## IS THE GREATER SOUTH EAST A MEGA-CITY REGION?

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This paper presents a new geographical-planning concept: the Mega-City region, object of a major new EU-funded research project, POLYNET (Section 1). It presents some technical building blocks, importantly explaining that this is a concept dependent on functionally-defined urban areas, not conventional administrative units (Section 2). It introduces a suggested South East Mega-City region, the biggest of eight such regions studied in the POLYNET project (Section 3). It then presents key findings on the region: on population (Section 4), employment (Section 4), commuting (Section 5), and the measurement of polycentricity (Section 6). It then presents a summary account of attempts at strategic planning of the region over the past half-century (Section 7) before a more speculative discussion of future options for its planning and governance (Section 8). The main conclusions are then summarised (Section 9).

This paper makes use of POLYNET findings and data, although the views presented are the author's own and not those of the POLYNET team. The paper does not necessarily represent the views of the Institute for Public Policy Research (ippr).

### 1. The Mega-City Region: A New Spatial Concept

South East England is an example of an emergent urban phenomenon in course of formation in the most highly-urbanised parts of the world: the *Polycentric Mega-City-Region*. It arises through a long process of very extended decentralisation from big central cities to new to adjacent smaller ones. It was originally identified in Eastern Asia, in areas like the Pearl River Delta and Yangtze River Delta regions of China, the Tokaido (Tokyo-Osaka) corridor in Japan, and Greater Jakarta (Hall 1999, Scott 2001). It is a new form: a series of anything between twenty and fifty cities and towns, physically separate but functionally networked, clustered around one or more larger central cities, and drawing enormous economic strength from a new functional division of labour. These places exist both as separate entities, in which most residents work locally and most workers are local residents, and as parts of a wider functional urban region connected by dense flows of people and information along motorways, high-speed rail lines and telecommunications cables carrying the "space of flows" (Castells 1989). It is no exaggeration to say that this is the emerging urban form at the start of the twentieth-first century.

Mega-City Regions are becoming a reality in Europe. The POLYNET project, funded by a €2.4 million grant from the European Commission under the Interreg IIIB (North West Europe) project, aims to analyse and compare the functioning of eight such regions: South East England, Belgian Central Cities, Randstad Holland, Rhine-Ruhr, Rhine-Main, Northern Switzerland, Greater Dublin and the Île-de-France.

A key feature of these regions is that, in different degree, they are all *polycentric*. The POLYNET study adopts a basic hypothesis that they are becoming more so over time, as an increasing share of population and employment locates outside the largest central city or cities, and as other smaller cities and towns become increasingly networked with each other, exchanging information which bypasses the large central city altogether. However, this is simply a hypothesis to be tested in the course of the study. So far it is clear that the eight regions are polycentric to very different degrees: Randstad Holland and Rhine-Ruhr are quite

polycentric because no one city dominates, while in Île-de-France, Rhine-Main and Northern Switzerland one city (Paris, Frankfurt, Zürich) still has a primary role and in Dublin there is no other centre of note.

These emerging findings are significant, because there is increasing stress in a European context on the active promotion of polycentricity as a policy objective. The European Spatial Development Perspective (ESDP), finally agreed by EU Ministers of Planning in Potsdam in 1999, has proposed a central policy objective of promoting greater polycentricity in the European urban system. But this central term, polycentricity, needs defining. At the EU level, in the ESDP, polycentricity means promoting alternative centres, outside the so-called "Polygon" bounded by Birmingham, Paris, Milan, Hamburg and Amsterdam (Hall 1993, Hall 1996) – into "gateway" cities outside North West Europe, many of which are national political or commercial capitals, serving broad but sometimes thinly-populated territories such as the Iberian peninsula, Scandinavia and East Central Europe (Hall 1993, Hall 1995a, 1995b, Hall 1996, Hall 1999, Hall 2003). But at a regional level, polycentricity refers to outward diffusion from major cities to smaller cities within "Mega-City-Regions", reconfiguring different levels of the urban hierarchy (Christaller 1966 (1933)): lower-level service functions are dispersed out from higher-order central cities to lower-order cities (Llewelyn Davies 1997), thus altering Castells' "space of flows". Recent research (Kloosterman and Musterd, 2001; Ipenburg and Lambregts, 2001; Taylor et al 2003) suggest that polycentric urban regions in North West Europe may exhibit features that conflict with ESDP sustainability objectives. And this may occur in parallel with increasing monocentricity in the developing peripheral regions of the EU (especially the accession countries which joined in May 2004) as capital and labour increasingly migrate to a few leading cities and lead to regional imbalances between core and periphery within each country.

POLYNET is at its half-way point. So far, only one of the four Research Actions is complete (and is reported below). It has been designed to achieve three objectives: to achieve precise definitions of the eight study areas; to present a statistical overview of each area, based on available Census and other statistical material, with a comparative concluding summary comparing the results; and to present preliminary conclusions about the degree to which each area could be said to be polycentric and/or was moving in that direction. This first Action was always conceived as an introduction to the research, using readily-available secondary materials to present a preliminary portrait and analysis. In this sense, it is necessarily superficial. This particularly applies to the third objective, the measurement of polycentricity.

