Polycentric Development and Metropolitan Governance

Simin Davoudi[*]

I would like to talk about two things: firstly, the notion of polycentric development and what it means at different spatial scales, but mainly focusing on the regional or inter-urban scale; secondly, the role of governance in facilitating the development of polycentric urban regions. But before that let me remind you of two significant milestones that we have witnessed since we have entered the 21st century. The first one is that the 21st century is the first *urban* century. Before 1850 there was no society that could be defined as predominantly urbanised, and by 1900 only Britain could be so regarded. Today, half of the world's 6 billion population are urban dwellers. Moreover, the developing countries have begun to urbanise more rapidly than the industrial nations did in the heyday of their urban growth. It took London 130 years to reach the 8 million population mark; Mexico City did that in thirty years. So, for the first time in history more people live in urban than in rural areas. In Europe, the ratio is already four out of five.

The second milestone is that for the first time the world urban dwellers form part of a single *networked* globe. Cities world wide are increasingly networked in complex systems of global interaction and interdependence. The information revolution has led to what Manuel Castells calls "time-space compaction" and the emergence of "space of flows". However, contrary to the earlier prediction this does not imply the death of distance. On the contrary, advances in telecommunication have not significantly reduced the importance of face to face contacts in social and business interactions. Neither have they diffused the forces of agglomeration. Population and economic activity continue to gravitate to major urban centres, often leading to a

[*] *Simin Davoudi, Professor of Environmental Policy and Planning, School of Architecture, Planning and Landscape; Director of Social Systems, Institute for Research on Environment and Sustainability (IRES), Newcastle University, United Kingdom.*

relentless growth of cities, as is evident in cities such as Dublin and Milan, and even more strikingly Madrid.

At a larger scale, agglomeration forces have also led to the creation of what Jean Gottmann famously called *megalopolis*, referring to a constellation of 600 miles of contiguous areas in the East Coast of America running from Boston in the North to Washington in the South. Doxiadis, the famous Greek urbanist, went even further in his attempt to explain the expanding scale of urban growth and the coalescence of metropolitan areas. He suggested that we would soon live in *ecumenopolis* or the world city. Although his vision was more of a poetic vision, it does resonate with contemporary reality when you look at areas such as East Asia with Beijing, Seoul, Tokyo urban corridor which transcends national boundaries and stretches almost contiguously along a 1500 km strip of highly networked and densely populated land with a maximum of 90 minutes air travel time. At the level of Europe, the agglomeration forces have led to the uneven development of the European territory, where a prosperous core stands against an underdeveloped periphery. This core-periphery conception of the European space has been captured in a number of metaphors such as "European megalopolis", "golden triangle", "the blue banana", and more recently the "pentagon".

The term pentagon was coined in the European Spatial Development Perspective or ESDP, which is a strategic document published in 1999 by the EU informal Council of Ministers for Spatial Planning. Although it is not a binding document, it has had a significant influence on spatial strategies that have since been produced in many member states. The pentagon refers to an area defined by the metropolises of London, Paris, Milan, Munich and Hamburg. Although it covers only 20 percent of the EU-15 territory, it generates 50 percent of its Gross Domestic Product (GDP) and is home to 40 percent of its population and 75 percent of its research and development investment. It is seen in the ESDP as the only economic zone which can compete effectively in the world market. So, the main thrust of the ESDP is to promote the creation of other zones of globally significant economic growth. The idea is that such a strategy would lead not only to a more competitive Europe, but also a more socially cohesive and spatially balanced Europe.

The spatial strategy that underpins this objective is polycentric development. By promoting polycentricity at the EU level, the ESDP aims to challenge the core-periphery image of Europe and promote a more balanced territorial development,

which has been captured in yet another metaphor called "a bunch of grapes". It is then argued that such growth zones can be developed by promoting polycentricity at the regional level, i.e. by developing polycentric urban regions or PUR for short. PURs are defined as regions with three or more historically and politically separate cities which do not have strong hierarchical ranking and are located in reasonable proximity to each other, and which, more importantly, have a significant functional interconnection and complementarity. Several examples of PUR have been cited, such as the Rhine-Ruhr area in Germany, which presents a sharp contrast to the Brandenburg area where Berlin is clearly dominant. Other examples include the Flemish diamond in Belgium and the Padua-Treviso-Venice area in Northern Italy.

Outside Europe, Southern California and the Kansai region in Japan are mentioned as examples of PUR. But the classic example of PUR is Randstand in Holland, consisting of a ring of four large cities around an area of farmland and water called the Green Heart. Each city thrives on a different yet complementary economic basis. Amsterdam benefits from proximity to Schiphol Airport, tourism and finance. Utrecht has the service sector and nice surroundings. The Hague is the seat of government and Rotterdam lives off its port. The Randstand is not an administrative or political unit but given the proximity and interactions amongst its constituent cities it has been promoted, for a long time, by the Dutch planning community as a single coherent region, or indeed as the European Delta Metropolis capable of competing with Paris and London.

