
Polycentricity and the Eye of the Beholder. A Multi-Layered Analysis of Spatial Patterns in the Dutch Randstad

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1. Introduction

The Dutch Randstad¹ can be seen as the quintessential polycentric region that, as a whole, functions as a global city.² It combines a political capital, a financial capital, a cultural capital, a world port, a world airport, headquarters of important transnational companies (including banks and producer services) and a highly skilled, cosmopolitan labour force. These assets are however not located in just one city as in London or Paris but are distributed over a number of historically distinct cities that together comprise the Randstad. The region encompasses a small number of larger cities that are located in more or less close proximity (mainly within commuting distance) and that do not differ that much in terms of size. The different parts are independent political entities. At first glance, the Randstad seems to lack a clear dominant city as Amsterdam has only slightly more inhabitants than the next largest city

Rotterdam, which has the largest port, and The Hague, which is the political capital. Within the polycentric region of the Randstad, locational differences, at first sight, seem to be eroded to the point of insignificance. Nearly every subcentre of this region has access to the same infrastructure (both transport and communication) and is, moreover, located within one-hour travel time of the international airport Schiphol. Also in socio-cultural terms, the urban centres of the Randstad appears to form one, fairly homogeneous urban field as the majority of the people (also) speak English, and the cable delivers CNN, BBC, France 2, TV5 (French) and WDR, ZDF, ARD (German) television almost anywhere. Within this large urban field, it would seem that more or less the same kind of agglomeration economies are at work (Phelps and Ozawa, 2003).

Conceptualising the Randstad as one polycentric, global city region with approximately 6 million inhabitants, an advanced economic profile, and good international linkages puts this region, in principle, in the same league as the more established global cities of London, Paris or

¹ The urban micro region: Deva - Hunedoara - Călan - Simeria

² See Hall, 1966; Scott, 1998, Kloosterman and Musterd, 2001.

New York. In this article, we will demonstrate, that notwithstanding its manifest polycentric character, the Dutch Randstad has just one (international) centre, which is located in Amsterdam. Polycentricity, we will argue, does not imply a uniform socio-economic space but allows for marked spatial differentiation between urban milieux. More generally, polycentricity regarding the distribution of population and employment is compatible with a highly monocentric layout if we look at the location of typical global city activities. It seems that the internationally oriented control and command functions of the global economy are strongly dependent on highly localised agglomeration economies that articulate themselves on a much lower spatial scale than that of the polycentric urban region and, partly, even on a lower scale than that of the city itself, namely on that of specific parts of the city.

Below, we will first present the more conventional polycentric picture of the Randstad by showing the nearly continuous spatial distribution of both population and employment (section 2). This representation of the Randstad as one urban field is highly in line with the views of many geographers, urban planners and policymakers and, to a high extent, also with the daily experience of many inhabitants of the Randstad who see traffic jams both into cities and out of them, and notice only very slight differences in built environment and amenities.³ We then change tack and unfold a rather different analytical perspective on the Randstad region by focusing on advanced international producer

services and related aspects. By using new data, we are able to show that Amsterdam is the evident international centre within the polycentric region of the Randstad (section 3). We conclude by exploring the theoretical and the policy implications of our findings (section 4).

2. The Randstad as a polycentric urban region

The Randstad is generally known as the horseshoe-shaped urban configuration in the western part of the Netherlands. It roughly runs from Dordrecht and Rotterdam in the south, via The Hague and Leiden in the west to Amsterdam in the north and Utrecht and Amersfoort in the east (Figure 1). This ring of cities surrounds a predominantly rural area called the 'Green Heart'. The outer borders of the Randstad are not precisely defined, nor are they much discussed or disputed in Dutch planning and policy discourses.

