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## The Futures of the City Region

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# The Futures of the City Region

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## THE ASCENDANCE OF THE CITY REGION

Urban space is so replete with descriptions that Pandora's jar could not contain them. Like in the Greek myth of Pandora, the plethora of urban spatial descriptions is almost a curse on those who attempt comprehensive understanding. Today, the debates surrounding regional questions are more complex than ever in many dimensions. They are multidisciplinary and multi-scalar, and the phenomena under analysis are themselves more complex, as evidenced by an abundance of empirical and theoretical research in the last decades.

National planners are anticipating the growth of connected networks of metropolitan areas or 'megaregions' in America 2050 (DEWAR and EPSTEIN, 2007) and in Europe the reach of urban areas is conceived as spreading from city centres to the remote countryside across 'city-region' territories (RAVETZ, 2000). Urbanization, in this sense, is both an empirical and an imagined/discursive question. The focus of this special issue is whether and how the 'city region' constitutes a new departure in urbanization, and if so what are the key elements of that difference. Contributors have been invited to situate and debate these questions through the analysis of social and economic conditions and/or the governance narratives in the spatial contexts with which they are familiar.

This introduction presents a broad sweep of academic preoccupations with the city region and then selects a set of these debates, which link these to the socio-spatial interactions and the articles that follow.<sup>1</sup> Within this broad palette, two themes interweave through the introduction. First is the socio-spatial constructs and their relationship to empirical evidence of change in the physical and functional aspects of urban form. Second is what they mean for the spatial scales of governance. This latter theme is more closely tied to territorially based understandings of intervention and the changing set of political concerns. The articles in this issue, therefore, reply to the critics of 'new regionalism', who claim that it reifies the region over other geographical scales and neglects the effects of power and politics and wider processes of uneven development (LOVERING, 1999; CUMBERS *et al.*, 2003; JONAS and WARD, 2007).

As rich and suggestive as contemporary formulations are, so were those of Park and the Chicago School, or Weber, Simmel, Christaller, and Losch in their day and beyond. Earlier generations limited their focus on 'the city'. Yet the city, and urbanism, the study of cities, have changed radically since.<sup>2</sup> Megacities, megalopolises, mega-city regions, mega-regions, megapolitan regions, and polycentric metropolises all represent fundamentally new constructs and sometimes conflicting understandings of the patterns of urbanity. (Unless specified, the general term 'city region' is adopted to capture the broad sense of urban phenomena at metropolitan and larger scales). Following part of the specifications of LANG and DHAVALA (2005), it contains two or more metropolises in relatively close geographic proximity and functional connectivity with a population of ten million or more. These terms are contested and subject to debate.

The aim here is to step back and understand more deeply how one thinks about the debates themselves. The papers in this special issue reflect a range of current debates regarding representations of the city region. This introduction reviews some of those debates, and offers frameworks for interpretation. These frameworks link the multi-scalar and multi-temporal quality of city regions and their governance, and seeks to specify the mutually interactive bridge between them as 'spatial-institutional isomorphism'. This last term replaces a diffuse space and society combined by suggesting a mirroring that takes place between urban spatial constructs and the networked governance constructs that purport to manage them.

This special issue's authors synthesize several theoretical strands as well as examine the empirical evidence of physical transformations in the morphology of the city region in the 21st century. This special issue, in this respect, expands on our intellectual grasp of the theoretical debates through 'practical knowing', drawing on evidence from Europe, the United States, Australasia, and beyond.

What are the cognitive constructs that frame the debate? We embed the critical thinking of the contributors to this special issue in the 'spatiality' of city regions, a concept just beginning to be explored by topographical

geographers (AMIN, 2002, p. 386). In this respect we have deliberately drawn on critical thinkers from other socio-spatial disciplines in addition to economic and relational geographers. So doing draws together various understandings of different kinds of processes in order to examine how these 'play out' in various combinations of local and global contexts.

While space does not permit the unpacking of all of the debates, exemplary themes will be identified and the consequences pointed out about the different ways of thinking have for theory and analysis. In this, the meta-analytic method of 'frame reflection' advanced by SCHÖN and REIN (1994) is followed. There they applied a reflexive approach to understanding the bases ('frames') that underlie what they named 'intractable policy problems'.

This task is undertaken in the following four sections. A brief overview of the spatial definitions of city regions and the empirically based theories of spatial form is first offered. Then the discussion marks out how the city region has been imagined in the recent past in the form of linkages, gradients, and cartographic and geographic representations. The third and fourth sections pose the question of whether the new constructs of mega-regions and city regions will help to establish new institutional structures at these scales. The possibilities and challenges and the consequences for institutional design are looked at before, finally, setting out an agenda for future research.

