



The Nature of Cities: The Scope and Limits of Urban Theory

Allen J. Scott, Michael Storper

► To cite this version:

Allen J. Scott, Michael Storper. The Nature of Cities: The Scope and Limits of Urban Theory. International Journal of Urban and Regional Research, Wiley, 2015, 39 (1), pp.1 - 15. hal-02163265

HAL Id: hal-02163265

<https://hal.archives-ouvertes.fr/hal-02163265>

Submitted on 24 Jun 2019

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

– URBAN WORLDS

– THE NATURE OF CITIES: The Scope and Limits of Urban Theory

ALLEN J. SCOTT AND MICHAEL STORPER

Abstract

There has been a growing debate in recent decades about the range and substance of urban theory. The debate has been marked by many different claims about the nature of cities, including declarations that the urban is an incoherent concept, that urban society is nothing less than modern society as a whole, that the urban scale can no longer be separated from the global scale, and that urban theory hitherto has been deeply vitiated by its almost exclusive concentration on the cities of the global North. This article offers some points of clarification of claims like these. All cities can be understood in terms of a theoretical framework that combines two main processes, namely, the dynamics of agglomeration/polarization, and the unfolding of an associated nexus of locations, land uses and human interactions. This same framework can be used to identify many different varieties of cities, and to distinguish intrinsically urban phenomena from the rest of social reality. The discussion thus identifies the common dimensions of all cities without, on the one hand, exaggerating the scope of urban theory, or on the other hand, asserting that every individual city is an irreducible special case.

‘Ne pas essayer trop vite de trouver une définition de la ville; c’est beaucoup trop gros, on a toutes les chances de se tromper.’¹
Georges Perec (1974: 119)

A disputed concept

The quotation above echoes a widespread view, namely, that cities are so big, so complicated and so lacking in easily identifiable boundaries that any attempt to define their essential characteristics is doomed to failure. The same problem haunts urban studies generally, with a plethora of diverging claims about the nature of cities competing for attention. Despite this confusion, most of us have little hesitation in dealing with everyday propositions to the effect, say, that cities are now growing rapidly at locations all over the globe or that urbanization is moving ahead more forcefully than at any other time in human history. Indeed, urbanization is so prominent a feature of our world that scholarly agendas attuned to this issue continue to proliferate, even as disagreements multiply as to how exactly cities should be conceptualized and studied.

We thank Michael E. Smith and three anonymous IJURR referees whose comments have enabled us to make significant improvements in the arguments presented in this article.

1 ‘Don’t be too hasty in trying to define the city; it is much too big and there is every likelihood that you will get it wrong’.

How can we understand and, we hope, point the way to a resolution of these tensions? And what might any such resolution mean for currently prevailing approaches to urban analysis? These are difficult questions and any attempt to answer them must entail a number of complex theoretical and empirical maneuvers. In the next section we set the scene for this attempt by highlighting a number of ideas that have been the focus of debate at different stages in the development of urban studies over the last several decades. The subsequent discussion then moves on in an effort to identify some basic common denominators of urban analysis and to describe their implications for further research.

Trends in urban theory

In the early and middle decades of the twentieth century, a sort of orthodoxy, based on the work of the Chicago School of Urban Sociology, could be said to reign in urban analysis. Classic statements of scholars such as Park *et al.* (1925), Wirth (1938) and Zorbaugh (1929) dealt with the city primarily as a congeries of socially differentiated neighborhoods caught up in a dynamic of ecological advance and succession together with associated mentalities and behaviors. By the late 1960s, however, the ideas of this school of thought started to come under intense critical scrutiny, notably by Castells (1968), who suggested that there is nothing especially urban about the questions studied under the banner of urban sociology because in the end they are simply questions about society at large. Castells (1972) later dismissed the work of the Chicago School *tout court* as nothing but an ideology that obfuscates the more fundamental nature of capitalism as a framework of social organization. Thus, by the early 1970s, the main traces of the Chicago School were being swept away by a powerful stream of Marxist and *marxisant* approaches. In their different ways, Castells and other analysts, such as Lefebvre (1970) and Harvey (1973), insisted on a concept of the city as a theater of class struggle, centered on land markets as machines for distributing wealth upward and on associated political claims from below about citizenship rights to urban space and resources. In addition, an echo of Castells' arguments about the city as an ideology can be found in the work of Saunders (1981), who goes so far as to suggest that the city is not itself a meaningful object of analysis but only an arbitrary geographic container of diverse economic, social and political phenomena.

The 1980s brought several major new arguments about cities and urbanization. Special importance should be accorded here to three main lines of investigation. First, feminist scholars such as Massey (1991) and McDowell (1983) established an analytical framework focused on the gender dimensions of cities, while other scholars revitalized longstanding interest in ethnicity, race and class in urban contexts (see, for example, Jackson, 1989; Waldinger and Bozorgmehr, 1996). Both of these lines of inquiry provided insights into neighborhood development and displacement, and on the different ways in which socially differentiated classes of people are also spatially sorted in cities. Second, a rapidly growing research thrust developed out of the work of authors such as Friedmann and Wolff (1982) and Sassen (1991) on the rise of a global urban system and the effects of globalization on the internal structure of cities. A third major trend has revolved around the reconceptualization of older concerns about urban politics and governance by Brenner (1999), Cochrane (2006), Harvey (2007; 2012), Jessop (1997) and others. This latter body of literature is greatly concerned with the changing nature of scales of political governance—from cities to states to the global—and with neoliberal domination of this process. All of these different lines of urban investigation continue to develop and grow at the present time.

By the turn of the millennium, a number of further important shifts in theoretical sensibilities about cities could be detected and some of these have now become quite influential. One of these shifts involves a strong postcolonial critique of urban theory. In particular, Robinson (2006) and Roy (2011a) argue that much twentieth

century urban theory, with its roots lying overwhelmingly in the global North, suffers from intellectual parochialism, and hence its claims to universality must be called into question. In this regard, Robinson (2011) provides a spirited defense of what she calls 'the comparative gesture' as a basis for constructing knowledge about cities and for avoiding the hazards of *a priori* theorization, especially when it is based on a limited sample of cities from the global North. Roy and Ong (2011) build on these points of departure in their plea for a 'worlding' of cities, signifying an effort to bring more cities into investigative view and an acknowledgment of the reflexive relations between the urban and the global. In some respects, these recent postcolonial approaches echo the work of earlier writers such as Abu-Lughod (1965), Jacobs (1998) and King (1976) who define postcolonial urbanism in a quite literal way, that is, as an urban condition shaped by the experience of colonialism. In the postcolonial period, this earlier form of urban development then blends with or interacts with subsequent developmental experiences shaped by national and global politics and processes. But there was no claim, in the earlier work, that consideration of postcolonial cities necessitated either the rejection of existing urban theory or the development of alternative forms of theorization.