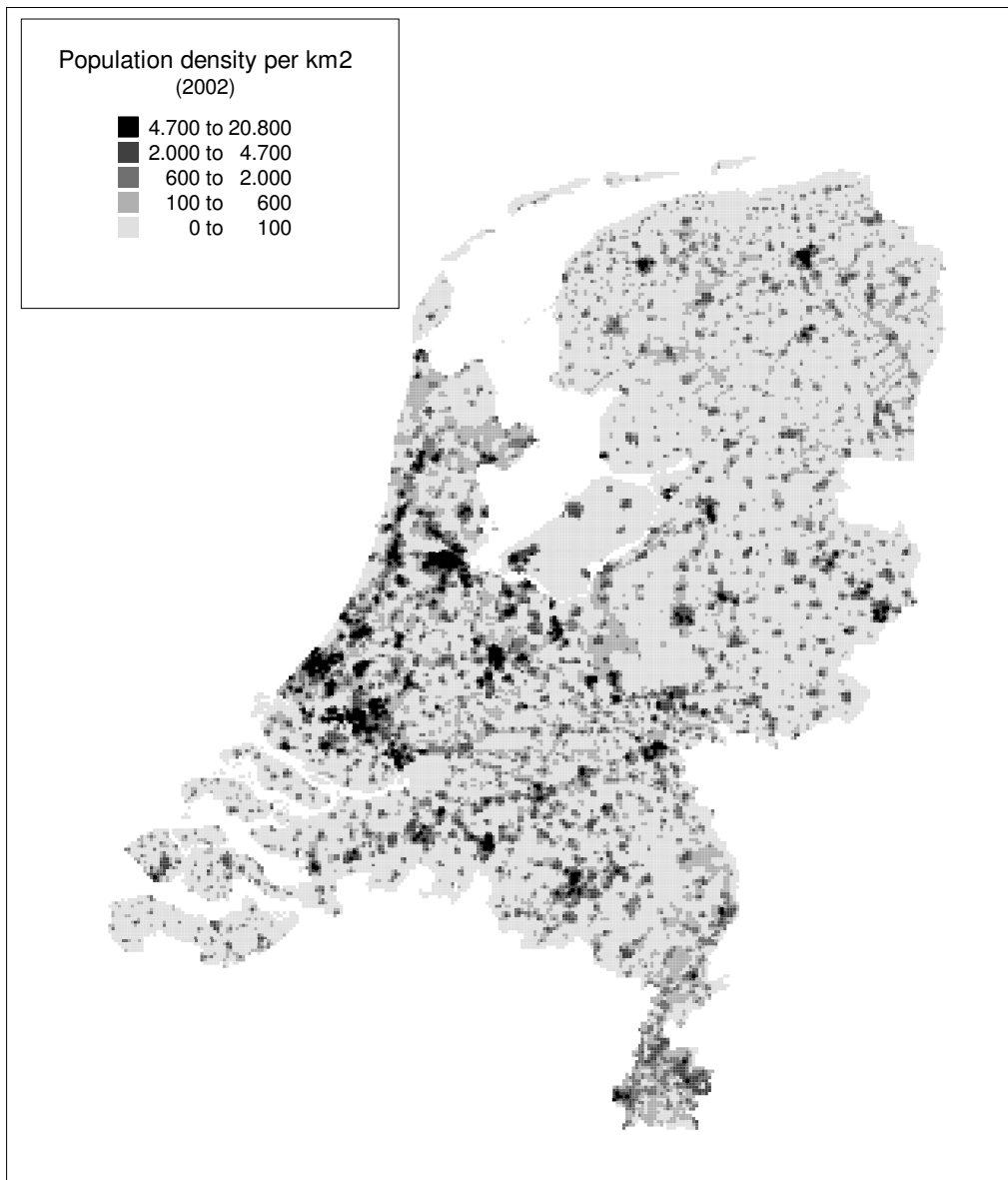
³ See Lambregts and Zonneveld, 2004 for an overview of interpretations by geographers and planners of the Randstad concept.



Map 1: Overview of the Randstad

The Randstad measures approximately 4,500 square kilometres (60 by 75 kilometres) and is home to about six million people. These live in a large number of mainly medium-sized cities and an even larger number of small towns and villages. The region includes twelve cities with more than 100,000 inhabitants and another ten in the range 70,000 – 100,000. The most populous cities are Amsterdam (736,000), Rotterdam (599,000), The Hague (458,000) and Utrecht (261,000).

The co-existence of so many individual smaller and larger cities in a relatively small area gives the Randstad its typical polycentric appearance. A simple population density map of the Netherlands confirms the image of the Randstad constituting a highly polycentric urban configuration. The map shows that it can even be thought to be part of a wider urban field that reaches out to country's borders with Germany in the east and Belgium in the south (Figure 2).