### SPATIAL DEFINITIONS OF CITY REGIONS

When city regions were last discussed in *Regional Studies*, the focus was on the spatial distribution of trade, commuting, and capital flows between the inner core and the surrounding hinterland (PARR, 2005). The impetus for this special issue's exploration responds in part to the opportunity identified by SUDJIC (1992). He indicated that the means to grasp the new complexities of the '100 mile city' are lacking. This special issue seeks to understand the various meanings attached to city region in the 21st century, all of which recognize the multidimensionality and interactional nature of the construction of space (AMIN, 2002). As David Harvey indicates, 'Human beings have typically produced a nested hierarchy of spatial scales within which to organize their activities and understand their world' (HARVEY, 2000, p. 75). The contributors attest to the fact that the city region occupies a prominent place in that hierarchy, even as it is linked intricately to other scales.

This special issue is timely in that the United Kingdom's Economic and Social Research Council Cities research programme, the European Commission's POLYNET programme, and the US-based America 2050 initiative renew long-standing arguments that policy-making ought to be organized around more

expansively delimited city regions (MARVIN *et al.*, 2006; BUCK *et al.*, 2005; HALL and PAIN, 2006; CARBONELL and YARO, 2005). In the United States there is a renewed attempt to make 'megaregions' matter (DEWAR and EPSTEIN, 2007), despite a half-century elapsing since geographer Jean Gottmann's seminal analysis of megalopolis. In a significant contribution to the megalopolis debate, VICINO *et al.*'s (2007) analysis of the Northeastern Seaboard of the United States shows that fifty years on, megalopolis indeed does matter. While being more suburbanized than before, their analysis suggests that the old contrasts of space (city-suburb) and race (black-white) do not represent the 'five distinct clusters of urban places ... "affluent, poverty, Black middle class, immigrant gateway, and middle America"' (VICINO *et al.*, 2007, p. 344).

According to other mega-region analysts, what is different now in North America are three things: scale, the number of travel trips and resulting traffic congestion and pollution, and land per capita. For TEITZ and BARBOUR (2007) the 'real difference' is this third item, land consumption per capita. A fourth can be added, as shown by the contributors to this special issue, that the mega-region is a new spatial *and* temporal entity, a polycentric multi-metropolis of shifting and dynamic multi-scalar and multi-speed architecture whose developmental logics respond to a new set of conditions. Those city regions that can integrate service delivery for the greatest number of people via multi-modal transport links with widely available broadband and cellular connectivity are precisely those perceived to be enjoying social and economic prosperity. It would seem that the higher the velocities and bandwidths, and the greater the range of options, the greater the accessibility for global investors; as 'Euro-Lille', the proliferation of high-speed rail, a worldwide wave of major airport expansions, and booming North American city regions centred on internet trunk lines, such as Washington, DC, and the Texas Urban Triangle all attest.

The first two contributions in this special issue attempt to analyse and understand the spatial-temporal dynamics across the city region using the available statistical data on their case study areas. Robert Lang and Paul Knox focus their contribution on the spatiality of the changing city region morphology over time in the United States by using the US Census Bureau's metropolitan data and statistical categories to analyse the trends in metropolitan form, scale, and connectivity. Their analysis suggests that urban form has been 'stretched and reshaped', with new commuting routes determining patterns of spatial-economic integration. They postulate the existence of ten megapolitan areas containing nearly 70% of the US population. They use this spatial model to extrapolate existing trends to 2040 and to predict the emergence of an even larger trans-metropolitan urban structure – the 'megapolitan region'. They conclude 'that the fragmented

post-modern metropolis may be giving way to a neo-modern extended region where new forms of networks and spatial connectivity reintegrate urban space'.

Contributor Peter Hall arrives at a similar conclusion, drawing on his experience and research. He employs a spatial-temporal analysis by couching his look forward by looking backward, à la Bellamy. He looks back at the accuracy of H. G. Wells's predictions in 1901, concluding that history exhibits 'long-term steady-state trends', in spite of punctual occurrences such as war, economic depression, and technological innovation. He then examines environmental, demographic, technological, and economic parameters at the beginning of the 21st century before tracing their spatial consequences forward to 2050. He foresees that cities will retain their unique role of organizing the economy on account of the historical weight of infrastructure and alliances embedded there. Yet, new infrastructure in the form of high-speed trains will drive the transformation of spatial-temporal relations in metropolitan areas and further the dispersal of urban form, creating dynamic edge city places to compete with the central city cores as business hubs. He advises spatial planners to use these infrastructure opportunities as a key structuring element in regional spatial strategies.

These two analysts are decidedly spatial in their take on the city region, distinct from the other contributors, whose analytical perspectives are relational and governance oriented, as is discussed below. It is also worth noting that the metropolitan statistical data on which they rely only gives 'partial glimpses' of multi-scalar interactions (TAYLOR, 2004). The aforementioned articles differ in important ways, in their scans backward and forward in time. Their empirical research focuses on trade, commuting, and development/investment patterns. As sensible in their prognostics as their internal logics allow, the key drivers of economic growth in the future may turn out to be scarcity of prime materials, food, and fibre, including those considered free and public today: water and air. Forty years on, in view of the United Nations' population projections and increasing consumption of countries currently 'in development', economic and ecological conditions disquiet projections and cause questioning of fundamental assumptions taken for granted now. Yet they share the premise that the city region, whatever its composition and whatever future conditions portend, is and will continue to be the locus of societal activity of all kinds. City regions are the integrators of the spaces of flows.

