

Spatial planning in competitive polycentric urban regions: some practical lessons from Northwest Europe

Paper submitted to City Futures Conference, Chicago IL, 8 – 10 July 2004

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Abstract: Polynuclear urban regions tend to develop into functionally coherent metropolitan systems. It is often hypothesised that a regional polycentric (urban network) perspective of planning is advantageous to strengthen these systems' territorial competitiveness. This paper elaborates on this hypothesis by examining the potentiality of this perspective in three North West European regions. The major conclusions are that a regional planning perspective is advantageous indeed, but that it should be developed into a multi-scalar and multi-actor approach. However, the feasibility of a regional perspective is weak in the three regions and any attempt to promote these should 'start small'.

1. The concepts of polycentric urban region and urban network

The notion of polycentricity basically refers to the existence of a number of urban centres in a certain area. It derives its meaning however from the patterns and dynamics of functional interrelations and co-operation (versus competition) between these centres. Polycentricity can be observed on various levels of scale ranging from the world-wide network(s) of global cities to the local intra-urban scale (e.g. Davoudi, 2003; Taylor, 2004), but means different things or/and deals with different types of interaction and different types of co-operation and competition on different scales. This paper deals with the concept on the inter-urban scale within sub-national regions. A particular manifestation of polycentricity on this scale is based on the existence of "a collection of historically and administratively distinct smaller and larger cities located in more or less close proximity, the larger of which do not differ significantly in terms of size or overall economic and political importance" (OTB, 1999: 8). This paper conceptualises such urban systems as 'polycentric urban regions'.

The concept of the polycentric urban region has become popular since the 1980s (van Houthum and Lagendijk, 2003) and has gained widespread currency in debates of both academics (such as geographers and economists) and professionals in planning and policy-making. The ways in which academics and planners deal with this type of region differ. The empirical-analytical research by academics has so far most strongly focussed on interurban interactions, most in particular tendencies of coalescence of separate cities' functional markets such as housing, labour, economic production, culture, and leisure and social services. The major research question concerns the tenability of a spatial trend towards polycentric urban regions as "more or less comprehensive metropolitan systems" (Lambrechts and Zonneveld, 2003). Amongst planners and policy-makers, the debate on the polycentric urban region focuses on interurban co-operation, its strategic motives and joint action². These professionals

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² Heeg *et al.* (2003) distinguish between territorial integrated and territorially disintegrated co-operation. Territorial integrated cooperation links together cities and communities that are direct neighbours and thus linked in everyday interaction patterns. Territorial disintegrated co-operation is thematically oriented and deals with

focus on this type of region as an ‘actor’ in addition to a ‘space’ (Keating, 2001). Most often, the polycentric urban region as an actor aims at the strengthening of its position in the territorial competition. There is a growing awareness that cities and city regions have (re)gained primacy from national states as the loci of international territorial competition. Within the context of the “fundamental geographical reorganisation of capitalism, metropolitan regions develop into the motors of the world economy. These motors tend not only to be big, but also to be constantly growing bigger (Scott, 1996)”. It is often hypothesised that co-operation by cities and communities in a polycentric region is advantageous to frame policies and planning in order to compete with these metropolitan regions. The polycentric region as a whole is a more appropriate scale than the individual cities for policies to strengthen territorial competitiveness within the globalising economy: internal co-operation for external competition! Some commentators emphasise that polycentric structures have potential competitive advantages over metropolitan territories (Bailey and Turok, 2001; Camagni, 2001). Successful territorial co-operation at least demands the pursuing of specific goals that are common to all participants and the conviction by all that these goals can be achieved better by co-operation. This focus on the polycentric urban regions as ‘actor’ is usually placed within the metaphor of the urban network.