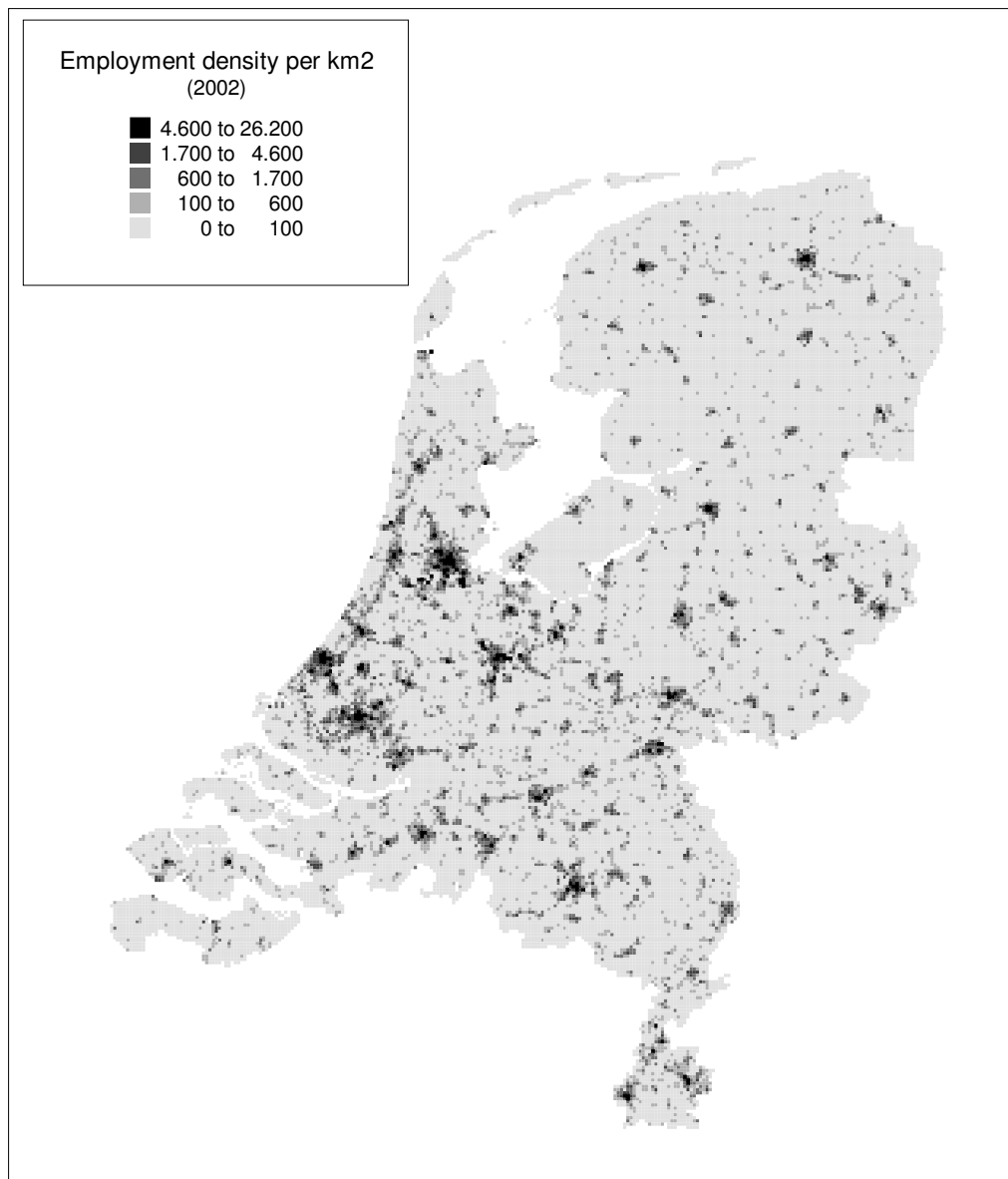
Map 2: Population density in the Netherlands