A second recent shift, one that overlaps with the first in the work of some scholars, calls for new kinds of methodological approaches to urban research based above all on actor-network theory and assemblage theory. These approaches typically proceed by constructing rhizomatic networks of urban relations, human and non-human (see, for example, Ong and Collier, 2004; Robinson, 2004; Sassen, 2008; Fariás and Bender, 2010; McFarlane, 2010; 2011; Rankin, 2011). Work in this second vein attempts to build up images of the urban or territorial by constructing complex descriptions of urban situations marked by strong substantive particularity (*cf.* Wachsmuth *et al.*, 2011). This work eschews *a priori* theoretical abstraction, though it does at times attempt to generalize via the construction of typologies based on associations between the phenomena it describes (see, for example, Roy and Ong, 2011). Still, the overall tone of this work is captured by the notion of the 'ordinary city' of variety and specificity as described by Amin and Graham (1997), which puts strong emphasis on the particularities of individual urban places.

This all-too-brief sampling of the literature from the early twentieth century to the present indicates that urban studies is susceptible to endemic and ever widening discontinuity and disjuncture in the conceptual frameworks, questions and methodologies that dominate research. This is not entirely surprising, given the complexity of the causes of urbanization and the multifarious nature of the urban itself. Similarly, the 'urban question', in the sense of research that is linked to political goals or policy concerns, seems to change its spots with every new generation of urban scholars. This sense of fragmentation is further reflected in the constantly changing watchwords that circulate through the literature in successive attempts to capture particular spatial or temporal conjunctures of urban development. Terms like captive cities, manipulated cities, postmodern cities, insurgent cities, consumer cities, cities as entertainment machines, the carceral city, the neoliberal city, the fragmented city, the dual city, the digital city, the global city, and the creative city, among many others, are all familiar examples of these watchwords.

We will re-examine some of the ideas discussed above at a later stage in the discussion when we will comment further on them in the light of our own analysis. That said, our overall objective in this article is not to engage in a detailed critique of the literature, and certainly not to deny that cities exhibit considerable empirical variation over time and space or that cities can be profitably studied as unique cases. Rather, we are concerned here with an attempt to build a general concept of the urban and the urbanization process that we believe can help to bring a shared vocabulary to the debates that proliferate within the field. Any concept of this sort will also contribute to the investigation of cities by providing us with pointers that facilitate the crucial task

of demarcating the inner logic of urbanization from other social processes. As such, we argue, our theoretical approach actually helps to illuminate rather than distort the particularities of individual cities and groups of cities. At least some of the cacophony in the urban studies literature can in part be traced back to the failure of researchers to be clear about these matters of definition and demarcation.

Historical origins of cities

All cities consist of dense agglomerations of people and economic activities, even though there are strong ambiguities about where and how a lower size limit should be drawn. Even so, recognizing density and agglomeration as general characteristics of cities takes us only so far in the search for an explanation of urbanization or in finding answers to the questions identified above. Any attempt to build a general concept of the city is further vitiated by the fact that cities also typically contain an enormous diversity of empirical phenomena. Urban theory is hence faced with the task of how to take in hand a complex array of similarities and differences. Can we group all cities together as a common class of phenomena? Or must we divide them into several different and incommensurable classes and, in the extreme case, into as many classes as there are individual cities? The initial step in response to these questions is to establish some features of urbanization over time and around the world that seem to be open to possibilities of a first round of theoretical description.

– Early historical forms of urbanization

Cities emerge historically only where a food surplus can be extracted. Once they do emerge on the landscape they have strong feedback effects on the further development of agriculture (Jacobs, 1969). Moreover, when the countryside generates an excess of production over subsistence needs, a cohort of non-agricultural consumers of the surplus can be maintained. The members of this cohort, who frequently hold some combination of political, military, religious and economic power, will often congregate together in geographic space to form urban or proto-urban places (Childe, 1950; Pirenne, 1952 [1925]; Bairoch, 1988; Braudel, 1995 [1949]). Even in the very earliest cities, agglomerations of activities such as political administration, ceremonial and religious pursuits, craft production (e.g. for luxury goods or military hardware), and market trading almost always constituted the core of the urban process (Wheatley, 1971). Agglomeration occurs because activities like these entail divisions of labor and other interdependencies as expressed in transactional relationships whose costs are distance dependent and because they can reap functional synergies by clustering together in geographic space. Various types of infrastructure help to consolidate the resulting dynamic process of agglomeration. In other words, one of the central features of urbanization has always been its efficiency-generating qualities via agglomeration.

The earliest urban centers appear to have emerged in the Middle East around 7500 BCE. These were all modestly sized settlement clusters such as Jericho and Byblos. Around 3500 BCE, agricultural surpluses were growing, and many other cities formed in the geographic area ranging from Mesopotamia to the Mediterranean coast and Egypt, as well as in India. The concomitant revolution in social organization and state formation, as described by Childe (1950), was reflected in urbanization: dense permanent settlements, containing non-agricultural specialists and monumental public buildings, and exhibiting class relationships based on differences in wealth and power (Smith, 2009). Subsequent waves of urbanization in the world's more advanced early states include the Mycenaean and Minoan cities of ancient Greece, around 2000 BCE, Chinese cities along the Yellow River in the 2000–1500 BCE period, ancient Rome around 700 BCE, and the cities of Mesoamerica about 200 BCE. Complementing these developments were advances in transport technologies for moving people and goods. Indeed, cities have *always* functioned as nodes in systems of long-distance

trade, as exemplified above all by Rome in the time of Augustus, with its population of over 1 million, and functioning as the central node in a well organized trade system extending from northern Europe to the southern Mediterranean, and well into Persia (Ward-Perkins, 2005). It is important to note that these long-distance trading activities frequently resulted in marked economic specialization of individual urban centers (McCormick, 2001).

