and so open up the future to other possibilities. This is not the triumph of hope over experience. Rather, it is recognition that between the past, the present and the future, we find ambivalence. This should not paralyse us, nor foreclose the making of better futures. Our book is a contribution to that endeavour.

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