The understanding of spatial-temporal analytics we wish to convey here extends the economic-based spatial models most often employed by regional and economic geographers (JONAS and WARD, 2007) and other disciplines, such as regional science and regional economics. The contributors apply conceptual and analytical models and data that consider not just social, political, and governance phenomena, which

JONAS and WARD (2007) call for to counterbalance the dominant economic regional approach. They add technological, infrastructural, and ecological networks for a more complete portrait that can guide future analytical modelling. Taken together, the contributors illustrate the dialectical interplay of theory and fact, time and space, and spatial and institutional, all of which depend on frames of reference – the conceptual models and mental images employed by scholars.

### IMAGINING THE CITY-REGION: A PLETHORA OF INTERPRETATIONS

Throughout the twentieth century, urban theorists have conceptualized city development through their own *Weltanschauung*. Each variant is intended to make the city region more intelligible and to help one grasp rapidly changing realities: world cities, global cities, megacities, metropolises, megalopolises, megapolitan regions, metacities, gig@cities. Sometimes these analyses are unitary, with a focus on a single concept or phenomenon, such as the city or the region, or a single aspect of it (WEBER, 1958; PARK, 1925; SCOTT, 2001; DAVIS, 2006). Others employ dualisms to convey the nature of place-space relations, such as the dual city of rich and poor, or black and white (MOLLENKOPF and CASTELLS, 1991; GOLDSMITH and BLAKELY, 1992).<sup>3</sup> Yet such constructs, whether unitary or duality, dialectic or dichotomy, can obscure more than clarify. The realities of the urban are complex and polychromatic. How to conceive the city region has intellectual and practical consequences: so one can investigate it effectively, inhabit it knowledgeably, and govern it sensibly.

Spatial analysts have been studying the internationalization of resource flows and their shaping of contemporary cities. Their findings persuasively suggest that, despite telecommuting and other real-time global interactions, the city survives as an important venue for business, social, and cultural transactions. Face-to-face interaction is still vital for securing joint collaboration for mutual benefit, particularly in high value-added situations and intimate personal settings (HALL, 2003; GRAHAM and HEALEY, 1999; MADANIPOUR *et al.*, 2001). Consequently, no matter how it is dissected or represented, the city region is still is what it and the city before it have always been, a specialized and concentrated 'transaction maximizing system' (MEIER, 1968). The city as a system had a rich if short tradition (BERRY, 1964; BOURNE and SIMMONS, 1978) and is one example of a schema used to convey complex urban conditions.

To illustrate the variety of mental schema used to describe city region conceptions, a review article posits three categories of '[spatial] models of regional definition', each with its characteristic spatial flows and examples (DEWAR and EPSTEIN, 2007, p. 116) (Table 1). The linkages model reflects a network

Table 1. *Spatial models of regional definition*

Framework	Spatial flows	Typical example
Linkages	Connections between points	Freight flow analysis
Gradient	Fluctuation of a phenomenon	Air and water pollution analysis
Bounded	Contiguous extent	Political jurisdiction, watersheds

understanding, the gradient model a topological understanding, and the bounded model equates to cartographic approaches. LAGENDIJK (2007) identified a three-fold framework as well, whose functional, structural, and voluntary categories reflecting geographical representations of the city region. These and other analysts struggle to devise 'spatial grammars' (MACLEOD and JONES, 2007). With so many approaches in circulation, the models seem as multiform as the regions themselves.

These differing conceptions, sometimes contrasting, sometimes complementary, have an underlying mental model or analytical frame. These models or 'imagined spatialities' simplify and synthesize one's knowledge of processes of change, and can be expressed using images and metaphors captured in theories and concepts. For example, in this issue, Peter Hall tackles images of cities in the historical past and those projected well into the future, and finds that city regions fifty years hence may not look so different from today. Ananya Roy's piece dissects numerous mental models that shape and constrain one's thinking about urban theory and, consequently, policy intervention. Robert Lang and Dawn Dhavale posit a new image, the 'megapolitan region', to replace not only megalopolis, but also awkward bureaucratic terminology such as consolidated metropolitan statistical areas.

Some theorists construct their models in supra-urban economic and social terms. This is expressed in studies on the transition from Fordism to flexible accumulation (SCOTT, 2001; HARVEY, 1989, 2001, 2003) and on the rise of a globalized network society (CASTELLS, 2000, 2001; SASSEN, 2001). Their analyses contrast images and metaphors of modern capitalism – hierarchy, linearity, rigidity – with those of postmodernism – networks, interactivity, flexibility. They follow a long tradition at the robust meeting point of the social and economic sciences, beginning with Marx and Engels and continuing through the German theorists Weber and Simmel, the Chicago School of Park, Burgess, McKenzie, and Wirth; through a wide range of German, French, Italian, British, and American theorizations which evince increasing degrees of contagion. Their common ground is built upon the metaphors and images they employ as their persuasive tools, such as concentric rings, mental illness, living bodies, and machines.