This polycentric picture even stands firm if the spatial distribution of employment is taken into consideration. With some 3,000,000 jobs within its borders, most of them in various kinds of (advanced) services, the Randstad is without doubt the country's principle economic

powerhouse. The port of Rotterdam is Europe's most important point of entry and departure for goods transported over sea and Schiphol Airport, located just south of Amsterdam, is Europe's fourth largest airport in terms of passenger movements (figures for 2003). A dense

network of road and railway corridors connects the cities of the Randstad with each other, with other parts of the country and with other metropolitan regions across North West Europe. The employment density map presented in Figure 3 suggests that the four largest urban agglomerations of the Randstad (Amsterdam, Rotterdam, The Hague and Utrecht) are well-matched in terms of economic importance. Recip-

rocity and equivalence between these cities are often illustrated by pointing at the complementary characteristics of the cities' economic profiles. Amsterdam then forms the financial and cultural capital, The Hague the political and administrative centre, Rotterdam the main logistic centre and Utrecht stands out as the seat of many a consultancy firm.



Map 3: Employment density in the Netherlands

The current spatial features of the Randstad can be traced back far into history (t Hart, 1994) but they are – at least partly – also the result of almost half a century of careful spatial planning. Already in 1958, in a report called ‘The Development of the Western Netherlands’ (Werkcommissie Westen des Lands, 1958) the Randstad was conceptualised as a ring of towns and cities, separated by green spaces, situated around a larger rural area (the Green Heart). Opinions then varied as regards the desired future of this area: should it be encouraged, by allowing inward growth, to develop into a real metropolis in order to let economic agents benefit from the associated agglomeration economies or, alternatively, should all efforts be directed at preventing the area from becoming a real metropolis and keep the Netherlands free from much feared metropolitan side-effects such as congestion and unhealthy living conditions (Lambregts & Zonneveld, 2004). Proponents of the latter view won the battle and the nation’s first national planning memorandum of 1960 prescribed that growth should be directed to other parts of the country to prevent the Randstad from ‘overheating’ and congesting (Ministerie van Volkshuisvesting en Bouwnijverheid, 1960). This ‘anti-metropolitan’ attitude towards the Randstad persevered throughout the Sixties and Seventies and it was only in the Eighties – a decade of severe economic crisis and global economic restructuring – that new themes came to underpin Dutch spatial planning. Most of all this decade saw an increase of the attention for the country’s international competitive position and the possibilities for strengthening this position by means of spatial policy. International competition for (increasingly) mobile eco-

nomical resources was regarded less and less as something that took place between countries and more and more as a matter between heavily urbanised regions. As far as the Netherlands was concerned, Germany, Belgium, France and Great Britain were replaced as competitors by their metropolitan representatives such as the Rhine-Ruhr area, Frankfurt, the Flemish Diamond, Paris and London. The Dutch counterpart became the Randstad (see, for example, Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer, 1991). After all, the international orientation of the business community was strongest here and the region was blessed with two of Europe’s most important transport intersections. The Dutch policymakers’ choice for the Randstad was confirmed by their foreign colleagues. Just as the Dutch had created foreign metropolitan competitors that were not, or scarcely, recognised or acknowledged as such in the foreign countries themselves (e.g. the Rhine-Ruhr area and the Flemish Diamond), the attention of the German and Flemish urban and rural planners was focused more on the competitive threat that emanated from the Dutch Randstad in its entirety rather than on the individual Dutch cities.

Current policy views on the Randstad seem to take this course further. The latest Spatial Policy Document (the Nota Ruimte) continues to capitalise upon the polycentric nature of the region (Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer et al., 2004). It presents the entire Randstad as the nation’s most important trump card in the international competitive struggle to attract and retain mobile economic resources and foreign investments. The central idea is that

an attractive, internationally competitive environment can only be realised at this particular spatial scale, that it requires the mass and diversity of the Randstad at large to play along with more established global cities and city-regions such as London, Paris and Frankfurt. In the remainder of this article we demonstrate that a more refined analysis of the region's economic structure may lead to very different conclusions.