However, despite these examples, the conceptualization of polycentricity at a regional level is still at developmental stage. Its definition, for example, is problematic at least on two accounts. Firstly, what is a reasonable proximity or commuting distance? Is it Patrick Geddes' one hour rule of thumb? Or, is thirty minutes, forty minutes, 45 minutes as others have suggested? Secondly, how do we measure functional interconnections? The common criterion is labour market flows. But, this seems increasingly inadequate, as I will elaborate later on. Other exchanges such as the inter-firm flows of goods, information and know-how are notoriously difficult to measure as it has been shown by a recent Interreg project called Polynet. In addition, as a normative agenda, which is how the ESDP sees it, it raises a number of questions: Is PUR a panacea for solving regional problems? Is it a more sustainable form of managing urban growth? And if so, what kind of policy intervention can facilitate the development of a PUR?

Although these questions are yet to be addressed, the notion of polycentric development has already provided a powerful political discourse for promoting both economic competitiveness and spatial equity. In fact, it has come to be seen as the spatial manifestation of the EU territorial cohesion agenda. At the level of member states, i.e. at the national level, it is used to challenge the polarising effects of agglomeration economies and the resulting regional disparities. In Ireland, for example, the economic boom of the last decade, which has turned the country into one of Europe's star performers, has mainly gravitated to the Dublin city region. The Greater Dublin Area is home to 40 percent of national population, 48 percent of National Gross Value Added (GVA), 70 percent of major company headquarters, 80 percent of government agencies, and 100 percent of financial institutions. So, although this economic success has contributed to polycentricity at the level of Europe as a whole, it has turned Ireland into a highly monocentric country.

In Ireland, the economic growth of Dublin is widely celebrated as the engine of the "Celtic Tiger". But it has also raised the alarm for policy-makers because firstly, its overheated economy has created a number of social and environmental problems which if left unchecked can disadvantage the competitiveness of Dublin itself. Secondly, this excessive growth has led to the widening of regional disparities. And this is partly because in Ireland, as in most other cohesion countries, only the major urban centres, particularly the capital cities, had the critical mass, the infrastructure, and the institutional capacity to absorb the EU resources and deploy them effectively. It is therefore not surprising to see similar trends taking place in the new member states which will be the main beneficiaries of the EU Structural Funds in the near future. In these countries, growth has already begun to gravitate towards capital cities such as Budapest, Prague, Tallinn, Riga and so on. Even Poland, which entered the post-socialist transformation with a well balanced urban system, has since experienced growing regional disparities.

In combating such trends many national spatial strategies have drawn explicitly or implicitly on the concept of polycentric development to promote functional interconnections between the second tier cities that do not have the critical mass to be globally or nationally competitive. Again Ireland is a potent example, where a number of neighbouring cities in the South-West, branded as Atlantic Gateways, are encouraged to pull their resources together and develop a polycentric urban region and hence increase their chance of becoming a new zone of economic growth and a counterbalance to Dublin. But let me emphasise one point here. The emphasis in the

Irish National Spatial Strategy is put on maximizing endogenous potential of these cities rather than redistributing resources from Dublin. I think that is a very important point in terms of the new regional policy. Similarly, in the UK, the concept of polycentric development has underpinned what is called the Northern Way Initiative, which is a coast to coast megalopolis with a 130 mile M62 corridor at its core and taking on 8 core city regions. The idea here is that by developing a coherent functional space, the area will become more competitive and the £29 billion productivity gap between the North and the South of the country will be closed.

However, when it comes to implementing the polycentric strategy, the most critical elements are the development of economic links and functional interactions and complementarities, because without these a PUR would simply represent a morphological concept rather than an integrated functional space. In Scotland, for example, despite the fact that development has spread along an East-West corridor, dominated by well connected cities of Edinburgh and Glasgow, it is not evident that the area is a fully integrated single region.

So the critical question for policy-makers is how to forge functional synergies between neighbouring cities of a potential PUR. There are two key areas where policy intervention is particularly useful. One is often obvious and relates to the development of "hard infrastructure" such as physical accessibility, efficient transport and telecommunication networks between the constituent cities. The other area which attracts less policy attention relates to the development of what we may call "soft infrastructure" and notably governing capacity and institution building. If cities are to pull together their resources and create synergies, they need appropriate forms of governance capable of coordinating their activities and providing a degree of leadership and strategic directions. However, there is a considerable mismatch between the strategies that are promoting polycentricity and the operation of the formal government structure. I am going to elaborate on this point by drawing on the current debate on city regions in the UK because although they represent a smaller than PUR scale, their governance principles are similar.

We all know that while governments operate on the basis of administratively defined boundaries such as communes, municipalities, boroughs, local authorities and so on, the activities of industries, businesses and households straddle such boundaries and take place in functionally defined areas. For example, 40 percent of the UK working population cross at least one local authority boundary during their journey to work.