Political economy attempts to explain urban development as the interaction of micro and macro forces that manifest themselves as regimes or growth machines (MOLOTCH, 1976; STONE, 1990; SIMPSON, 2004). Other political scientists have offered socio-cultural explanations of city region development as either more networked or more hierarchical phenomena (SAXENIAN, 1994). The wealth of city regions' conceptualizations matches the fecundity of the researchers' analytical interpretations of their observations.

The relations between social (subsuming economic, political, cultural) processes and their built and virtual environments, formerly called space and society, are now increasingly conceptualized by economic and political geographers as the multi-scalar relations between institutions and environments (COX, 1998). As HARVEY (2000) notes, 'spatial scales are never fixed, but perpetually redefined, contested, and restructured' (p. 76). Networked infrastructures lower the transaction costs associated with multi-scalar interactions to the extent that the power of flows may exceed the flows of power (CASTELLS, 1989).

Yet as potent as the network metaphor has become, the latest complex modelling of urban environments reveals that networks are not the only form of representation. Fractals, cellular automata, space syntax, and others are compelling ways to comprehend them (GRAHAM, 1998; BATTY, 2005; TRANSPORTATION RESEARCH BOARD, 2004; MASSEY *et al.*, 1999). A challenge for empiricists and theorists is to resolve this plethora of interpretations, each conditioned by its own frame of analysis.

The theories reviewed above are among those that enrich one's grasp of cities and urbanization. A strength of each of them is that each posits an image (a concept, metaphor, story, rational structure) to sediment complex realities in a simplified way in a mental model. This strength nonetheless leads to a general critique of these theories: they tend to ignore those parts of reality that the theoretical construct and conveying image cannot capture, and thereby gloss over the complexity of the contemporary city region. Their limitations are compounded by dogma packaged in disciplines and ideologies, which when properly understood are one and the same.

Furthermore, as contributor Ananya Roy points out as a limitation to broader and more accurate understandings, much theoretical work on city regions is 'firmly' located in North America and Europe (Chicago, New York, Paris, Los Angeles). Her question is: Can the experiences of the global South 'reconfigure the theoretical heartland of urban and metropolitan analysis'? Some have already begun, such as the work compiled by Klaus Seberg, whose collection looks at Johannesburg, Mumbai, São Paulo, and Shanghai in the context of urban region spatial formation (SEBERG, 2007). Their findings show that the complexity and fragmentation of urban region space in the global south rivals if not exceeds that in the north, albeit in different forms.

Roy claims the one-dimensional preoccupation with the financial flows between certain 'global' cities produces the familiar dichotomies of 'overdeveloped versus underdeveloped' and 'growth versus dependency'. Experiencing the 'spaces outside' urban theory in the fast-growing cities of the global South (Shanghai, Cairo, Mumbai, Mexico City, Rio de Janeiro, Dakar, Manila) will not only widen out the sites from which urban theorists can theorize, but also introduce them to the 'heterogeneity and multiplicity of metropolitan modernities' that will dominate the 21st century. She sets a new agenda for the production of a variety of dynamic typologies and deep relations which she calls the 'worlding of cities'.

In efforts to address these issues and improve upon disciplinary knowledge, some scholars have been building new data-driven, cross-disciplinary theories, thus creating new images that may prove to supplement if not supplant old ones.<sup>4</sup> Yet, the very number and variety of investigative methods and theoretical underpinnings suggests that we are in the midst of a paradigm shift, where old ones (plural) have clearly broken down, and potential pretenders sprout in the race to become the dominant new paradigm (KUHN, 1961). Just as there has not been a single dominant paradigm in the past for city regions – regional science competed with the descriptive approach of Patrick Geddes, for example – there is clearly not one paradigm that is emerging now as dominant.

Amidst all this good work, is something fundamental lost? Is there a perspective on city region space–society relations in all its manifestations that current scholarship is pointing toward but not yet hit the mark? From this point of view, is it surprising that metropolitan and regional governance debates are also scattered across the intellectual map, as vertical government paradigms based on the city (understood as a discrete municipal jurisdiction) and the nation-state weaken in the face of globalization, networks, and city regions?

### THE REGIONAL GOVERNANCE IMPERATIVE

The rise of global networks enabled by supranational administrations both governmental and corporate strongly influence and structure the management of urban life. The complex global transactions of finance and labour that both link and set cities apart create a 'transnational hierarchy of cities' and division of labour between cities at different levels (global, supranational, national) (SASSEN, 2000, p. 104; see also TAYLOR, 2004). Underpinning this superstructure, the 'geographical scaffolding' of capital accumulation includes physical connectivity via telecommunications and transport infrastructure, but also social networking connectivity (COUTARD *et al.*, 2005; BRENNER, 1999).