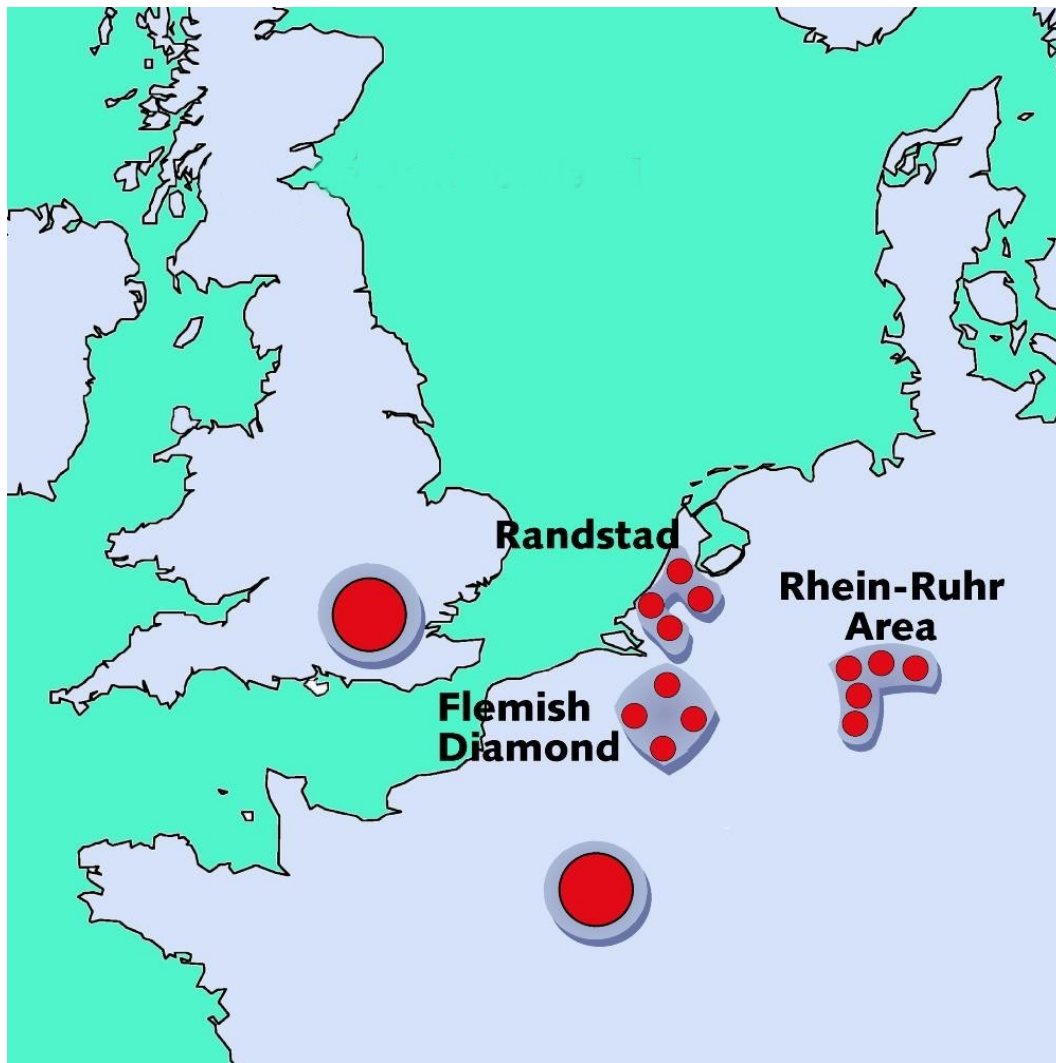
Despite the growing interest in the polycentric urban region, conceptualisation of polycentricity at this scale is at an early stage of development (Bailey and Turok, 2001; Kloosterman and Musterd, 2001). Understanding of its potential planning value is still limited, for planning in emerging polycentric urban systems involve “planning at a relatively new scale, based upon new starting points and taking aboard new strategic objectives” (Lambrechts, 2000). By reason of a lack of both theoretical and empirical knowledge, Capello (2000) for instance criticises the basic assumption by many planners that co-operation within regional urban networks stimulates growth and is advantageous to each city, community and interest group. To date, the concept of the polycentric urban network act in some existing planning documents, but these are mostly prepared by national planning agencies, are rather top-down in nature, and deal with the concept on a high level of abstraction. This paper aims to contribute to the debate on the polycentric urban network as a planning concept to strengthen regional territorial competitiveness by adopting a polycentric view. This exploration is largely practical and explorative in nature; it has little theoretical pretensions and does not present sophisticated statistical analyses.

2. The examined regions

The polycentric urban region as a spatial configuration is most widespread in Northwest Europe. Located at relatively close distance, the Randstad (the Netherlands), the Flemish Diamond (Flemish Region, Belgium) and RheinRuhr (North Rhine-Westphalia, Germany) are classic examples. Examples outside Northwest Europe are more scarce but exist as well, such as the Spanish Basque Country (van Houtum and Lagendijk, 2001) and the Padua-Treviso-Venice area in Northern Italy (Camagni and Salone, 1993). Outside Europe, the Kansai area in Japan (Batten, 1995) and the southern Californian urbanised area (Kloosterman and Musterd, 2001) in the USA are mentioned. This paper examines the three regions at close distance in Northwest Europe (Figure 1) in a comparative way.

specific issues important to all participating cities, for example the health city network (Capello, 2000). Obviously, this paper is on territorially integrated co-operation.

Figure 1: The examined polycentric urban regions



Source: OTB

The paper summarises some conclusions of the recently finished research project EURBANET. EURBANET was one out of 45 projects that together made up the transnational European programme INTERREG IIC. This programme aimed to support co-operation among public and private parties in regional planning. It was set up by the European Commission and subsidised by the European Regional Development Fund. The paper is chiefly based on contributions to EURBANET by research teams on the Randstad (Hoppenbrouwer, Meijers and Romein, 2003), the Flemish Diamond (Albrechts and Lievois, 2003) and RheinRuhr (Schmitt, Knapp and Kunzmann, 2003) that were brought together in a final report (see **Acknowledgements**)³. This report was edited by the Randstad team that represented the OTB Research Institute as leading partner of EURBANET.

³ In addition to the three regions that are compared in this paper, EURBANET also included Central Scotland. Being a very different context, this latter region was left out of the paper in order not to complicate the comparison too much.

Table 1: The Randstad, the Flemish Diamond and RheinRuhr in their national contexts

	Population in millions (1990s)	Share of national population	Share of national surface	Share of national GDP (1996-8)	Major cities	Share of regional population in major cities
Randstad	7,2	46%	25%	51%	Amsterdam, Rotterdam, The Hague, Utrecht.	28%
Flemish Diamond	5,3	52%	30%	58%	Brussels, Antwerp, Ghent	31%
RheinRuhr	11,1	16% (74%)	6% (61%)	17% (76%)	Cologne, Essen, Dortmund, Düsseldorf, Duisburg	30%

(): Share of RheinRuhr in the state of North Rhine-Westphalia

Sources: Lambregts, 2001; Statistical institutes of the Netherlands, Belgium and North Rhine-Westphalia.

The Randstad, the Flemish Diamond and RheinRuhr are all part of the core economic zone of Europe, specified by various concepts such as the ‘Blue Banana’ (Jobse and Musterd, 1994) or the ‘Pentagon’ (European Commission, 1999). Some authors suggest a trend towards functional integration of these three regions into one ‘transnational polynucleated macro region in the making’ (Dieleman and Faludi, 1998; Zonneveld, 2001) but there is little proof for that yet, so these three regions can still be considered independently. They are all major population concentrations within their country or state⁴. With over seven million inhabitants in the 1990s, almost half the Dutch population concentrated on just a quarter of the national territory, the Randstad is the most highly urbanised core region in the Netherlands. A similar conclusion can be drawn for the Flemish Diamond, where over half of the Belgian population is concentrated on less than a third of its national territory. Needless to say that its dominance within the Flemish Region (footnotes 4 and 9) is even considerably larger. Provided the large size of Germany and the presence of more large metropolitan and polycentric regions in this country, the figures of RheinRuhr in the national context are less impressive. Within the context of the federal state of North Rhine-Westphalia on the other hand, three quarter of its population is concentrated in RheinRuhr (Table 1). This concentrated population is in the same size-category as Paris/Île de France (10–11 million inhabitants in the 1990s), one of the two major metropolitan regions of Northwest Europe. In addition, the three regions are also economic ‘powerhouses’ within both their national/state contexts and the European context. Large concentrations of high-quality industrial, commercial, cultural and service activities generate a considerable share of the national or state GDP and GVA on relatively small territories.