3. Global city functions and the Randstad

Looking at the spatial distribution of the population and the employment, the Dutch Randstad thus forms a fairly uniform urban field with stronger concentrations in and around the historical cities. This section explores a different analytical perspective on the Randstad, specifically focused on the identification of the place(s) where typical global city activities are located. The global economy is partly flows and partly nodes as the flows have to start and land somewhere. Global cities constitute these nodes where rich bundles of global flows—goods, services, capital, information, people—are co-ordinated, allocated, generated, initiated, transformed or transferred. Together these nodes form the backbone of the global economy (cf. Friedmann, 2001). Below, we will show that the Randstad's global city functions are spatially articulated in a highly monocentric pattern, contrary to the classic image of the Randstad as a large, fairly homogenous urban region with relatively little differentiation.

Saskia Sassen (2001a, 2001b) has analysed the particular characteristics of

the global cities over the last three decades. In her view, global cities are intimately and inherently linked with advanced producer services. With globalisation, economic activities become more dispersed and co-ordination tasks, concomitantly, become more complex. An increasing part of these central control and co-ordination functions are outsourced to producer services. Specialised producer services fulfil these tasks on a global scale and these firms themselves have branched out on a global scale contributing to a further strengthening of the global network of nodes (Hall, 2001). In addition, these producer services are subject to strong agglomeration economies (Amin and Thrift, 1992). They are, of course, dependent on a highly skilled labour pool, on sophisticated infrastructural facilities for (global) communication and transport, on other producer services for outsourcing on their part and, crucially, they thrive on thick, non-standardised information that has to be exchanged in face-to-face situations (and is even created in such exchanges).⁴ Agglomeration and, hence, proximity characterise advanced producer services. Agglomeration based on economic reasoning is strengthened by agglomeration based more on social reasoning. Increasingly it has also become clear that the workers of these producer services—among them many highly skilled creative people—are quite selective when it comes to the milieu they have to work in

⁴ According to Sassen (2001a): "This is a type of information loop that as of now still cannot be replicated fully in electronic space, and has as one of its value-added features the fact of unforeseen and unplanned mixes of information, expertise and talent, which can produce a higher order of information."

(and live in or nearby on commuting distance). They demand a certain quality of place and this refers to both cultural amenities (museums, cafés, restaurants, galleries, nightclubs etc.) and a tolerant and open cultural atmosphere (Zukin, 1995, Florida, 2002). These requirements contribute to spatial concentration of producer services in particular (localisation economies) and to agglomeration more in general (urbanisation economies).

To explore the spatial patterns of advanced producer services empirically, we build upon the sophisticated methodology that is used in the GaWC global cities programme (see Beaverstock et al, 2000). In addition, we have used one other indicator that can give information on the more precise location of the global functions in the Randstad. This indicator is the spatial distribution of escort services in the Netherlands. Such services are part-and-parcel of the high-end amenities of global cities catering predominantly for more well to do clients from abroad and from the area itself. Before we show the results of this exploration, we first explain the particular methodology used for identifying the locations of producer services.

We started with assessing around one hundred globally operating commercial service providers as to whether they are established in the Netherlands, and if so where. A great deal can be learned from the establishment strategies of such companies. Because setting up an office abroad is an expensive business for a company, one might assume that a lot of careful consideration goes into choosing a location. The company will only establish offices or outlets in those places, which it considers to be crucial for the realisation of its objec-

tives (Beaverstock et al, 2000). The locational preferences of such businesses therefore say something about the importance that is or is not attributed to certain locations from an international business perspective.

We used a database of companies created by the British Globalization and World Cities Study Group and Network (GaWC) for their research into network relationships between world cities (see Taylor et al, 2002). The database contains information on 97 globally operating companies from six commercial services sectors. The six sectors are management consultancy, financial services, accountancy, legal services, insurance and advertising. These are sectors within which the GaWC researchers were able to trace at least ten globally operating businesses. In order to qualify as a global business, a company had to have branches in at least 15 different cities, with at least one branch in North America, Europe and/or the Pacific region of Asia. The database consists primarily of (originally) American, British and Japanese companies. A limited number has their roots in the Netherlands (including ABN-AMRO, ING and the Rabobank).