These new structures and interactions are thought to be eroding the 'entrenched relationships of "mutuality"' (BRENNER, 1999, p. 432) between cities and the nation-state and creating new 'geographies of power' with concepts of 'polycentricity', 'peripheral cities', and 'peripheralization' standing in contrast to the centrality of major cities in developed countries. SASSEN (2000) differentiates between cities on the 'inside' and 'outside' of the 'world market-oriented subsystem'. Places that fall outside the new grid of digital highways are 'peripheralized' (p. 113). These peripheral–central forces and counter forces accentuate the various divides marking the 21st-century city. These forces are channelled through infrastructures, ever and again at the forefront of reshaping urban space, and space–society interplay. Accordingly, city region governance activities are increasingly focused on strategic infrastructure.

City region governance is complicated by many factors, not the least of which being 'City regions share one characteristic: not one of them functions as a unitary actor' (SEBERG, 2007, p. 1). While it is questionable that 'mere' cities ever functioned as unitary actors, Seberg's more significant contribution refers to 'decisive power currencies' that governance manages. They are not just military or economic currencies. In this regard he refers to power deriving from the 'extreme asymmetries' between interacting actors in most if not all fora and arenas (SEBERG, 2007, p. 6). These asymmetries lead to instability and unsustainability – potent governance challenges.

One concomitant result, egregious in developing city regions, is that collective notions of social and built spaces – civic, public, commons, community – wither as a consequence of increasing separation and isolation (ALEXANDER, 2006). Finding common ground, a prerequisite for effective governance, becomes increasingly challenging for at least two fundamental reasons. First, urbanites are becoming ever more diverse through massive migrations. Second, disparities among income, education, and other defining social indicators are growing. Yet the evidence of increasing urbanization worldwide, and the unrelenting growth in the size of cities, points to the imperative of regional governance to solve these and other problems.

When we contemplate urban futures we must always do battle with a wide range of the emotive and symbolic meanings that both inform and muddle our sense of 'the nature of our task'. As we collectively produce our cities, so we collectively produced ourselves.

(HARVEY, 2000, p. 159)

This claim suggests that the collective production and governance of the urban region owes to the collective production of its images, a finding of CHRISTINE BOYER's *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments* (1994). Lewis Mumford's and Kevin Lynch's command of urban imagery reflects the same understanding of the

importance of the image of a city and city region. Humans have always used images to construct their understanding of space, urban or otherwise, as a precursor to actually constructing settled place.

What has changed today is the complexity and scale of the mega-city region, and its multiple intersections with virtual spaces and flows of globalization. This complexity and scale not only has clouded our image of the city (even as it has reinforced its centrality), but also has clouded our very ability to construct an image of the city region. This of course has direct consequences for the ability to govern one. If we cannot imagine, then we cannot manage. Can we be surprised to encounter, in this light, contributor Patsy Healey's questioning of the very possibility of city region planning and governance? 'What then is a "city region" and what is its value as a planning and governance concept?' Only after we answer this question clearly do we stand a chance to reply to her other challenge: the value of and justification for creating 'city region' institutional arenas. Can the city region claim, in her words, 'some kind of "integrated" policy attention?' Do we have a choice, as the city region becomes a sort of 'region state', filling the gap between cities and nation states (OHMAE, 1993)?

Healey focuses on the 'imagined regions' of North West Europe. She asks, 'who is doing the summoning up of the idea of a city region' in what arenas and to what purpose? Taking two case studies of England and the Netherlands, she finds, as expected, that attempts to 'bottle-up' the 'relational webs' of the urban life of metropolitan regions that are dynamic and ambiguous into a coherent 'concept of a relationally integrated urban space' have not mobilized the imagination of residents of that space. The concept engaged policy and government actors in both case study areas, nevertheless. In England it has engendered new networking and collaboration on metropolitan strategy development to capture funding from central government. Whilst in the Netherlands, with a stronger tradition of collaboration among levels of government, she discerned a new discourse of economic competitiveness that has 'opened up' the governmental alliance to focus on economic development and infrastructure priorities.

Ivan Turok picks up on emerging concerns raised by Healey and Wheeler about the neglected social and environmental dimensions of the contemporary city region concept. He discusses the dominant economic arguments for large or 'mega' city regions and draws attention to the conflict that can emerge between local needs and regional interests if a narrow policy agenda is pursued. He illustrates this argument with a case study from the UK's prominent Thames Gateway initiative east of London. It seeks to concentrate the supply of new housing in response to regional growth pressures, at a time when local communities need jobs, skills and improved services, rather than more housing

for incomers. The lesson for city region theory and practice is not to constrain the role envisaged for secondary cities and towns in relation to the core city. So, is mega-city region governance viable? Another take is from the point of view of politics. According to HARVEY (2000):

It is interesting to note how the figure of the city periodically re-emerges in political theory as the spatial scale at which ideas and ideals about democracy and belonging are best articulated.

(p. 239)

Is it true, however, that the city is the best urban container of our everyday lived experience, as Healey and Harvey attest? This assumption comes under increasing pressure, given globalization and attendant flows and movements at all scales. The metropolitan region, however, is still the locus of most daily experiences for most people: home, work, commuting, school, shopping, community and religious affiliations, recreation and pleasure, and so on.<sup>5</sup> This holds whether you are experiencing your own city region or when you happen to find yourself temporarily in another. This leads to the *networked politics of the metropolis*. Networked politics, a radical departure from the old dictum 'all politics is local', reshapes the boundaries of governance by the very networking processes of public management (AGRANOFF, 2007).