All three regions fit the concept of polycentric urban region quite well. They are

⁴ Within the politico-administrative structure of the Netherlands, the level that overarches the Randstad is the national state. In the federal systems of Belgium and Germany there is an intermediate level, the Flemish Region and the state of North Rhine Westphalia respectively, between the polycentric urban region and the national state. This is not to say that the three polycentric regions are politico-administrative entities for themselves, which they are not.

morphologically and functionally urbanised areas that are spread over a few large cities (Table 1), some more medium-sized cities and a vast number of smaller towns and villages. These urban settlements are within close proximity to each other, although some distances appear to be large to bridge on a daily basis. None of the large urban centres can be characterised the primate city of its region; altogether they house only about 30% of the regional populations (Table 1). Not even Brussels, a five-fold political capital⁵ and home to two thirds of office floor space and almost half of the headquarters of the one hundred largest enterprises in the Flemish Diamond, has reached this status. The regions have become very specific cases of polycentricity over the past few decades since processes of urban de-concentration of both population and employment have caused further urbanisation of their landscapes, including the growth of new centres, and have given way to functional urban-rural patchworks.

3. Analytical framework

Basically, the paper assesses whether, to what extent and how a co-operative regional perspective, and a regional approach based on this perspective constitute a framework (network) for strategic planning and action to enhance the competitiveness of the examined polycentric urban regions. To that end, an analytical framework consisting of four subsequent steps is implemented in the paper. The first step focuses on the functional rationality of the region, i.e. the tendency of the region to develop towards a single functional entity. This tendency is a prerequisite for the topics that are explored in the next two steps; the value and the feasibility of joint planning on the regional scale. The final step presents some practical proposals how a regional approach of planning can be organised. Much of the relevance of this stepwise framework traces to the fact that the three regions are no politico-administrative entities by themselves.

The relevance of exploring the functional rationality of a polycentric region (Section 4) is based on the logic that a regional planning approach is of little or no value in case of neighbouring cities that are highly self-containing functional entities with, for instance, little business interactions, little exchange of workers and shoppers, and separated housing markets. Furthermore, the absence of such interconnections does not generate much willingness among key stakeholders in the various cities to consider the polycentric region a relevant platform for planning. It could be argued then that stronger functional linkages and interconnections between urban centres (but carried out and maintained by agents) make a polycentric region more meaningful in the sense that both the practical value and the feasibility to adopt an overarching regional planning perspective are stronger.

Section 5 establishes the value of the regional urban network as a planning concept by exploring the possible advantages of joint planning on regional level. Chiefly for practical reasons, each research team started on selecting the three or four issues of spatial development that are most pressing from the regional competitiveness point of view and that, moreover, are already dealt with by current planning practices. It became apparent that there are considerable similarities between the regions on these issues. This made it possible to identify three key issues to analyse the value of regional planning in the three polycentric regions in a comparative way:

- a. intra-regional accessibility,

⁵ Brussels is the capital of the European Union, Belgium, the Flemish Region, the French Speaking Community and the Brussels Capital Region (see also section 6.1).

- b. uneven spatial economic development,
- c. spatial diversity, quality of open space and vitality of urban centres.

Assuming that the adoption of a regional perspective in dealing with these key-issues is indeed supposed to strengthen the competitiveness of the polycentric urban regions, Section 6 explores the feasibility of developing such a regional perspective. Basically, a polycentric urban region “can be looked upon as a socio-spatial conflict zone for the articulation of multiple interests, identities and cultural differences” (Albrechts, 2001: 734). Provided this, the feasibility of the adoption of a common polycentric perspective is supposed to be based on the strengthening of the capacity of the regional political and institutional structures and the culturally determined willingness by regional stakeholders to accept, further develop and eventually implement a regional approach. In addition to these region-bound assets, the feasibility to develop a regional planning perspective is also determined by the willingness of national or state /regional planning authorities to give up their top-down approach if existing.

Having explored both the value and the feasibility of adopting a regional planning perspective in polycentric urban regions, Section 7 illustrates how a regional planning practise in regional urban networks could be designed and given shape. The presented mechanisms to promote a regional planning approach primarily attempt to deal with its required multi-actor (and multi-scalar) nature.

4. Functional rationality

Some years ago, Blotevogel (1998) observed that there were hardly any thorough studies on the structure and internal connections of RheinRuhr. Since then, the German EURBANET team also participated in the INTERREG IIC project GEMACA II which evokes the impression that RheinRuhr is a “highly integrated network area” on the basis of selected criteria (GEMACA, 2002).

The Flemish conclusions are based on work by the planning team that prepared the Structure Plan Flanders (SPF) in 1996. This team defined a set of nine indicators to operationalise the concept of regional coherence. For six of these indicators (housing market, higher education, labour market, headquarters of large companies, cultural assets and hospital services) it was permitted to conclude that “there appears to be sufficient coherence for spatial functioning of the Flemish Diamond”. Moreover, the region also met threshold values on the criteria ‘complementarity of urban areas’, ‘interurban relations as measured by flows of goods, people and information’ and ‘physical infrastructural links’ which permitted to consider it a functional entity. Although the Flemish Diamond as yet “should not be considered a fully-fledged urban network, it can be looked upon as an urban network in the making” (Albrechts and Lievois, forthcoming).