An assessment was made with regard to these 97 companies as to whether 1) they have a presence in the Netherlands and 2) where exactly their Dutch head offices are located. In order to establish this, a variety of Internet sources were consulted including the websites of the companies themselves, the Yellow Pages and the telephone directory. As regards the companies that turned out to have more than one office in the Netherlands, only the Dutch principal establishment, as designated by the companies themselves, was

included in the analysis. In order to place the pattern ascertained in perspective, the six service sectors were also analysed from a wider perspective. This involved examining the distribution of the total number of branches, the employment possibilities and the location quotients in these sectors.

Of the 97 businesses, 78 have a branch in the Netherlands (see Table 1). Apparently, the majority of these ‘global players’ consider it important to be active on the Dutch market. However, the presence score differs considerably per sector. For example, all accountancy firms included in the original database have one or more offices in the Netherlands whereas designated.

the same applies to not even half of the selected law firms. The latter may have to do with the relatively modest size of the Dutch market and the very specific (almost completely in Dutch and therefore difficult to access for foreigners) knowledge that is required to provide legal services within a country.

The Randstad appears to be favourite with most of these business service providers. All but two of these companies control their Dutch operations from within the Randstad. For three companies with more than one office in the country no clear head office could be

Table 1: Globally operating commercial service providers in the Netherlands (situation in April 2004)

Sector	GaWC ‘Top 97’	Presence in the Netherlands	Head offices in the Randstad
	Number of companies	Number of companies	Number of companies
Accountancy	17	17	14
Financial services	22	17	17
Insurance	10	8	8
Legal services	16	7	6
Management consultancy	17	15	14
Advertising	15	14	14
Total	97	78	73

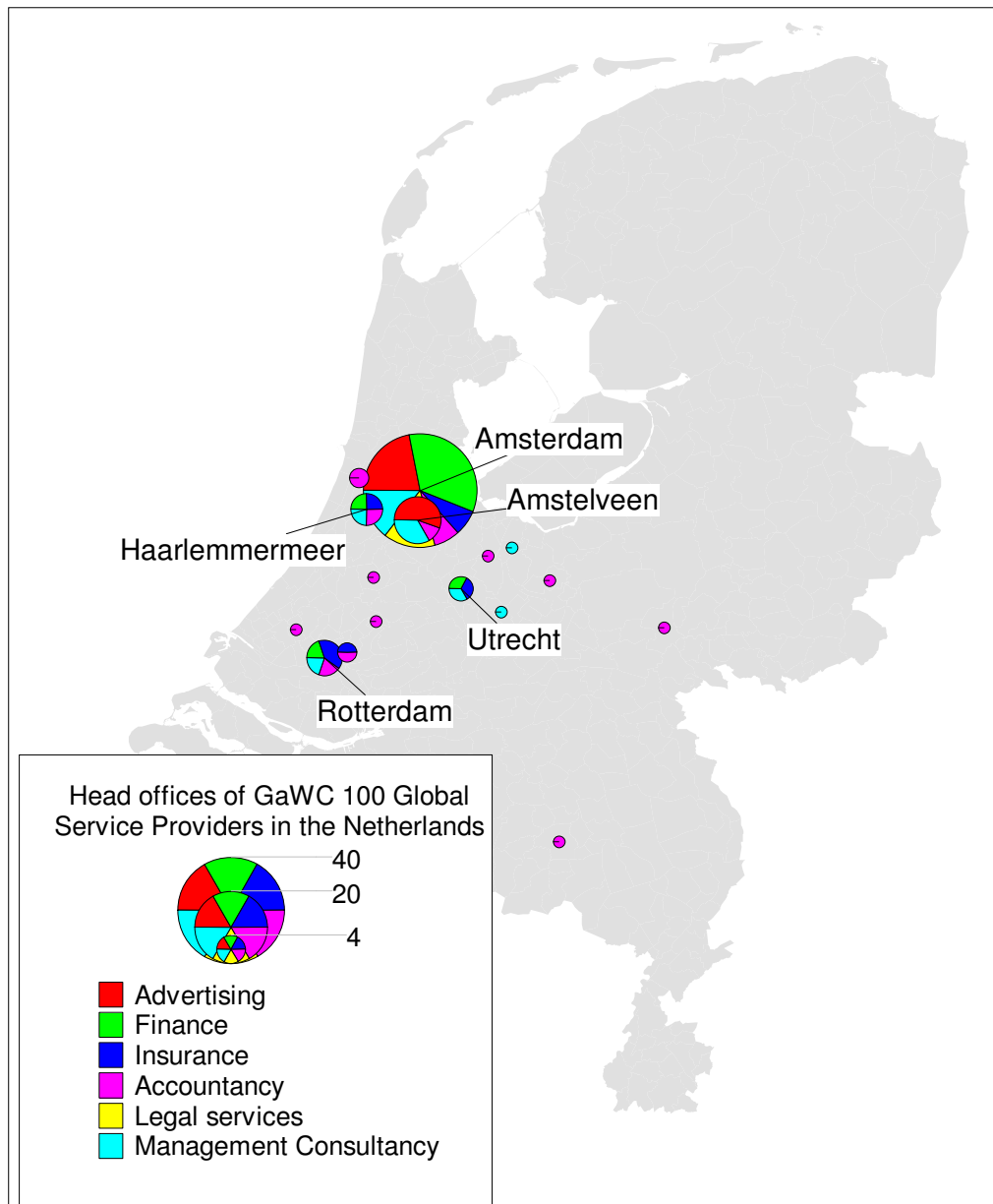
Source: Calculated by authors on the basis of websites of companies.