This paper presents some key results – only just available – for the UK. It explores the proposition that there is now a Mega-City Region across much of the South East, whose primary characteristic is a network of interlinked cities, towns and urban centres. It does this by setting out a working definition, then examining population, employment and commuting data to explore the links, flows and degree of interconnection between different parts of the area.

#### 2. Basic Building Blocks: Functional Urban Regions, Mega-City Regions

POLYNET is based on conceptual building blocks allowing systematic comparison of urban areas from one country to another and from one date to another. It is important to stress that these are neither administrative units nor morphological (physical) units: they are functionally-based.

The basic building block is the *Functional Urban Region (FUR):* a functionally-defined urban region that reaches out beyond the physically-built-up area to encompass all the areas that have regular daily relationships with a core city. *FURs* comprise a *core* defined in terms of employment size and density, and a *ring* defined in terms of regular daily journeys (commuting) to the core<sup>1</sup>. FURs were then aggregated into the eight apparent *Mega-City-Regions (MCRs)* the project sought to examine. Here, the basic criterion was *contiguity*<sup>2</sup>.

For both individual FURs (and, by definition, for aggregate MCRs), the eight study area teams have assembled basic data on population, employment, and commuting (including cross-commuting between FURs in MCRs).

#### 3. The South East England MCR: Introduction to the Region

As defined for the POLYNET study, the South East England MCR occupies a huge area, over one-fifth of England, and contains nearly two-fifths of its population (Fig. 1). Stretching northwards for some 120 km from London and south-westwards as far as 180 km from the capital, it is dominated by the huge built-up mass – about 25 km in radius – of Greater London, bounded by the green belt that was placed around it after World War II as the result of the Greater London Plan of 1944 and by the M25 orbital motorway, also part of that plan but completed only in 1986. Most significantly, though, outside this central built-up mass are no less than 50 other significant towns forming cores of FURs, ranging in size from 70,000 to 300,000, which have shown consistent and strong growth in the last half century. Strong land use planning policies have kept them physically separate, but they have become functional interdependent. These policies have also progressively restrained growth nearer to London, effectively diverting it to more distant towns and cities. The original eight London new towns, started in 1946-50 and completed some twenty years later, are 35-55km from London; their three successors, started in the 1960s, are 80-130 km distant. The UK government's most recent spatial development strategy, published in 2003 (ODPM 2003), aims to concentrate growth in discrete towns along three major development corridors running north-north west, north-north east and east from London, and following new or upgraded high-speed train links and motorways.

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<sup>&</sup>lt;sup>1</sup> Cores: Using NUTS 5 units (the smallest units for which published data are generally available), define cores on the basis of: 7 or more workers per hectare\*, and minimum 20,000 workers in either single NUTS 5 unit or in contiguous NUTS 5 units. *Rings:* Using NUTS 5 units, where possible, rings are defined on the basis of 10 per cent or more of the residentially-based workforce commuting daily to the core¹. Where they commute to more than one core, allocate to the core to which most commuters go.

<sup>&</sup>lt;sup>2</sup> *Mega-City-Region:* Defined in terms of contiguous FURs, and thus similar to the so-called Consolidated Metropolitan Statistical Areas, CMSAs, used in the United States. Contiguity is the basic criterion.

Fig. 1: South East England MCR: Major Cities



Composition of the Region: 51 FURs

South East England thus contains no less than 51 separate FURs including London itself, which has a huge commuting ring with a radius averaging about 60 km from central London and overlapping with a number of the other 50, in a few cases completely surrounding them (*Fig. 2*). The great majority are however beyond the limits of the London FUR and constitute well-defined and generally-separate local commuting systems around cities and towns that vary downwards from 200,000 (Portsmouth, Southampton) to 100,000, with the majority in the 100-200,000 range. At the outer limits they tend to form projections along major highway and rail travel corridors such as Northampton (M1), Cambridge (M11), Ashford (M20), Bournemouth-Poole (M3/M27) and Swindon (M4). There are also two outlying FURs, not contiguous with the rest: Peterborough some 120 km north of London, and Colchester 80 km to the north-east. It was therefore decided to include them, first because as originally defined at NUTS 5 level they were virtually contiguous, and second because Peterborough plays an important role in spatial planning strategies both at national and regional levels.

The sub-regional distribution of these FURs is also highly significant: if one draws a north-south line down the region through the Bank of England, 32 FURs lie to the west and only 18 to the east of it. This division proves fundamental in understanding the region's functional structure: it clearly signifies that cities and towns to the west of London have developed as strong and

independent centres to a far greater degree than those to the east. It confirms a finding in an earlier study of the London economy (Arup 1996): that places to the east of London have developed as commuter satellites of the City of London, while places to the west have developed a more independent economic existence, reducing their commuter ties to London. This will emerge clearly in the region's commuting relationships.

Fig. 2 South East England MCR: Constituent FURs