If urbanization achieved impressive gains in various regions of the world in the 5,000 years prior to 1500, urban growth was still generally subject to severe constraints. Even in areas where urbanization was relatively robust, it did not advance in a continuous, linear way since most cities were caught in a Malthusian trap stemming from uncertain agricultural surpluses. Over the European Age of Exploration in the sixteenth and seventeenth centuries, however, some of these constraints started to loosen (Mann, 2011). Long-distance trade costs began to decline sharply, and this allowed for tighter interconnections between far-flung and often highly specialized urban centers. Despite these developments, it was not until after the late eighteenth century, principally in Western Europe, that the Malthusian trap was decisively surmounted. The key to this development was the unprecedented increase in levels of economic productivity unleashed by the Industrial Revolution (Maddison, 2001; Bourguignon and Morrisson, 2002). This not only made it possible to produce manufactured goods in hitherto unheard of quantities and variety, but also—by means of mechanization—to surmount the limitations and vagaries of agriculture. The Industrial Revolution ushers in the modern era when urbanization begins in earnest. This is an era when the fundamental relationship between economic development and urbanization becomes especially clear.

– Industrialization and its aftermath

As the Industrial Revolution gathered pace in the more advanced capitalist countries in the nineteenth century, it was accompanied by rounds of urban growth, culminating in the large industrial cities of the American and Western European manufacturing belts. The nineteenth century also saw the growth of entrepôt, resource processing, administrative and trading centers in Asia, Latin America and parts of Africa, often under the sway of colonial rulers. Later, especially after the mid-twentieth century, selected cities in the developing world expanded under the auspices of government-sponsored industrialization programs. Cities continued to grow in the main capitalist countries over the twentieth century on the basis of manufacturing but, starting in the 1970s, many of them went through a period of deindustrialization as jobs dispersed to low-wage regions and countries, leading in many cases to severe crisis conditions in the core. After a transitional period of slow growth in the 1970s and early 1980s, large cities in the core again experienced a strong resurgence as the 1980s wore on. Cities now found themselves at the focal point of a new ‘post-Fordist’ economy, characterized by a decisive shift away from materials-intensive manufacturing to various kinds of high-technology, management, logistical, service, design and cultural sectors. The intensification of globalization and the emergence of a new international division of labor since the late 1970s have also promoted a major wave of urbanization in the developing countries, where many cities now function as significant producers of manufactured exports (McKinsey Global Institute, 2012). More recently, a number of cities in former ‘third-world’ countries (especially very large cities such as Hong Kong, Seoul, Shanghai, Singapore, Mexico City and São Paulo) are also beginning to shed manufacturing jobs and to participate actively in the new post-Fordist economy (Scott, 2011).

In the last 200 years, population and cities all around the world have grown continuously and at a higher rate than at any time in the past. In the contemporary era, urbanization has attained new heights of development, in the more economically

advanced parts of the world and in many less advanced parts too, and more of humanity is currently urbanized than ever before. The critical point for present purposes, however, is that throughout the course of history, urbanization has been fundamentally engendered by a complex interaction between economic development, divisions of labor, agglomeration, specialization and external commerce. Accordingly, we can say that the most basic *raison d'être* for cities, certainly in the modern era, resides in their role as centers of economic production and exchange within wider systems of regional, national and international trade. Cities are always much more than this, as we shall see shortly; however, it is only by means of an analysis that begins with the complex spatial dynamics of economic activity that we can arrive at an account of the agglomeration dynamics common to all cities.

Agglomeration: production, trade and urbanization

Rising levels of economic development in any country have strong causal impacts on urban growth via agglomeration and specialization processes. This relationship is manifest in a consistently positive empirical relationship between national rates of urbanization (i.e. city dwellers as a percentage of total population) and GDP per capita (*cf.* Renaud, 1979).² However, an interdependent two-way relationship is also at work here, namely, one in which cities constitute the critical foundations for continued economic growth and development (World Bank, 2009; Henderson, 2010). Economic expansion and urbanization should therefore properly be understood as being intertwined in a recursive path-dependent relationship over time with its critical hinge point focused on processes of agglomeration.

There is now an enormous literature on the technicalities of agglomeration, as such, and hence little or no rehearsal of this theme is called for here, except perhaps to note that in the terms expressed by Duranton and Puga (2004) agglomeration can be generally understood as a mechanism of sharing, matching and learning. Sharing refers to dense local interlinkages within production systems as well as to indivisibilities that make it necessary to supply some kinds of urban services as public goods. Matching refers to the process of pairing people and jobs, a process that is greatly facilitated where large local pools of firms and workers exist. Learning refers to the dense formal and informal information flows (which tend to stimulate innovation) that are made possible by agglomeration and that in turn reinforce agglomeration. Taken together, these properties of agglomeration give rise to powerful and measurable economic synergies (see also Scott, 1988; Storper 1997; 2013; Fujita and Thisse, 2002).

These observations run counter to the claim by Amin and Thrift (2002: 27) that the city 'is not a place of meaningful proximate links', and that no specific economic and social effects flow from 'agglomeration, density and proximity' (*ibid.*: 53). To the contrary, these dimensions of urban reality are fundamental and defining features of cities everywhere, even in a world where cities are increasingly interconnected. But, in addition, agglomeration as process and outcome goes far beyond the narrow question of the technical foundations of economic geography, for it is a quasi-universal feature of human existence. Agglomeration touches many social, cultural and political/administrative dimensions of human life; and as a result, it has powerful feedback effects not only on economic development, but also on society as a whole. At no time has this been more the case than today. Agglomeration is the basic glue that holds the city together as a complex congeries of human activities, and that underlies—via the endemic common pool resources and social conflicts of urban areas—a highly

2 We recognize that at least some postcolonial urban theorists might take these remarks as being tantamount to a 'developmentalist' view of urban processes in which cities outside the developed modernist West are seen (pejoratively) as being characterized only in terms of what they are not (i.e. developed and modern). We have no intention of insinuating any such interpretation here.

distinctive form of politics, as we show later. In addition, we must once again remember that the economic functions of cities are deeply molded by external trade. Cities do not develop and grow just on the basis of their internal relationships; they are also shaped by locational sorting across geographic space. Trade enables cities to specialize and sell their outputs in exchange for the specialized outputs of other places. The economic viability of cities and the growth of long-distance trade are therefore complementary and mutually reinforcing phenomena. In capitalism, in particular, the basic dynamic of agglomeration of capital and labor combined with interregional sorting of people, households, capital and firms lead to systems of linked but specialized cities at various scales of resolution, from the national to the global (Black and Henderson, 2003; Henderson and Venables, 2009).