The Randstad team finally, carried out a quantitative analysis of patterns and purposes of physical mobility. It focused on the dynamics of the spatial orientation and the spatial range of mobility for six purposes (labour, business visits, shopping, education, social visits and stays, and leisure and sports) by comparing traffic flows in 1998 with 1986. For all these purposes together both the total annual amount of trips and the average daily distances covered increased. Furthermore, analysis of the traffic flows between (not within) fourteen city-regions (so-called COROP-regions) in the Randstad reveals that their spatial pattern had become more polycentric in shape. Given the largest average length of trips in absolute terms, 22.8 km. for business purposes in 1998, it is nevertheless clear that functional rationality still hardly operates on the scale of the Randstad as a whole.

In sum, there are indications of growing functional coherence in the three examined regions, but that this not automatically means that this already encompasses the entire regions. There is no exclusive unidirectional re-scaling of functional linkages and interactions up to the regional levels. Moreover, growing functional coherence does not include all functional markets and all types of interactions to the same extent⁶. The indications nevertheless imply that supra-local frameworks up to the regional scale for co-operation and co-ordination of planning and action deserve more attention.

5. The value of a regional planning perspective

To explore whether there is a case for a regional perspective of planning, this section intends to establish the value of planning on this level of scale. It does so by elaborating on the three selected major key-issues of regional competitiveness that were mentioned in section 3.

5.1 Intra-regional accessibility

A high level of intra-regional accessibility is an important competitive advantage of polycentric urban regions. For most businesses, easy access to large pools of labour, services, customers and information are still considered essential factors for location decisions. Both these businesses and the commuters on their pay-rolls profit from fast and convenient transport networks to travel around in polycentric urban regions. In addition, consumers tend to scale up their range of action to profit from a wider range of complementary services and amenities that are distributed across the urban centres and communities in the region if these are easily accessible by an adequately organised regional transport network. In all three regions, this key-issue of competitiveness is under strain because of ever-increasing road congestion, mainly at peak-hours, that increases journey times and reduces the quality of travelling. The growing functional coherence within polycentric regions has caused the supplementation, if not replacement of formerly dominant ‘up-the-rent gradient’ mobility patterns within self-contained local entities of individual cities and their hinterlands with ever-growing criss-cross patterns of entangled local, regional and long-distance flows. Together with the ever-increasing use of the private car, this entanglement severely contributes to the growth of congestion. Growing congestion downgrades the accessibility of core cities and suburban concentrations of economic activities, and hence the attractiveness of the regions for investors, businessmen, visitors and local consumers.

To date, several policy outlines have been proposed to combat congestion and decreasing accessibility of urban centres in the examined regions. A general one is the promotion of a modal shift from private automobile to public transport, for by far most congestion of regional mobility is situated on roads and motorways that are used by ever-increasing amounts of cars and lorries. Various projects to upgrade public transport systems are proposed; both improvement of the existing systems and addition of new elements to the system. Examples of such additional elements are plans for new regional, or sub-regional, light rail systems: MetroRapid in RheinRuhr, Randstad-Rail and Regional Express Networks in the Flemish

⁶ The analysis of mobility in the Randstad reveals that the various purposes to travel do not contributed equally to the increased size and polycentricity of the total pattern of mobility. Home-to-work traffic, shopping and social trips, and mobility for leisure and sports developed increasingly polycentric patterns and considerable to moderate increases of average length. Both business trips and home-to-school trips hardly changed in spatial orientation, and the functional market of education even shrunk in spatial scope. The average length of home-to-school trips decreased by no less than –31%.

Diamond. Notwithstanding the great importance attached to reducing regional car traffic in favour of public transport, there are also some efforts to solve major bottlenecks and to add missing links to the regional motorway systems. Finally, it is stressed by all EURBANET research teams that transport and accessibility planning should be linked to spatial land use planning in the regions.

Following the growing multi-scalarity of geographical linkages of places in contemporary post-industrial urban regions, integrated transport systems in such regions need to serve different scales of mobility (supra-regional HST and motorways, regional light rail nets, and municipal bus and metro system) and need to be planned according to their functional positions in these multi-layered networks. This should include a well-considered planning of multi-modal / multi-scalar transfer nodes to combat or prevent disentanglement of local, regional and supra-regional flows. The regional teams therefore draw the conclusion that a multi-scalar approach of transport planning in polycentric urban regions is more promising than a strictly regional one in order to achieve integrated regional networks. The teams also state that the planning of integrated regional networks should be based on appropriate co-operation and co-ordination by planning agents working on local, regional and supra-regional scales. There are, however, still long ways to go in these respects. Regarding the former idea of a high speed MetroRapid as a metropolitan “flagship” in RheinRuhr – as it turned out the project was called off - interviewed regional stakeholders used words like “contradictory”, “top down” and “short sightedness”. The planning of this flagship missed, in short, a regional discourse and created little support from most regional and local stakeholders. Transport planning in the Flemish Diamond is scattered over different layers of policy-making - federal/national, regional and local - but lacks purposive co-operation and co-ordination that is based on a regional perspective. This perspective is hindered by the “complex and delicate relationships (often mistrust) as well as the lack of a common discourse between the different Regions (Flanders and Brussels), communities, local authorities and other actors”. What can, and to a certain extent does emerge is “a string of separate, self-directed development scenarios, strategies and policies” (Albrechts and Lievois, forthcoming).

5.2 Uneven spatial economic development

Cities in polycentric urban regions often differ considerably with regard to both real and alleged competitive assets. Most make their own policies on competition without starting from a regional perspective: neighbouring cities are sometimes considered even stronger competitors than cities elsewhere in the country or abroad. For regions as a whole, this may lead to increasingly distorted markets due to such unproductive and unsustainable effects as duplications of assets or the boosting of real estate prices. Such processes are noted in particular by the RheinRuhr and Flemish Diamond teams, but also occur in the Randstad.