Seen in this way, the Randstad clearly seems to function as a global region. However, this view needs to be adjusted if we focus on the spatial distribution of head offices within the Randstad. It actually appears that no fewer than almost three quarters (54 from 73) of the companies investigated have their main Dutch office in Amsterdam or in one of the sur-

rounding municipalities. Figure 4 shows that the number of establishments in Amsterdam far exceeds the rest of the Randstad. Amstelveen, adjacent to Amsterdam, follows at some distance and this municipality is then followed by Rotterdam and Utrecht. In the financial services, the advertising and the legal services sectors, there is almost absolute dominance of the

Amsterdam region. In accountancy, management consultancy and the insurance sector, cities such as Rotterdam and Utrecht and their surrounding municipalities share a piece of the pie. What is strik-

ing is the complete absence of The Hague. Not one of the selected global service providers has selected the seat of the national government as its Dutch bridgehead.

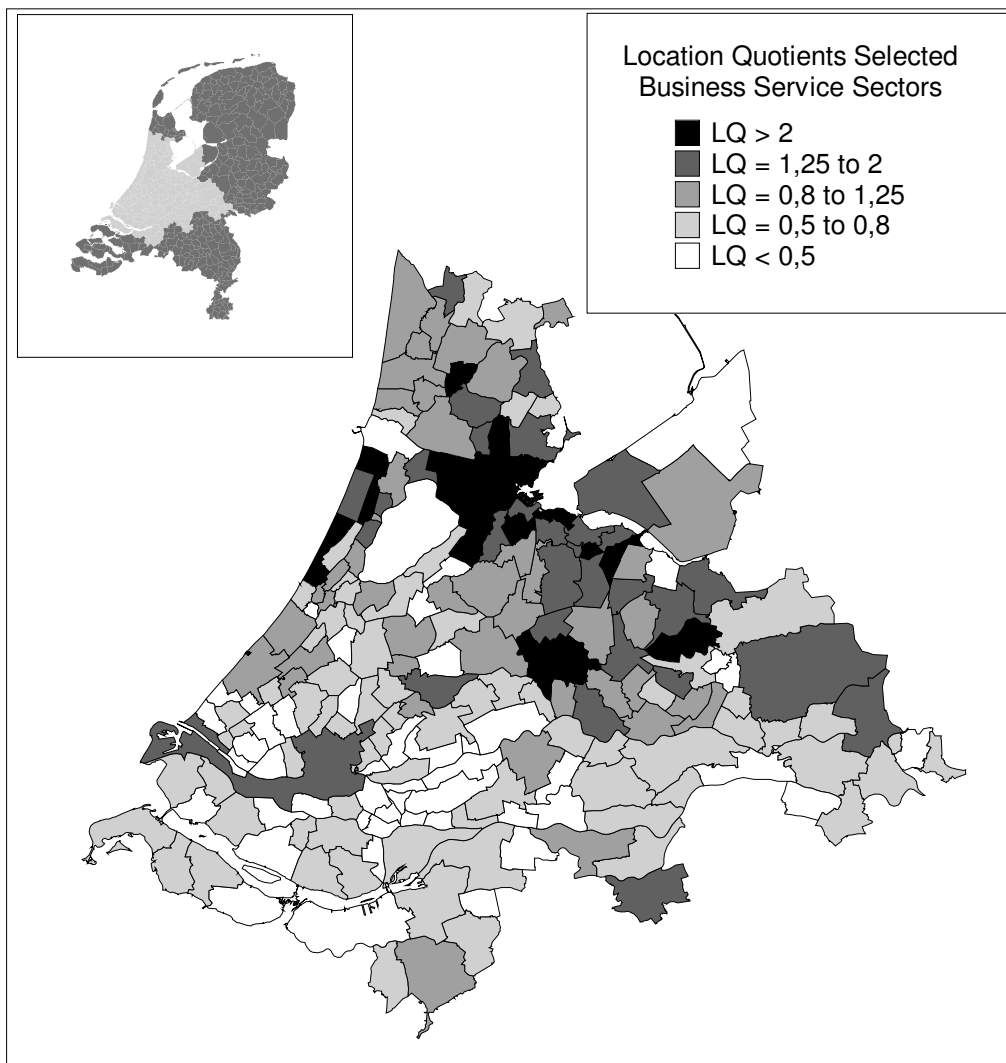


Map 4: Distribution of Dutch head offices of global service providers

The question is whether the above-observed concentration in the Amsterdam region is an indicator of a more general pattern. The fact is that the commercial services sector is, in any event, very strongly represented in the northern part of the Randstad. Figure 5 shows the location quotients for the six different services sectors⁵. The six services sectors are significantly over-represented (location quotient greater than 1.75) in quite a number of cities and municipalities in the northern

over-represented in the Amsterdam region, while management consultancy is substantially over-represented in the region of 't Gooi and large areas of the province of Utrecht. In addition, there is considerable over-representation of the legal services and insurance sectors typically in the largest four cities (Amsterdam, Rotterdam, The Hague and Utrecht).

Map 5: Location quotients business services



part of the Randstad. The financial services and advertising sectors are significantly