This emphasis on agglomeration points directly to a related question that has long been the subject of considerable debate, for if the notion of agglomeration has any meaning, should we not also be able to circumscribe individual agglomerations in geographic space, and certainly, in the limit, to distinguish one agglomeration from another? This question has taken on renewed importance in view of the claims by Brenner (2013), who suggests that we are now entering an era of planetary urban fields that call into question any insistence on the specifically local scale of agglomeration. We have already noted that all cities, from ancient times onward, have functioned as systems of dense local interactions imbricated in complex long-distance movements of people, goods and information. In view of this observation, we concede at once that cities are strongly and increasingly intertwined with one another in relational networks. Equally, there can be no rigid and absolute boundary between any given city and the rest of geographic space. Once these points have been made, however, we still need to assert the status of the city as a concrete, localized, scalar articulation within the space economy as a whole, identifiable by reason of its polarization, its specialized land uses, its relatively dense networks of interaction (including its daily and weekly rhythms of life), and the ways in which it shapes not just economic processes (such as the formation of land, housing and labor prices) but also socialization dynamics, mentalities and cultures. We might say that the city is to the space economy as a mountain is to the wider topography in which it is contained. In neither the case of the city nor the mountain can a definite line be drawn that separates it from its wider context, but in both instances, certain differences of intensity and form make it reasonable and pragmatically meaningful to treat each of them as separable entities. Moreover, the specificity of the urban depends not so much on the crude ratio of its internal to external transactions, but on the contrasting qualities of these two sets of transactions and their locational effects. In fact, intra-urban transactions are usually quite different from long-distance transactions in that they tend to be marked by high costs per unit of distance and dense tacit information content (hence the frequent need for face-to-face contact), and these kinds of interpersonal transactions are one of the mainstays of urban agglomeration (Storper and Venables, 2004; see also Scott, 2001).

In any case, even as globalization intensifies, there is much empirical evidence to suggest that the urban scale of interaction remains extremely vibrant, indeed increasingly so (Duranton and Storper, 2008). In his examination of American urbanization, Pred (1973) pointed out that already in the eighteenth century there was a tendency for local transactions to expand along with the growth of long-distance trade. Hummels (2008) indicated that the vast majority of current trade occurs within a purely local ambit, and other analysts such as Charlot and Duranton (2006), Reades (2010), and Storper and Venables (2004) show that local face-to-face interaction and long-distance business travel grow as complements to one another. Similarly, localized scientific interactions increase in tandem with long-distance scientific and knowledge exchanges (Zucker and Darby, 2006; Sonn and Storper, 2008). More to the point, the

rise of a globalizing world system has been associated—thus far at least—not with the demise of the city, but rather with intensifying agglomeration/urbanization processes across all five continents.

The urban land nexus

The discussion up to this point identifies a major aspect of the urbanization process as being rooted in the spatial concentration of production and a multifaceted, circular, cumulative dynamic of clustering and sorting. We now build on this foundation to identify a related feature that is equally critical to any account of the nature of the city. We refer to this feature as the *urban land nexus*, meaning an interacting set of land uses expressing the ways in which the social and economic activities of the city condense out into a differentiated, polarized, locational mosaic (Roweis and Scott, 1978; Scott, 1980). The urban land nexus, in other words, corresponds to the essential fabric of intra-urban space. This phenomenon emerges as the extensive expression of agglomeration, and in modern society is molded to a significant degree by the behavior of firms seeking locations for production and households seeking living space. These forms of behavior are typically structured by market mechanisms generating land prices that arbitrate uses and that sustain distinctive patterns of spatial allocation. In addition, owners and users of land (firms and households) demand selected kinds of proximity to one another while simultaneously seeking to avoid locations where they might experience negative spillovers and other damaging effects on their activities. However, the outcomes of this activity are inherently problematic. This is because the supply of space at any given point in the city is always strongly inelastic so that preferences in regard to access and separation (or, alternatively, proximity and avoidance) can almost never be fully satisfied, a predicament that is magnified by differences in ability to pay and the locational rigidities that are intrinsic elements of the built forms of the urban land nexus.

Firms and households represent the foundational elements of two broad divisions of the urban land nexus, identifiable respectively as the production space of the city where work and employment are concentrated, and the social space of the city as manifest in residential neighborhoods, typically differentiated by variables such as income, race and class. In addition, a third space can be detected, namely, the circulation space of the city, which is represented by the infrastructures and arterial connections that facilitate intra-urban flows of people, goods and information. These three major components of the urban land nexus are marked by endless empirical diversity and interpenetration, giving rise, in turn, to the high levels of idiosyncrasy that characterize individual cities. Nonetheless, they can also be described in theoretical terms by reason of their roots in generalizable processes of agglomeration/polarization and their functional integration within urban space as a whole. Furthermore, and even though much of the internal space of the city is divided into units of land that can be individually owned and exchanged, the urban land nexus is very much more than a simple aggregation of independent private locations. Units of urban land—in the sense of individual locations in intra-urban space, as well as entire neighborhoods or districts, serviced by infrastructure, and with features shaped by proximity to and separation from other land uses—reflect the many individual, communal and political actions that invariably impinge upon them. This remark includes, but goes beyond, the standard notion that private land use generates externality effects or that its production is the result of public interventions in the face of market failures. The essential nature of urban land is that it is simultaneously private and public, individual and collective, and that its shape and form express the intertwined dynamics of the individual actions of firms and households and collective action on the part of diverse institutions of control and governance.

As a corollary, the urban land nexus is the site of extensive common pool assets and liabilities, a point that signifies, in the absence of effective mechanisms of collective coordination, that it is subject to numerous kinds of disfunctionalities ranging from infrastructure breakdowns to locational conflicts, and from deteriorating neighborhoods to environmental pollution. Without institutions able to implement relevant planning and policy measures, these disfunctionalities would unquestionably undermine the viability of the city, for market logic alone is congenitally incapable of regulating the urban commons in the interests of economic efficiency and social wellbeing. Hence, non-market agencies of collective action typically emerge to keep the urban land nexus in some sort of functioning workable order. Sometimes these agencies are purely local in character, and sometimes they exist at higher levels in the overall hierarchy of governance. Land use regulation, for example, is mostly (but not necessarily exclusively) initiated by *local* institutions, including formal governmental agencies and various kinds of civil associations. Financial support for transport construction projects, by contrast, is frequently provided by higher-level agencies. At the same time, agencies of collective action, urban and supra-urban, are often engaged in forms of intervention directed to issues that exist within the city but that have only an indirect relationship with the urban land nexus, as such. Examples of this kind of intervention might include the regulation of hospital administrative arrangements or the formulation of airport safety rules. In this latter connection, moreover, local collectivities frequently act as agencies for relaying higher-level mandates down to urban constituencies. As a consequence of these different cross currents detectable in urban governmental institutions there is a real sense in which we can say that the latter play a hybrid role, one that is purely local (and an intrinsic element of the dynamics of the urban land nexus) and one that is driven by broader socio-economic pressures. It may well be that at least some of the widespread perplexity concerning the purpose and functions of urban government (as expressed, for example, by Cochrane, 2006) is due to a failure to recognize this essential interpenetration of scales and functions in the sphere of governance.