The conclusion by the RheinRuhr team is quite explicit: “The crude and partly unproductive competition among sub-regions or municipalities to attract new businesses, bind more purchasing power, and invent flagship projects which are absolutely not unique in the region (such as urban entertainment centres, multiplex cinemas, concert halls) is still set to continue. Local decision-makers are under extreme pressure to enhance the competitive position of their area of interest by means of such flagships. These developments result in the current unsustainable expansions in the leisure and trade sector for instance, which are running far ahead of demand”. The Flemish team has developed this key issue of uneven spatial economic development by focusing explicitly on office space in top business locations. Regarding the emergence of a global knowledge-based service economy, it is of utmost importance for a city’s competitive position to provide high quality office space to headquarters of

transnational corporations on locations with high potentials. Within the Flemish Diamond, Brussels dominates the regional market with almost two-thirds of the regional office floor space concentrated there. Growing demand has nevertheless led to a strained market and inflated prices for office space in the Brussels area. Facing this emerging constraint, the private real estate market has tended to develop a polycentric regional perspective by turning their building activities to other, cheaper parts of the region. The planning of office locations by public agencies on the other hand, employs such a perspective only to a limited extent because each city-region within the Flemish Diamond explores and determines its own office space development. In particular Brussels has a 'self containing' attitude.

In response to adverse economic effects of the lack of a regional perspective, all research teams lay stress on the potentialities of joint planning and action to exploit complementary benefits on the regional level of scale. They draw attention to opportunities either to pool resources or to exploit complementary assets across the polycentric regions. This requires an overarching planning concept with a clear regional perspective that stimulates inter-city co-operation and co-ordination. RheinRuhr and the Flemish Diamond hardly meet this requirement yet. German planning recognises RheinRuhr as a functional metropolitan entity, i.e. one of the country's European Metropolitan Regions (EMRs). This concept was introduced by the federal planning agency and has been integrated into the State Development Plan of North Rhine-Westphalia (1995) with a clear competitive objective in mind. The concept was however introduced in a top-down manner, is still in a "very earlier stage of process", and implementation is counteracted by sub-regional or single city territorial discourses propagated in politics and press. The Flemish Diamond as a concept, introduced by the strategic Structure Plan of Flanders (SPF), also lacks a broad socio-political basis and a clear discourse at this early stage. And its implementation in provincial and municipal planning documents also occurs in a fragmented manner without a strict regional perspective (Albrechts and Lievois, forthcoming).

Unlike RheinRuhr and the Flemish Diamond that were introduced as concepts only in the 1990s, the Randstad dates back to the 1950s and forms, together with the Green Heart, one of the oldest and most persistent concepts in the history of Dutch spatial planning. Faludi (1999) even speaks of the concept as a "doctrine". The region is being conceptualised as an 'urban network' since the publication of the Fifth national Memorandum for Spatial Planning in 2001. Starting from the awareness that not even the region's four largest cities (the G4) have the individual potential to become a metropolitan player in the international arena, the concept stresses that major agents in the region, in particular municipal governments but also provincial governments, semi-public institutions and private business and civil society organisations should co-operate and co-ordinate their planning in order to combine their assets into a more diversified and complementary mixture of environments (office-locations, residential, services, leisure, etc.) and networks (transport, ecological, etc.). After several decades of rather strict control of spatial development by the national government, its say was considerably reduced in the Fifth Memorandum and even more in its successor, the 'Memorandum Space' published in 2004⁷, on the principle that local and regional stakeholders know what is best for them. In spite of the apparent value of the urban network concept, much is still unclear about the implementation. What is lacking are unambiguous guidelines and clear arrangements for such networking on the regional level. Ambitions tend to reach further than progress 'on the ground' and the concept has not yet been the panacea to

⁷ Due to the fall of the Dutch government in 2001, the Fifth Memorandum has never passed Parliament and has not gained force of law.

finish with conflicts of interests and competences between authorities and agents as obstacles to planning.

5.3 Spatial diversity, quality of open space and vitality of urban centres

Both population and economic activities have tended to de-concentrate away from major urban centres already for decades. Sub-urbanisation has caused considerable population declines of the three regions' largest cities. The populations of some have started to grow again recently due to accelerated immigration, but still at rates considerably below those witnessed by smaller cities, towns and municipalities in their regional hinterlands. The de-concentration of economic activities is in particular emphasised in the Flemish Diamond study, but is also not confined to this region. Its economic geography shows a 'donut type' of spatial growth of employment at district level with the lowest growth rates of the late 1990s in core cities (in particular Brussels) and the highest rates in these cities' surrounding districts. These trends have caused new functional patchworks of urban sprawl that produce spatial fragmentation, diminish spatial diversity and in effect make the distinction between 'urban' and 'rural' increasingly obsolete. Both the quality of open spaces and the vitality of urban centres in the regions are at danger, which is at the expense of the regions' territorial competitiveness.