'Growth management' and 'spatial planning', terms in use in the United States and Europe, respectively, are the networked metro politics of urban development. Recent studies of city region planning document that it is increasingly being attempted by using flow management (linkage capacities, switching capacities at nodes) instead of or in addition to spatial management (urban growth boundary lines and green belts, development zones) tools (DEWAR and EPSTEIN, 2007; HALL and PAIN, 2006). This has led to new techniques of mapping of the spaces and conduits of city region flows and the production of descriptions of situations and places.

Taken further into the institutional sphere, it implies a relational approach to institutional design, and points to relational agency. Relational process mechanisms include coordination, collaboration, consensus building, and facilitation. Moreover, they inspire the redesign of fora and arena that best accommodate relational mechanisms. But will the transaction costs of city region democracy gain the political support and commitment necessary to respond to their problems and opportunities? In this moment of transition what occurs is both modes simultaneously: relational governance and hierarchical government. As a result conflicting and/or hybrid languages and styles are seen that provide obstacles for common understanding, much less common governance.

This is evident when efforts are examined to integrate sustainability into regional planning. In this

special issue contributing author Stephen Wheeler, as do Roy and Healey, also draws attention to the production of authoritative knowledge in the theorizing on sustainability. He evaluates the success of regional planning initiatives across Europe and North America and finds an inordinate gap between regional visions of sustainability and current practice. In most places, he finds weak metropolitan and city region governance with a singular preoccupation with coordinating economic competitiveness of the territory in response to perceived global forces. Given the rapid growth and coalescence of city regions into mega-regions in the foreseeable future, he identifies strategies to 'nurture' more effective planning for sustainability. These include ecological systems thinking to integrate actions horizontally and vertically across different spatial scales with proactive support from higher-level governments and coalitions of interest.

We observe that shifting flow patterns, indeterminate boundaries, and the multi-scalar properties of spatial conditions and institutional actions do not bode well for the type of institutional fixity that attends to spatially based levels of government, and even governance at a single scale. Part of the problem, as HALL and PAIN (2006) point out, is the 'mismatch between functional and territorial logics (p. 178).

Seberg's scepticism goes beyond Healey's, Wheeler's, and ours. He claims that massive and globally circulating 'capital and content flows are difficult to organize and cannot be regulated effectively, at least not by traditional instruments and strategies'. He goes on to say that 'regulation and control is [*sic*] in crisis' and furthermore that 'the term *governance* is in crisis' (SEBERG, 2007, pp. 6–7, emphasis in original). The real issues attendant to Seberg's view are twofold. First, regulation belongs to the language of the past related to more rooted entities, and thus can conflict with the logic of flows. Second, it points to the notion that there may be better mechanisms of regional or larger-scale governance than regulation. We note that the first is not necessarily so, as regulation depends on what is regulated, how, and by whom. These are questions of institutional design, that is, governance.

Yet, the very fact that capital and content are flowing freely and massively indicates effectiveness of some sort. In fact, the flows are regulated strictly by a variety of organizations, national and international in scope. We believe that a significant part of the problem radiates from the fact that there is a disconnect between the regulation of capital and content flows and the governance of city region development.

One such better mechanism for regional relational governance and planning is a contract. A contract stipulates for a fixed period of time and a determinate set of actors a work programme to be accomplished and a specific set of relations among the actors. Contracts are relational by definition, and offer a definite option to overcome regional governance difficulties (MOTTE,

2007). City region governance 'contracts' thus can alleviate the experimental nature of spatial strategy formulation at this scale, giving more certainty to what BALDUCCI (2005) calls a 'field of experimentation'. Experimental designers strive to hold parameters constant to gain credible results. In politics and policy-making, this can be interpreted as risk management. Contracts are designed to manage risk. They are relational means to establish obligations, rights, and responsibilities among the contracting parties. In the past, the spatial plan – especially the city general plan – coupled with institutionalized implementation instruments, such as zoning, was this contract.<sup>6</sup> What does this mean for the current circumstances? A new type of contractual spatial plan? Many metropolitan governmental associations and non-governmental entities already use contractual plans.

### SPATIAL–INSTITUTIONAL ISOMORPHISM

Contemporary analytical approaches to comprehending the city region, briefly sketched above, highlight one characteristic over all others: the deep and complex interplay between urban space and the processes that produce that space. The relational geographies documenting this interplay underscore the multiple scales, sites, and speeds of city region phenomena. The patterns of interactions in and among city regions, and between individuals and institutions in attempts to govern city regions, occur through networks in built and virtual environments. Many times they occur through the same networks. This reveals how institutionally networked space mirrors urban networked space, a phenomenon called here spatial–institutional isomorphism. Spatial–institutional isomorphism, particularly when understood as the interplay of spatial, institutional, and virtual network phenomena, may well reconfigure analytical approaches and reconceptualize space–society relations.