The figure rises for professional and skilled workers. And as I mentioned before, journey to work is not the only journey we make. People may live in one administrative area, work in another, send their children to school in a third, spend their leisure time in a fourth, use the services of a hospital in the fifth and so on. So, making strategies on the basis of administrative boundaries does not make sense and will not be effective. But what is the alternative? How can administrative boundaries and wider functional areas be co-aligned? Well, this is currently the subject of a heated debate in the UK. The debate is mainly focused on the city region and particularly large metropolitan cities which have an extensive catchment areas, but their authority is often confined to a much smaller administrative jurisdiction.

Birmingham in the West Midland Region of England is a potent example. The boundary of the municipal city is a political and administrative definition; the one which demarcates the metropolitan city is a physical definition based on a contiguous built up area; and the line which delineate the city region is an economic definition based on the travel-to-work area. Their mismatch makes Birmingham a classic example of a metropolitan area which has evolved from the coalescence of smaller independent settlements into a large contiguous built up area, but where no local authority has administrative control over the whole area and even less so over the city region. To overcome this fragmentation it is crucial that a city-region approach to strategic planning is adopted and this of course requires a better co-alignment of governance and functional geometry. However, this does not mean that a single all powerful city region authority should take over the jurisdiction of the whole area. It is even more perverse to argue for such an authority at the level of polycentric urban regions. There are a number of reasons why such a governance structure is not desirable or effective.

Firstly, it is politically sensitive and creates unnecessary rivalries and resentment, especially amongst smaller cities which might fear loosing their autonomy and identity. Secondly, the geography of functional areas varies, depending not only on the methodology which we apply to define them, but also on different functions and markets. For example, travel-to-work patterns may be different from the patterns of travel-to-shopping and entertainment centres. Often for less frequently used services the catchment area of metropolitan cities is much more extensive than for the daily travel-to-work. This is evident from a recent research undertaken by Brian Robson at Manchester University which shows the wider spread of the cultural draw of Manchester's theatres. Although the majority of customers are drawn from the North

West Region, there is hardly a single local authority in England and Wales which does not have at least one person attending a performance at one of Manchester's theatres. Thirdly, even within one type of market, such as the labour market, the catchment area is markedly different by different occupations. Looking at two sides of the spectrum here, one can see that it is substantially larger for professional and managerial workers than for semi-skilled and routine workers. Fourthly, much of the debate and research on functional regions, including the research I mentioned, is dominated by economic imperatives with little attention to the environmental footprints of metropolitan cities. For example, the movement of waste from metropolitan cities such as Greater Manchester to the rest of the region has a catchment area of its own whose boundaries do not necessarily coincide with other functional boundaries. Furthermore, the flows are always in opposite direction to the dominant economic flows. Fifty eight percent of municipal waste generated in Greater Manchester is exported to the nearby town of Warrington, a small city which is locally known as the dustbin of the North West, while about a quarter of the waste travels even further to Yorkshire.

To sum up, there is no single overarching city region boundary which can catch all functions and services, and hence there is little justification for creating a single city region authority. It is even less justifiable to have such a formal government structure for polycentric urban regions. The fuzziness of the functional areas means that any tightly drawn administrative boundaries, no matter how big or small, will become inadequate for one type of function or another. Sooner or later they will also become irrelevant as these patterns are dynamic and they rapidly evolve. It thus follows that imposing a fixed structure of government over such fuzzy boundaries will do little for effective governing of the complex and dynamic functional interconnections between cities and their hinterland. Similarly, it will do little for forging synergies and cooperation and developing polycentric urban regions.

Instead, what is needed is a variable geometry of more informal and flexible inter-municipal collaborations for different functions and services. In fact, such collaborative arrangements, based on multi-agency partnerships and flexible forms of networking at different spatial scales, are already happening across Europe and have become the hallmark of the transition from government to governance. They represent alternative models of managing collective affairs which are based on horizontal self-organisation amongst mutually interdependent actors from both governmental and non-governmental sectors.

Hence, although the evidence on the degree of functional polycentrism across European regions is not yet conclusive, the move towards *political polycentrism* is already evident from the proliferation of multi-level forms of governance. Most of these initiatives have been bottom up. In Birmingham, the case I mentioned earlier, there is now a concerted effort to set up partnership between existing local authorities. Lyon in France and Frankfurt in Germany are other pertinent examples of such trends. However, these informal arrangements are likely to be more effective and command more credibility if governments provide appropriate incentives to encourage their establishment and increase their chance of being sustained over time.

Now, let us go back to the question I posed earlier: How can policy intervention facilitate functional interconnections between neighbouring cities of a potential polycentric urban region? Well, as far as the soft infrastructures are concerned the answer is: by incentivising inclusive inter-municipal coalitions for different functions across the PUR geometries. To conclude, collaboration is the hallmark of effective governance, and effective governance is a prerequisite for the development of polycentric urban regions.[1]

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[1] *More detailed discussions of these issues and an extended bibliography can be found in Davoudi, S. 2003, "Polycentricity in European Spatial Planning: from an Analytical to a Normative Agenda,"* European Planning Studies, *11(8), pp. 979-999.*