The scope and limits of the urban

This mass of urban *relata* must now be set in the wider context of society as a whole, without, however, conflating the two so that the distinctiveness of the city is lost. At the present moment in history, urbanization processes are profoundly shaped by the social and property relations of capitalism, though they cannot be reduced to functionalist expressions of those relations, because they are also shaped by ideas, interests and politics. Thus, cities today provide essential bases for most economic systems to function, but do not automatically fulfill this role in any optimal way. To the contrary, cities often generate conditions that have negative impacts on the viability of wider economic, political or social arrangements.

One point of departure for dealing with these matters is to pick up on arguments made in the previous section and to insist on the distinction between issues that are to be found *in* cities but that are not intrinsically urban in character and issues *of* cities in the strict sense as identified here, that is, they revolve around processes of agglomeration *cum* polarization and associated interactions within the urban land nexus. For example, there are usually many poor people in cities but it does not necessarily follow that all aspects of poverty are inherently urban in character or that poverty is caused principally by urbanization (Slater, 2013). Poverty is primarily engendered within a set of macro-social processes related to the level of economic development, the structure of overall employment opportunities and the availability of education and training. That being said, certain urban conditions can unquestionably aggravate or ameliorate levels of poverty, for example, where concentrated neighborhood problems, such as a prevalent

gang culture, influence levels of educational performance by children (Sampson, 2012). Policy attention to these specifically urban issues may produce adjustments in overall poverty rates, but they will not eliminate poverty once and for all. The housing boom and bust in the United States over the first decade of the twenty-first century provides another example of the analytical difference between problems in cities and problems of cities. The sub-prime real-estate boom was not principally caused by urbanization but rather by a number of innovations in the finance industry related to the extension of mortgage credit to risky households. The concomitant excess capital supply generated an asset price bubble in the real-estate sector such that when the returns on investments in this sector collapsed, a spiral of falling real-estate values and housing abandonment came about. As a consequence, a crisis that was not at the outset fundamentally urban was subsequently translated into specifically urban terms as manifest in deteriorating neighborhoods and related chains of negative externalities. These remarks help us further to pinpoint the urban as a domain of analysis and especially to salvage at least some of its essential features from the eclecticism (and concomitant failures of policy targeting) that currently haunts the field of urban studies.

Generality and difference in urban analysis

Cities are always embedded in wider systems of social and political relationships at many different scales. These contextual circumstances stamp individual urban centers with diverse distinguishing features and give rise to numerous variations in their form and function across time and space. Hence, some cities have entered into a post-industrial phase, others are dominated by manufacturing employment; some are located in relatively prosperous countries, others are in countries where rampant poverty prevails; some are embedded in societies that are relatively homogeneous in terms of their racial and ethnic makeup, others in societies that are characterized by enormous diversity in these respects; some are overlain by authoritarian social and political frameworks, others by more open and democratic kinds of relationships; some are in the global North, others are in the global South; and so on, virtually *ad infinitum*. We may ask, do the admittedly enormous variations in the empirical makeup of cities that result from these differing contextual circumstances warrant a plurality of different concepts of the urban? Or can we cut through this Gordian knot to reveal a coherent concept of the city as an object of theoretical inquiry?

We argued for a positive answer to the latter question by insisting that the essence of the urbanization process resides in the twofold status of cities as clusters of productive activity and human life that then unfold into dense, internally variegated webs of interacting land uses, locations and allied institutional/political arrangements. Even so, it would be a major error to discount the empirical variation that exists from city to city or to overlook the contextual variables that mold the individuality of particular cities. Five such variables would appear to play an especially significant role without, however, negating the general nature of urbanization as a particular mode of spatial integration and interaction. Their meaning and importance for urban studies can be summarized as follows:

- 1 Overall levels of economic development vary enormously across time and space. Concomitantly, cities in contrasting developmental contexts display widely contrasting profiles in such matters as their economic bases, their infrastructural endowments and their complements of rich, poor and middle-income people.
- 2 The rules that govern resource allocation have major impacts on urban development. A society that allocates resources through markets will generally do so differently from one that deals with resource allocation through non-market rules or through some hybrid arrangement such as a market system combined with robust urban planning regulations.

- 3 Prevailing structures of social stratification, including racial and ethnic variations, have a powerful impact on neighborhood formation.
- 4 An additional important source of difference stems from cultural norms and traditions. These affect a multitude of practices and ways of life that affect the urban landscape, including the formation, evolution and persistence of neighborhoods and the operation of local labor markets.
- 5 The overarching conditions of political authority and power leave deep traces on urban development in any given society. These conditions typically define the scope of local government and urban planning activities, and hence influence the detailed spatial functioning of the urban land nexus, just as they almost always have strong implications for the dynamics of local political contestation.

In relation to this last point, the wider conditions of political authority and power are often revealed in mediated form in the skyline of individual cities, as in the case of the remnants of imperial monumentality that can be observed in London and Paris, the Soviet gigantism that continues to loom over Moscow, the feudal relics that abound in Asian cities from Bangkok to Beijing, and the colonial vestiges that characterize cities in many parts of Latin America.