This is possible because the networking of institutions is now superposed on the networking of space, one providing a mirror image of the other. This stands to reason, as both networked institutions and networked space are mediated by the same networked infrastructures.<sup>7</sup> This holds for all institutions, whether governance, corporate, non-governmental, or mixed; as it does for all urban space, whether local, regional, global, or 'glocal'. As much empirical evidence and theoretical research is showing, these are increasingly multi-scalar in nature (NEUMAN, 2007). Focusing on a single scale such as the city or the city region has less relevance, as the European Union experiment in continental governance of spatial planning and territorial cohesion is revealing, through both policy initiatives and ESPON, the European Spatial Planning Observation Network. One implication is that governance, through institutional networks, acts on infrastructural

networks that are the eventual shapers (and shapes) of space at all scales. Another implication is for institutional design, outlined below.

A clear example of spatial–institutional isomorphism at a continental scale is identified in the fine study by HEIN (2004) of the polycentric European Union headquarters' network. The institutional network of the headquarters and field offices of the numerous European Union institutions is scattered yet well connected by intentional institutional design throughout the expanded Europe of twenty-seven nations. The European Union's polycentric institutional structure mirrors the polycentric spatial structure at the continental scale of the city regions of Europe. At the global scale a parallel observation can be made about the United Nations headquarters' network. While the its global headquarters is in New York (USA), the International Court of Justice has its seat in The Hague (the Netherlands), The World Bank in Washington, DC, the International Labour Organization (ILO), United Nations High Commissioner for Refugees (UNHCR), and World Health Organization (WHO) in Geneva (Switzerland), the United Nations Environment Programme (UNEP) in Nairobi (Kenya), United Nations Educational, Scientific and Cultural Organization (UNESCO) in Paris (France), the Food and Agricultural Organization (FAO) in Rome (Italy), and so on. The United Nations, as the European Union, spreads its institutional web by design across the global space it seeks to govern.

At the city region scale, institutional networks of governance are patterned by the polycentric space they occupy. In the United States it is common for city region associations, called Associations of Governments, to be engaged in some form of metropolitan planning and governance. They are constituted of hundreds of local government entities in many cases. A European equivalent is the Mancomunitat de Municipis of the Barcelona metropolitan area (Spain). It is not identical in that it combines the functions of the Associations of Governments with what in the United States is called a Metropolitan Planning Organization, responsible for metro transport planning. The San Diego Associations of Governments (California) is one American example that combines both.

Governance entities in many city regions are comprised of hundreds of jurisdictions and organizations of all types spread throughout their area. Examples include Envision Utah, Blueprint Planning in California and Houston (Texas), the Regional Plan Association of New York, the Thames Gateway London Partnership, and the Pla Estratègic Metropolità de Barcelona (now called the Pacte Industrial de la Regió Metropolitana de Barcelona). In city region economic production systems, firms and economic actors are also networked across urban space in social patterns that mirror urban patterns. The better they are networked, the better they perform (STORPER, 1993; SAXENIAN,

1994). These instances of spatial–institutional isomorphism open a window to view both institutional design for city region governance, and spatial design for planning and policy, as they grapple with the uncertainties and complexities of development in the future. Hall's evocative concluding essay, while not explicit about isomorphism, is suggestive of the future forms it may take, and the future issues with which they will have to contend.

## CHALLENGES FOR THE FUTURE

Understanding the complexity of the contemporary city region and the forces that shape it has proven too much of a challenge for a single mind or discipline – hence our collection of disparate and polyglot scholars and our focus on both city region spaces and their governance institutions. Examining space and governance at any scale in a serious way would employ a range of methods of network analysis that measure factors such as nodes, linkages, gateways, and switches. The present authors believe this could form part of the agenda for future research.

The points that follow – sustainability, learning, and governance – are brought together in what is seen as a new logic that should penetrate all aspects of studying and governing city regions. They build on the ideas outlined in the previous sections. They contrast with earlier approaches which were discipline- or sector-specific. Earlier approaches served regions poorly because they fragmented the whole into parts, among other reasons. Instead of analysis, many scholars and practitioners, cited by the authors in this issue as well as in this introduction, are finding that evolutionary and emergent approaches that explicitly avoid a single hegemonic logic seem to be serving, or have the potential to serve, city regions better.

One way to integrate these understandings is via sustainability as a learning endeavour (MEPPEM and GILL, 1998), and governance as a learning endeavour. These come together in sustainability as a governance-learning effort (JOHNSON and WILSON, 1999). This type of governance learning is emergent, evolving from the collaboration of a wide variety of interests (INNES *et al.*, 1994; HEALEY, 2006). The brief remarks below illustrate this approach further.

A key governance concern imperative for the 21st century is sustainability. Stephen Wheeler indicates in this issue that sustainability is a quiet concern, overshadowed by economic development and competitiveness at the regional scale. Without entering the debate, selected propositions can be ventured that situate sustainability within the discourses about the city region.