Both in the Netherlands and in the Flemish Region, a 'contour policy' was formulated in recent planning documents. The Dutch Fifth Memorandum (2001) introduced 'red' and 'green contours' which mark out areas for urban expansion around existing urban centres vis-à-vis areas where particular ecological and landscape assets require protection from urban expansion. The Flemish Structure Plan, published five years earlier, restricts the contour policy to an equivalent of the 'red' (urban) contours. The open space policy in the Flemish Region is based on 'blue and green networks' rather than green contours as structuring concept. In order to make such policies effective in countering the challenges of spatial fragmentation and decreasing spatial diversity, the research teams in both regions propose an urban network perspective. This requires in their opinion co-ordinated planning on different levels of scale and intensive co-operation between different types of agents, including spatial planning administrations, policy decision-makers and business and civil society organisations. For the Randstad, the introduced concept of 'urban network' urges the necessity for such actors and agents to jointly offer a complete programme of working, residential and leisure environments within a setting of both an attractive countryside and vital and accessible cities. However, elaboration of the concept as an instrument of co-operative planning and policy-making was postponed since the fall of the government in 2001 and the Memorandum Space 'passes the buck' to municipal and provincial governments. What is more, this latest Memorandum has liquidated the 'contour' policy: the Randstad is a free country for municipalities and land developers. In common with the Randstad and the Flemish Diamond, the German team also concluded that "a spatial policy on a co-operative regional basis that focuses on the question of how RheinRuhr should shape and organise its functional patterns while preserving the open space is urgently needed". However, the perceptions of problems in that region have "not been adequate so far and corresponding policies have therefore hardly, or only partially been developed. It is highly doubtful whether existing policies, some reflecting a long tradition such as green belt preservation, are still an appropriate response to challenge to strengthen the competitiveness of the urban patchwork that is RheinRuhr".

6. Basis for a regional perspective

All research teams are convinced that policies that aim at strengthening economic competitiveness at the strictly local level of individual cities make increasingly less sense since both these centres and their functionally enriched hinterlands are becoming part and parcel of larger functional polycentric systems. The teams also conclude that the spatial developments that influence the competitiveness of the regions take place on various levels of scale. Some of these more or less coincide with the region, but many others come about on either lower or higher scales. Local planning perspectives therefore should not be substituted by one single regional perspective but, instead, by a multi-scalar perspective. In addition, spatial issues of competitiveness should preferably be addressed through a governance mode of decision making that involves a variety of public, semi-public and private stakeholders in addition to governments. The question is how feasible such a multi-scalar perspective and multi-actor approach is. Mainly based on concepts as ‘regional organising capacity’ by Van der Berg and Braun⁸ (1995), the research teams distinguish between two dimensions which together are supposed to determine this feasibility to a large extent: the capacity of the formal politico-institutional framework (section 6.1) and the political and societal willingness to accept, develop and implement multi-scalar and multi-actor governance on regional scale (section 6.2).

6.1 Institutional capacity

The Flemish research team took a broad perspective by stressing the trans-regional nature of the Flemish Diamond concept. Trans-regional in the Belgian vocabulary refers to the country’s very complex institutional framework since the process of federalisation was rounded off in 1980. This complexity concerns the double set of federal entities, Regions and Communities, with different boundaries and different sets of responsibilities and competences⁹. Since this constitutional reform, the Regions have ultimate responsibilities for spatial planning and environmental policy, but formal co-operation on these fields of policy has been rather limited, even between the two Regions that make up the Flemish Diamond, i.e. the Flemish Region and the Brussels Capital Region. In addition, experiences with partnerships of public institutions and private agents, an essential component of governance, have as yet been limited in the Flemish Diamond. This contrasts with the varieties of coalitions and co-operative associations that have been set up in both the Randstad and RheinRuhr.

The Randstad shows two periods of enhanced formation of coalitions with a supra-local perspective on spatial planning. These periods parallel the public debates around the publication of the Fourth (1988) and the Fifth Memorandum for Spatial Planning (2001) respectively. Both Memorandums stress the importance of strengthening the international competitiveness of the Randstad and the need for administrative co-operation. The coalitions in the most recent period incorporate considerably more actors, most in particular more

⁸ Van der Berg and Braun described regional organising capacity as “the ability to enlist all actors involved in order to generate new ideas and to develop and implement policies designed to create conditions for sustainable development”. They considered this capacity to be determined by seven factors: the formal institutional framework (the administrative organisation); strategic networks; leadership; vision and strategy; spatial-economic conditions; political support; and societal support.

⁹ The federal system of Belgium includes two types of constitutional elements: Regions and Communities. These are each responsible for a different set of government domains. Basically, economic and territory-related matters are attributed to the Regions, i.e. the Flemish, the Walloon and the Brussels Capital Region. Language, culture and people related matters are transferred to the Communities, i.e. the Flemish, French and German-speaking Community.

private actors than those in the period about one decade earlier¹⁰. Not all coalitions however, cover the entire region. In both periods some confined themselves to the region's 'South Wing', its 'North Wing', the G4 or the Green Heart. Furthermore, these coalitions' instruments were confined to consulting, advising and research; their factual influence is limited and they lack executive powers. Finally, most coalitions, including the most recent ones, are particularly internally oriented and do not place the Randstad in wider national and international contexts, nor has any set itself the objective to draw up one coherent spatial view for the entire Randstad. Provided this history, there are no strong indications that regional coalitions will make the most of the opportunities for regional development initiatives that arise now the Memorandum Space has put an end to top-down tendencies in spatial planning.

The administrative and institutional landscape of RheinRuhr is even described as "a fragmented patchwork of overlapping and juxtaposed institutions, organisations and authorities". It "might give the impression of a chaos" of different ideas, visions and plans on various sectors, problems or policy domains (retail concepts, housing, festivals, parks etc.) which cover a variety of subgroups of cities or sub-regions. Some initiatives for instance, only cover the *Ruhrgebiet* (Ruhr area), the city-row along the river Ruhr in the northern fringe of the region that was severely hit by the process of de-industrialisation¹¹. In spite of a growing demand by stakeholders to bundle regional tasks into politically legitimated region-wide bodies in order to simplify administrative structures and processes, current political thinking does not include any further steps towards advanced urban networking for RheinRuhr. In terms of Van der Berg and Braun (1995, footnote 8), the region 'suffers from a lack of organising capacity'. The failure of the envisaged application for the Olympic Games of 2012 illustrates some readiness by the state government of North Rhine-Westphalia to tone down its top-down planning approach but that local governments do not make the most of their possible capacity for co-operative decision-making and in the end leave no other possibility open to state authorities than to enforce a top-down approach on them¹².