Given the peculiarities of the empirical phenomena that occur in cities and the ways in which the contextual variables enumerated above compound the sense of irreducible diversity, cities invariably present on first view a bewildering degree of individuality. Small wonder, then, that so many analysts are tempted to treat every city as a special case and to insist on the futility and dangers of conceptual abstraction. We might refer to the concomitant style of urban analysis as a 'new particularism', though we hasten to add that there are different conceptual pathways into this vein of investigation. One such pathway can be identified in the currently fashionable approaches to urban analysis represented by assemblage theory and actor-network theory, as discussed earlier. In their practical application in urban studies, these approaches tend to impart a radical sense of the singularity of cities by focusing on the description of kaleidoscopic combinations of discrete contingencies at the expense of recurrent underlying structures and processes. The comparative method that is currently favored by a number of geographers is also, in our opinion, apt by default to privilege particularities in urban outcomes, notwithstanding the claims of Robinson (2011) about its theory-generating capacities. In fact, meaningful comparative work requires that we have a clear theoretical sense of the significance and properties of the units of analysis *before* comparison is initiated. In the absence of this sense we have no guidelines as to what the appropriate points of comparison may be or what it is precisely about them that calls for comparative investigation. Our argument here is not that empirical particularities are inherently uninteresting or valueless, far from it. Rather, we offer the obvious and time-worn point that in any scientific endeavor, conceptual abstraction actually helps the researcher to reveal *meaningful* levels of diversity and difference in basic observational data, just as it is an essential prerequisite for the construction of useful empirical taxonomies. At one level of analysis, for example, the brown and black suburbs of Paris differ sharply from the racially and ethnically distinctive communities of South Central Los Angeles or from the barrios of Caracas. Similarly, the upper-class neighborhoods of London are very different in texture from those of Tokyo, just as these two cases are quite unlike the privileged communities of Gávea or São Conrado in Rio de Janeiro. Yet beneath the obvious empirical differences between these examples (and note that the terms 'neighborhood' and 'community' already resonate with theoretical meanings) we encounter widely observable mechanisms of social segregation resulting from the ways in which land and housing markets work in combination with agonistic relations of race, class and ethnicity. In the same manner, precise policy responses to problems and predicaments in any individual

instance of urban development will invariably differ from one another, but again, in ways that can almost always be related to the dynamics of the urban land nexus with its generic forms of breakdown and collective disorder related to negative spillover effects, overheated growth or chronic economic decline, jobs–housing imbalances, derelict property, congestion, pollution, deteriorated infrastructure, conflicts over access to urban space and public goods, socially dysfunctional neighborhoods, sprawl and all the rest.

Particularism, of course, can often be a positive attribute of academic work. It is a source of critical empirical detail and descriptive color, and it is unquestionably a highly appropriate dimension of the rich ethnographic studies produced by many promoters of postcolonial approaches to urban analysis. Still, the willful advocacy of the ‘messiness’ of urban life in some of these approaches—as in Simone’s (2004: 408) description of urban conditions as emerging from the interweaving of ‘complex combinations of objects, spaces, persons, and practices’—is superficially correct, but radically incomplete because, as we have argued, there *are* systematic regularities in urban life that are susceptible to high levels of theoretical generalization. At the same time, there is an ambiguous tension in the postcolonial urban literature between particularism on the one side and the urge to theoretical construction and re-construction on the other. One widely held view in much of this literature is that cities of the global South gainsay much of urban theory as it has hitherto been formulated, and Roy (2009: 820) has invoked this notion as the basis of her statement that it is time ‘to blast open theoretical geographies’. The principle of proceeding with caution is always to be encouraged in academic work, but equally, outright iconoclasm cannot be justified solely and in principle on the grounds that existing geographies are founded on a limited ‘repertoire of cities’ that excludes this or that form of empirical variation. We are entirely sympathetic to the idea that examination of the cities of the global South may necessitate a radical reformulation of urban theory, but the reformulation will not come solely from the fact that these cities exhibit *prima facie* empirical differences from those of the global North (or, indeed, from one another). Rather, it will come from whatever new and hitherto unsuspected insights that the study of urbanization in the global South may provide about the logic and inner workings of urban agglomeration processes and associated dynamics of the urban land nexus as we currently understand these matters. We might add, in this context, that the call for a new kind of urban analysis that is ‘cosmopolitan’ (Robinson, 2006) and that emphasizes the ‘worlding’ of cities (Roy, 2011b) has an essentially gestural quality in view of its lack of specificity about how it might provide insights into the genesis and basic character of urbanization, *qua* a grounded system of dense polarized and interacting spaces constituting the urban land nexus. This absence of specificity is underlined by Robinson’s (2011: 13) remark that the city can be seen as ‘a site of assemblage, multiplicity, and connectivity’, an almost entirely indeterminate statement that (like the quotation from Simone, above) signally fails to distinguish the city as a distinctive, concrete social phenomenon from the vast sweep of historical and geographical reality at large.

Implications for urban research and policy

We argued earlier that a viable urban theory should enable us to distinguish between dynamics of social life that are intrinsically urban from those that are more properly seen as lying outside the strict sphere of the urban, even when they can be detected as a matter of empirical occurrence inside cities. The task is not an easy one, but in the previous discussion we provided a number of criteria for any attempt to deal with it.

Our approach emphasizes the commonalities across all types of cities and the organizational processes that shape them. This manner of proceeding helps to guard against over-hasty impulses to take certain dramatic or peculiar instances of urban

development (e.g. the crumbling infrastructure and violence of Kinshasa, the extensive slums of Mumbai or the current financial collapse of southern European cities) as a clear-cut signal that a reformulation of theory is required (Roy, 2011a; compare with Boo, 2011). Furthermore—and this is surely an important part of its power—our approach undercuts another kind of unwarranted temptation (prominently on display in Dick and Rimmer, 1998) to the effect that cities around the world are all converging to a common empirical template. None of these propositions, by the way, is intended to justify or promote any of the theories of the urban that have come and gone over the last century and more. Many defective theories have been formulated over the years and we can identify many instances where ideas developed in one urban context are inappropriately applied in others. One striking example of this misapplication, as Robinson (2006) justly remarks, can be found in mid-twentieth century attempts to interpret urban life in the Zambian Copperbelt through the lens of Chicago School theory.³