There is an underlying concern about the long-term consequences of prevailing settlement patterns and the 'lock-in' they signify in terms of unsustainable practices. 'Lock-in' because these patterns are instantiated in institutional patterns and practices, as delineated above,

following the philosophical underpinnings of LEFEBVRE (1991). As Wheeler suggests, city regions lack a coherent framework and supportive metrics for promoting sustainability. Moreover, images and models of a truly sustainable city region have not yet begun to populate the collective consciousness.

Another general concern is the extent to which regions can 'learn' to govern themselves, to develop sustainably, to distribute equitably, and so on. The 'learning region', with its direct implications for most of the issues addressed in this introduction as well as by the contributors, has been a conceptual frame for fifteen years (STORPER, 1993; FLORIDA, 1995; RUTTEN and BOEKEMA, 2007). Storper found that dynamic production regions 'which are leaders of international trade, [and] continually re-define the best practices' owing to their 'intricate social division of labor' (STORPER, 1993, p. 440). In other words, the regions learn, and thus innovate, to maintain their competitive advantage. Florida takes the concept further by applying it to all knowledge creation-related activities, and situates it in the city region. 'Learning regions provide a series of related infrastructures which can facilitate the flow of knowledge, ideas, and learning' (FLORIDA, 1995, p. 528). For Florida, knowledge infrastructure networks are central, and as such serve as predecessors to necessary conditions for effective regional governance, a finding underscored by a study of thirteen California regions (INNES *et al.*, 1994).

Just as asymmetric distributions of wealth, resources, impacts, and so on form the basis of social equity considerations as a part of sustainability; Phillip Cooke identifies a shortcoming in learning region schema. He identifies it as 'asymmetric knowledge'. Different actors in the region have different levels and different types of knowledge. Cooke sees it as an 'epistemic' problem, which is posed here as ripe for 'frame reflection' (SCHÖN and REIN, 1994). He further cites a review of two hundred studies on regional innovation systems whose conclusion was that regions improve their performance in innovation by 'redesigning' their knowledge boundary-crossing mechanisms, or 'bridging social capital', following PUTNAM (2000) (COOKE, 2007, pp. 184–185). In this one can trace the influence of J. D. Thompson, who posited that organizations expand their boundaries to capture uncertainties or threats in their environment in order to bring them under their control (THOMPSON, 1967). Another point of Cooke's is that discovery, change, and in the end, learning, are not so much products of 'learning' as of 'unlearning' (COOKE, 2007, p. 187). In all instances, regional learning is essential to the prospects of regional governance, development, and evolution. Yet, to portray learning as regional implies collective action, and so is linked to governance.

This special issue provides the opportunity to monitor, interpret, and reflect deeply on changes in socio-spatial relations in city regions. Is a new urban

landscape really emerging? If so, are the terms 'urban' and 'landscape' even appropriate? Are the ways in which humans individually and their ever-different and ever-changing groupings inhabit place becoming untethered, or will our place-based and community-enriched genetic code still be appropriate for the 21st century?

Looking as far forward as several of the contributing authors, especially Hall and Lang and Knox, and questioning the very essence of city regions and how they are constructed and managed, as Roy, Healey, and Wheeler have done, invite radical reflection. If we are truly to be sustainable in the future, changing city region scale urbanism and governance practices invites radical rethinking, a challenge that has been laid down for this special issue's authors, who in turn have extended them to you the reader.

## NOTES

1. Three special issues in 2007 of *Regional Studies* and the *International Journal of Urban and Regional Research* devoted to understanding the region and regional studies more generally are especially pertinent to gain a background on which our arguments – specific to the city region – are framed: PIKE (2007); JONAS and WARD (2007); and PIKE *et al.* (2007).
2. Another, traditional meaning of urbanism refers to urban planning and design practices to shape the physical urban development of cities, a topic left unexplored in this issue.
3. These dualities are well represented in urban conditions today: 2.5 billion living on less than US\$2 per day, scores making more than 2.5 billion dollars a year. Life expectancy around forty years in some African nations; life expectancy over eighty years in several Mediterranean nations. Slums and mansions side by side. Digital divides, North–South divides, East–West divides, First and Third Worlds, global cities on a planet of the slums – all coexisting in urban space. Extremes, and contrasts between them, are not only commonplace descriptors, they colour our conceptual palette as well.
4. A number of authors for this special issue have been selected using this criterion.
5. HARVEY (2000, p. 60) makes the observation that most nation-state boundaries were drawn between 1870 and 1925. This is coincident with the rise of the first true metropolitan regions, such as London, Paris, Berlin, and New York.
6. The Local Area Agreements, negotiated between national government in England and the Local Strategic Partnerships (LSP), representing key public and private actors, are one example of a contract which has supplanted the traditional land-use development plan. In return for funding, the LSP agrees to deliver national policy priorities at the local level to agreed standards.
7. The institutionalist perspective that has emerged in governance studies acknowledges the role of agency, rules, and norms that constitutionally structure interaction in social contexts. Institutions have become the media

through which most human agency occurs. Institutions have the resources and means of interactivity that extend individual agency across social space and time.

Moreover, they have the most wherewithal to create, extend, and use networked infrastructures to perpetuate themselves.

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