6.2 Culture and identity

Next to a region's institutional capacity, factors relating to culture and identity also determine the feasibility of a regional polycentric planning perspective. This dimension is the basis of a frame of reference that structures the consciousness and behaviour of agents in a regional society and can be split into two elements. The first one is a *common culture* that refers to the existence of a shared history and shared values, norms and beliefs that all ease regional networking. Sharp cultural divides by language, ethnicity, religion or politics on the other hand impose barriers to regional co-operation. The second element is *regional identity*. Stakeholders' identities are linked to, among other things geographical entities such as neighbourhood, city or country, but probably also region. The existence of both a common culture and a regional identity, hard to define as they are, helps to generate stakeholders' support for a regional planning perspective.

¹⁰ In particular the Association Deltametropolis contains a large diversity of both public agents (municipalities, provinces and waterboards), private business associations (chambers of commerce, transporters organisations) and non-governmental organisations (nature and landscape).

¹¹ Recently, the *Kommunalverband Ruhr* (Ruhr District Association of Local Government Authorities) which consists of eleven cities and four counties and has expresses a kind of institutional cohesion within the Ruhr area since the 1920s, was strengthened by the state government of North Rhine Westphalia through the assignment of some new planning competencies and was renamed *Regionalverband Ruhr* (Regional Association Ruhr).

¹² The state government of North Rhine-Westphalia put some pressure on the cities in RheinRuhr to apply for the Games. These agreed that such an application should be a regional issue, bearing in mind its polycentric structure, but a common regional strategy was nevertheless put in the shade of rivalry, competition and distributive issues. One of these issues was which cities should and should not take part in the application. In the end, the opportunity to apply for the Games was attributed to the city of Leipzig.

The Randstad research team starts rather optimistic by concluding that “the common historical background and the absence of cultural cleavages have clearly contributed to the existence of a common culture in the Randstad”. Many cities in the region, in particular the four largest ones are becoming multi-ethnic, which has led to growing cultural cleavages and segregation and have generated growing social tensions. These are however chiefly fought out in the political institutions and social networks of the individual cities rather than of the region. This trend has therefore little negative impact on interurban co-operation. The regional identity in the Randstad is, on the other hand, weak. The region has no precise spatial boundaries, it lacks any symbol like a flag or a (historic) building, it is the territorial organising principle for only a few institutions, it has no political parties that deal with Randstad issues and there are no media that aim at a Randstad audience. In short, the Randstad does not evoke strong feelings of identification and has only a limited identifying power among its citizens.

A similar conclusion is drawn by the German team: “RheinRuhr as a polycentric urban region does not exist in the mental map of people, not even in that of major regional stakeholders”. This region suffers from a serious lack of regional identity and is politically, institutionally and mentally fragmented. A deep cultural and mental cleavage is in particular visible between the Ruhr area and the city-row on the banks of the river Rhine (Dusseldorf, Cologne, Bonn). The cities, institutions and people along the Rhine do not want to be associated with the Ruhr area that suffers from a bad image based on its industrial past and manifested by a derelict landscape and poor social conditions, although, in fact, the Ruhr area today is characterized by highly uneven development itself. These two sub-regions rather than RheinRuhr as a whole evoke some feelings of identification. The German team takes, therefore, the view that the enhancement of a regional discourse is urgently needed, for instance by establishing a ‘RheinRuhr Information Pool’, starting a ‘RheinRuhr monthly’, or creating regional symbols that communicate RheinRuhr as a coherent entity.

The Flemish case study does not pay much explicit attention to the cultural dimension, but the very recent introduction and the limited familiarity of both policy-makers and the general public with the concept Flemish Diamond alone indicate that its common culture and regional identity are only weakly developed. What is more, there is a cultural divide by language – quite a strong cleaving factor in Belgium- between part of Brussels and the rest of the Flemish Diamond that imposes barriers to co-operation on the scale of the entire region.

7. Mechanism to promote a regional planning

Both the existing institutional frameworks and the culture and identity in the regions raise little optimism on the feasibility of a regional perspective of planning and policy making. The institutional frameworks are static, hierarchical and mostly confined to subsections of the regions only, and the common regional cultures and identities are weakly developed. This is not to say that such a perspective is impossible to accomplish, but the mechanisms to promote it have to start at very initial stages of co-operation and require a long term. What is needed according to the research teams to cope with the multi-scalar and multi-actor complexity of spatial planning and policy-making is the formation of flexible and loose coalitions in which public and private partners deal with planning issues on the appropriate scale(s). Up to now no successful initiatives on this course can be seen. This failure illustrates that the Flemish team may be in the right when it concludes that “our understanding of how polycentric urban systems operate and function is probably inadequate for governance to be effective”. Nevertheless, the various ideas put forward by the research teams opens the channel towards a

mechanism that can promote a regional planning perspective and implement a regional approach. This mechanism consists of three steps.

The building up of mutual understanding, trust and respect by stakeholders is crucial for the development of a sustainable concept of the polycentric region and repetitive regional co-operation and planning based on it. This is, however, also a slow and difficult process. It is very helpful to start the three-step process with projects that give stakeholders the experience of effective and successful co-operation at low costs. All three research teams lay emphasis on the importance of formulating concrete projects that deal with strategic issues of development and competitiveness but have a limited scope, are easy to organise, and yield much winners and a few or no losers.

After this 'small start', the step-wise approach advocates to address more complicated issues. Once the concept of the region as a co-operative vehicle for planning has taken some root and both mutual trust and the regional discourse have been strengthened since successful small-scale co-operation, more difficult projects that involve more distributive aspects and trade-offs rather than just win-win situations can be placed on the agenda. Not only progress on these issues itself, but also the building of further understanding, consensus and eventually the formulation of consistent policies are served by the creation of loose issue-based networks of appropriate stakeholders. Preferably these stakeholders share interest, but conflicting interests would not necessarily put a time bomb under the network. While the RheinRuhr team propose that these networks should be composed of non-political stakeholders, the authors of the Flemish Diamond study see an important role for administrators. But irrespective of the kind of actors involved, it is essential that their membership is active, not passive, as is stressed by the Flemish team.