These concerns spillover directly into any consideration of the relationship between urban theory and policy intervention. The urban policy literature has already opened up a fruitful debate on this matter by making a distinction between ‘place policies’ that target particular cities or parts of cities, and ‘people policies’ that target particular socio-economic categories irrespective of location (Glickman, 1981; Glaeser and Gyourko, 2005; Freedman, 2012). Urban poverty analysts, in particular, have vigorously debated this distinction, and have made much progress in identifying the potentialities and limits of policies focused on place (such as interventions that seek to moderate the spatial concentration or isolation of poor people in certain neighborhoods) versus those focused on people (such as interventions directed to correcting factors like family breakdown or educational failure). The issues here are far from being cut and dried, and the debate remains open as research continues to develop new results about the urban and the socio-economic roots of poverty and inequality. There are also many clearly exaggerated claims in the literature about the role and potency of cities in political life. For example, an abundant literature at present sees the urban as a principal fountainhead of emancipatory political trends and movements (e.g. Soja, 2010; Harvey, 2012). There can be little doubt about the role of cities, precisely because of their size and density, as centers of political debate and flashpoints of popular protest and political mobilization, and these issues must figure prominently in any general urban theory; so must specifically urban conflicts over matters such as access to items of collective consumption in the city or unfair differentials in public spending on neighborhood development. However, the basic etiology of political contestation in contemporary society extends far beyond the domain of the city in the strict sense, for it reaches down into the very core of social life where the basic mechanisms of injustice, inequality, political oppression and other major causes of inequality and unrest reside. Accordingly, we have no hesitation in characterizing currently widespread claims that tend to assimilate all forms of social and political action into an urban totality as cases of severe conceptual overreach (*cf.* Cox, 2001; Purcell, 2006). Even in the twenty-first century, when, for the first time in human history, most of human existence is geographically contained in cities, not all or even the greater part of this existence—*pace* Lefebvre—can be described as being *intrinsically* urban in the senses that we have laid out above.

Allen J. Scott, Department of Geography, UCLA, 1255 Bunche Hall, Los Angeles, CA 90095-1524, USA, ajscott@ucla.edu

Michael Storper, Department of Geography and the Environment, London School of Economics, Houghton Street, London WC2A 2AE, UK, m.storper@lse.ac.uk

3 We might add that Chicago School theory was also seriously flawed even in its application to Chicago.

References

- Abu-Lughod, J. (1965) Tale of two cities: the origins of modern Cairo. *Comparative Studies in Society and History* 7.4, 429-57.
- Amin, A. and S. Graham (1997) The ordinary city. *Transactions of the Institute of British Geographers* 22.4, 411-29.
- Amin, A. and N. Thrift (2002) *Cities: reimagining the urban*. Polity, Cambridge.
- Bairoch, P. (1988) *Cities and economic development*. University of Chicago Press, Chicago.
- Black, D. and J.V. Henderson (2003) Urban evolution in the USA. *Journal of Economic Geography* 3.4, 343-72.
- Boo, K. (2011) *Behind the beautiful forever: life, death and hope in a Mumbai undercity*. Random House, New York.
- Bourguignon, F. and C. Morrisson (2002) Inequality among world citizens: 1820-1992. *American Economic Review* 92.4, 727-44.
- Braudel, F. (1995 [1949]) *The Mediterranean and the Mediterranean world in the age of Philip II*. University of California Press, Berkeley and Los Angeles.
- Brenner, N. (1999) Globalisation as reterritorialisation: the re-scaling of urban governance in the European Union. *Urban Studies* 36.3, 431-51.
- Brenner, N. (2013) Theses on urbanization. *Public Culture* 25.1, 85-114.
- Castells, M. (1968) Y a-t-il une sociologie urbaine? *Sociologie du Travail* 1.1, 72-90.
- Castells, M. (1972) *La question urbaine*. Maspero, Paris.
- Charlot, S. and G. Duranton (2006) Cities and workplace communication: some quantitative French evidence. *Urban Studies* 43.8, 1365-94.
- Childe, V.G. (1950) The urban revolution. *Town Planning Review* 21.1, 3-17.
- Cochrane, A. (2006) *Understanding urban policy: a critical introduction*. Blackwell, Oxford.
- Cox, K.R. (2001) Territoriality, politics and the urban. *Political Geography* 20.6, 745-62.
- Dick, H.W. and P.J. Rimmer (1998) Beyond the third world city: the new urban geography of South-East Asia. *Urban Studies* 35.12, 2303-21.
- Duranton, G. and D. Puga (2004) Micro-Foundations of urban agglomeration economies. In J.V. Henderson and J.-F. Thisse (eds.), *Handbook of regional and urban economics*, Elsevier, Amsterdam.
- Duranton, G. and M. Storper (2008) Rising trade costs? Agglomeration and trade with endogenous transaction costs. *Canadian Journal of Economics* 41.1, 292-319.
- Fariás, I. and T. Bender (eds.) (2010) *Urban assemblages: how actor-network theory changes urban studies*. Routledge, London.
- Freedman, M. (2012) Place-based programs and the geographic dispersion of unemployment. Working Paper, Department of Economics, Cornell University, Ithaca, NY.
- Friedmann, J. and G. Wolff (1982) World city formation: an agenda for research and action. *International Journal of Urban and Regional Research* 6.3, 309-44.
- Fujita, M. and J.-F. Thisse (2002) *Economics of agglomeration: cities, industrial location, and regional growth*. Cambridge University Press, Cambridge.
- Glaeser, E.L. and J. Yourko (2005) Urban decline and durable housing. *Journal of Political Economy* 113.2, 345-76.
- Glickman, N.J. (1981) Emerging urban policies in a slow-growth economy: conservative initiatives and progressive responses in the US. *International Journal of Urban and Regional Research* 5.4, 492-528.
- Harvey, D. (1973) *Social justice and the city*. Edward Arnold, London.
- Harvey, D. (2007) *A brief history of neoliberalism*. Oxford University Press, Oxford.
- Harvey, D. (2012) *Rebel cities: from the right to the city to the urban revolution*. Verso, London.
- Henderson, J.V. (2010) Cities and development. *Journal of Regional Science* 50.1, 515-40.
- Henderson, J.V. and A.J. Venables (2009) Dynamics of city formation. *Review of Economic Dynamics* 12.2, 233-54.
- Hummels, D. (2008) Transportation costs and international trade in the second era of globalization. *Journal of Economic Perspectives* 21.3, 131-54.
- Jackson, P. (1989) Geography, race and racism. In R. Peet and N. Thrift (eds.), *New models in geography*, Volume 2, Unwin Hyman, London.
- Jacobs, J. (1969) *The economy of cities*. Vintage, New York.
- Jacobs, J. (1998) *The edge of empire: postcolonialism and the city*. Routledge, London.
- Jessop, B. (1997) The entrepreneurial city: re-imagining localities, redesigning economic governance, or restructuring capital? In N. Jewson and S. MacGregor (eds.), *Transforming cities: contested governance and new spatial divisions*, Routledge, London.
- King, A.D. (1976) *Colonial urban development: culture, social power and environment*. Routledge and Kegan Paul, London.
- Lefebvre, H. (1970) *La révolution urbaine*. Gallimard, Paris.
- Maddison, A. (2001) *The world economy: a millennial perspective*. OECD Development Center, Paris.
- Mann, C.C. (2011) *1493: uncovering the new world Columbus created*. Vintage, New York.
- Massey, D. (1991) Flexible sexism. *Environment and Planning D: Society and Space* 9.1, 31-57.
- McCormick, M. (2001) *Origins of the European economy: communication and commerce AD 300-900*. Cambridge University Press, New York.
- McDowell, L. (1983) Towards an understanding of the gender division of urban space. *Environment and Planning D: Society and Space* 1.1, 59-72.
- McFarlane, C. (2010) The comparative city: knowledge, learning, urbanism. *International Journal of Urban and Regional Research* 34.4, 725-42.
- McFarlane, C. (2011) Assemblage and critical urban praxis. *City* 15.3/4, 204-24.
- McKinsey Global Institute (2012) Urban world: cities and the rise of the consuming class [WWW document]. URL http://www.mckinsey.com/insights/urbanization/urban_world_cities_and_the_rise_of_the_consuming_class (accessed 21 February 2014).
- Ong, A. and S.J. Collier (2004) *Global assemblages: technology, politics and ethics as anthropological problems*. Wiley-Blackwell, London.
- Park, R.E., E.W. Burgess and R.D. McKenzie (1925) *The city*. University of Chicago Press, Chicago.
- Perec, G. (1974) *Espèces d'espaces*. Galilée, Paris.
- Pirenne, H. (1952 [1925]) *Medieval cities: the origins and revival of trade*. Princeton University Press, Princeton, NJ.
- Pred, A.R. (1973) *Urban growth and the circulation of information: the US urban system, 1790-1840*. Harvard University Press, Cambridge, MA.
- Purcell, M. (2006) Urban democracy and the local trap. *Urban Studies* 43.11, 1921-41.
- Rankin, K.N. (2011) Assemblage and the politics of thick description. *City* 15.5, 563-69.
- Reades, J. (2010) The place of telecommunications: spatial decision-making by firms in the age of global communication. Unpublished PhD thesis, Bartlett School, Department of Town and Country Planning, University College, London.
- Renaud, B. (1979) *National urbanization policies in developing countries*. World Bank, Washington, DC.
- Robinson, J. (2004) In the tracks of comparative urbanism: difference, urban modernity and the primitive. *Urban Geography* 25.8, 709-23.
- Robinson, J. (2006) *The ordinary city: between modernity and development*. Routledge, London.
- Robinson, J. (2011) Cities in a world of cities: the comparative gesture. *International Journal of Urban and Regional Research* 35.1, 1-23.
- Roweis, S.T. and A.J. Scott (1978) The urban land question. In K. Cox (ed.), *Urbanization and conflict in market societies*, Maaroufa, Chicago.

- Roy, A. (2009) The 21st-century metropolis: new geographies of theory. *Regional Studies* 43.6, 819-30.
- Roy, A. (2011a) Slumdog cities: rethinking subaltern urbanism. *International Journal of Urban and Regional Research* 35.2, 223-38.
- Roy, A. (2011b) Urbanisms, worlding practices and the theory of planning. *Planning Theory* 10.1, 6-15.
- Roy, A. and A. Ong (2011) *Worlding cities*. Wiley Blackwell, London.
- Sampson, R. (2012) *The great American city and the enduring neighborhood effect*. University of Chicago Press, Chicago.
- Sassen, S. (1991) *The global city: New York, London, Tokyo*. Princeton University Press, Princeton.
- Sassen, S. (2008) *Territory, authority, rights; from medieval to global assemblages*. Princeton University Press, Princeton, NJ.
- Saunders, P. (1981) *Social theory and the urban question*. Hutchinson, London.
- Scott, A.J. (1980) *The urban land nexus and the state*. Pion, London.
- Scott, A.J. (1988) *Metropolis: from the division of labor to urban form*. University of California Press, Berkeley.
- Scott, A.J. (2001) Globalization and the rise of city-regions. *European Planning Studies* 9.7, 813-26.
- Scott, A.J. (2011) Emerging cities of the third wave. *City* 15.3/4, 289-381.
- Simone, A. (2004) People as infrastructure: intersecting fragments in Johannesburg. *Public Culture* 16.3, 407-29.
- Slater, T. (2013) Your life chances affect where you live: a critique of the 'cottage industry' of neighbourhood effects research. *International Journal of Urban and Regional Research* 37.2, 367-87.
- Smith, M.E. (2009) V. Gordon Childe and the urban revolution: an historical perspective on a revolution in urban studies. *Town Planning Review* 80.1, 3-29.
- Soja, E. (2010) *Seeking spatial justice*. University of Minnesota Press, Minneapolis.
- Sonn, J.W. and M. Storper (2008) The increasing importance of geographical proximity in technological innovation: an analysis of U.S. patent citations, 1975-1997. *Environment and Planning A* 40.5, 1020-39.
- Storper, M. (1997) *The regional world: territorial development in a global economy*. Guilford Press, New York.
- Storper, M. (2013) *Keys to the city: how economics, institutions, interactions and politics shape development*. Princeton University Press, Princeton, NJ.
- Storper, M. and A.J. VENABLES (2004) Buzz: face-to-face contact and the urban economy. *Journal of Economic Geography* 4.4, 351-70.
- Wachsmuth, D., D.J. Madden and N. Brenner (2011) Between abstraction and complexity: meta-theoretical observations on the assemblage debate. *City* 15.6, 740-50.
- Waldinger, R. and M. Bozorgmehr (eds.) (1996) *Ethnic Los Angeles*. Russell Sage Foundation, New York.
- Ward-Perkins, B. (2005) *The fall of Rome and the end of civilisation*. Oxford University Press, Oxford.
- Wheatley, P. (1971) *The pivot of the four quarters: a preliminary enquiry into the origins and character of the ancient Chinese city*. Aldine, Chicago.
- Wirth, L. (1938) Urbanism as a way of life. *American Journal of Sociology* 44.1, 1-24.
- World Bank (2009) *World development report: reshaping economic geography*. World Bank, Washington, DC.
- Zorbaugh, H.W. (1929) *The Gold Coast and the slum: a sociological study of Chicago's Near North Side*. Chicago University Press, Chicago.
- Zucker, L.G. and M.R. Darby (2006) Movement of star scientists and engineers and high-tech firm entry. Working paper 12172, National Bureau of Economic Research, Cambridge, MA.