The final step is the foundation of regional agencies that not only deal with certain issues or specific short-term projects but also have a more general scope and are enduring. All teams state that these agencies should be platforms for governments, together with other public and semi-public institutions and private organisations, in order to join forces. Its roles and tasks are very diverse, according to the ideas of the research teams. These vary from direct involvement in regional development projects by formulation, co-ordination or monitoring, to the preparation of strategic spatial visions to strengthen the region's competitive position in both national and international perspectives and acting as interlocutor for the national government on regional issues. In addition, the RheinRuhr team stresses the possible role of such an Agency in enhancing the regional discourse. As the occasion arises, transfer of (some) competences to these agencies can be recommended, but the regional teams all resist the idea of creating a new politico-administrative layer.

The Flemish team states the danger that multi-actor types of regional policy- and decision-making may suffer from a lack of democratic control and legitimacy insofar it comes partly in the hands of non-elected public bodies and private stakeholders, and takes place in arenas that are mostly invisible for people's elected representatives. This may lead to low levels of public involvement, information, communication and finally limited commitment with the region as a construct, all at the expense of its identifying power. The team stresses the importance of "transparency, dialogue and a broad regional involvement that incorporates all public and public stakeholders as well as the civil society" and recommends that "leading regional personalities" have to take on the responsibility and the leading role in promoting the concept.

8. Some concluding remarks

Planning and policy-making have been reigned during most of the post-war Fordist era by a state-centric system. Regional and local states have been regarded as sub-units of national states, and regional and local policies have primarily been pursued in a top-down manner with the key objective to secure balanced domestic economic growth, infrastructure development and social welfare across the nation within well-defined national frameworks. This state-centric system is being severely challenged since recently, and individual cities has tended to become increasingly important actors of policy-making that aims at the strengthening of competitiveness. The range of competition between cities was limited but has extended and become more profound. The scope of many spatial processes in polycentric urban regions, including important key-issues of competitiveness, follows a course from the local, single city level towards the regional level. This tendency is driven by enlarging scopes of spatial behaviour of agents like firms, consumers and tourists. Taking these tendencies into account, this paper's major purpose is to explore the potentiality of a regional rather than, or in addition to local and national planning perspectives and approaches.

The paper concludes that inter-urban functional linkages and interactions indeed tend to scale up towards the polycentric regional level and that (some selected) key issues of competitiveness can often be good dealt with on that very level. It is also made plausible however, that this does not imply an exclusive and unidirectional shift of spatial processes. Some spatial developments that influence the competitiveness of a polycentric urban region more or less coincide with the regional level of scale, but many others take place on either lower or higher scales. Besides this dynamics of scale, a tendency of "de-statisation of the political system" (Heeg *et al.*, 2003) can be observed. Decision-making on public policy issues, including spatial policy, is longer the monopoly of public governments but involves an ever-increasing assembly of public and semi-public institutions and private and civil society organisations. In response to both tendencies, the purpose to strengthen the competitiveness of polycentric urban regions is best suited by spatial planning that employs a regional perspective but is multi-scalar and multi-actor in approach, design and implementation. Currently, the feasibility to restyle planning in this manner is limited. Apart from a lack of understanding of the spatial dynamics of polycentric urban systems, defined by Albechts (2001) as "open and multi-layered complexes of nodes, networks, flows and interactions of global, regional and local scales" and how to respond to this dynamics, the existing institutional frameworks in the regions are inappropriate and the regional culture and identity, affecting the willingness for a regional perspective and approach, are weak. Any attempt to design a successful mechanisms to promote a regional perspective on planning and action to improve the competitiveness of polycentric regions should 'start small'. In addition, it should permanently interconnect the enlarging scale and growing distributive complexity of projects and the design of spatial visions on regional development with the enhancement of the regional identity and the shaping of an institutional structure for regional planning.

The paper reflects both the enthusiasm and the scepticism that the related concepts of polycentric urban region and urban network have received so far. The enthusiasm relates to its potential to make clear the benefits of regional planning over both a series of self-containing local policies and a top-down approach by the national state. Scepticism however, still exist and is among other things related to the concept of urban network's still unconvincing answers to basic questions whether it is advantageous to each city, community and interest group and how it can be institutionally and instrumentally equipped to set and achieve the shared development goals. One may wonder whether the concept is too much planners

rhetoric. The paper raises more questions than it answers and at best contributes to the thinking on a further research agenda to help the concepts forward.

Acknowledgements

I am greatly indebted to the former partners in EURBANET who carried out the case-studies in the Flemish Diamond and RheinRuhr. This paper would not have been possible without the high-quality work and co-operative attitude of Louis Albrechts and Griet Lievois of the Institute for Urban and Regional Planning of the Catholic University in Leuven (Belgium), Klaus Kunzmann of the University of Dortmund (Germany), and Wolfgang Knapp and Peter Schmitt of the Research Institute for Regional and Urban Development of the Federal State of North Rhine-Westphalia (Germany). Besides, I owe much debt to Ivan Turok and Nick Bailey of the Department of Urban Studies, University of Glasgow, and to Evert Meijers and Eric Hoppenbrouwer, colleagues at OTB and fellows in the Randstad team. The work of the Central Scotland team is not mentioned in this paper, but was a very valuable source of inspiration throughout EURBANET. Needless to say, finally, that the paper would never have been written without the financing of EURBANET by the European Commission and co-financing by the Spatial Planning Agency (RPD) of the Netherlands ministry of Housing, Spatial Planning and Environment.

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