The structural characteristics of the Amsterdam local and regional economy and the geographic distribution of the head offices of the selected business service

⁵ The location quotient method compares the local employment share of a particular industry to the national share of that industry

firms therefore point very much in the same direction. However, the former cannot completely explain the latter. Whereas in terms of employment and the number of establishments in the six sectors together Amsterdam scores two to four times higher than Rotterdam, The Hague or Utrecht (see Table 2), in the case of the selection of world players, the relationship is even ten to one. Other factors must, therefore, be at work to make that the Amsterdam region stands out at international level compared to the rest of the Randstad. Only in Amsterdam do we find the global city milieu with the dense concentration of international advanced producer services. The agglomeration econo-

mies that Saskia Sassen referred to are clearly at work here. In addition, Amsterdam stands out because of its other qualities as the cultural capital of the Netherlands (Kloosterman, 2004), as a very open cosmopolitan city and because of its qualities of place more generally (Trip, 2005). Looking solely at global city functions generates a highly monocentric picture with Amsterdam as the clear centre. Other cities in the Randstad may also be in close proximity to Schiphol and boast comparable facilities in terms of accessibility, but a truly international milieu that can support global city functions is only be found in Amsterdam.

Table 2: Commercial services* in the G4, 2002

	Establishments		Employment**		From the GaWC 'top 97'	
	Number	Share	Number	Share	Number	Share
Amsterdam	9,669	69%	56,015	48%	41	84%
Rotterdam	1,433	10%	25,060	21%	5	10%
Den Haag	1,115	8%	15,312	13%	0	0%
Utrecht	1,855	13%	21,380	18%	3	6%
Total	14,072	100%	117,767	100%	49	100%

* Reduced to the six sectors focused on in this article, namely financial services, insurance, accountancy, legal services, management consultancy and advertising.

** Only full-time, not part-time.

Source: LISA register of establishments 2002.

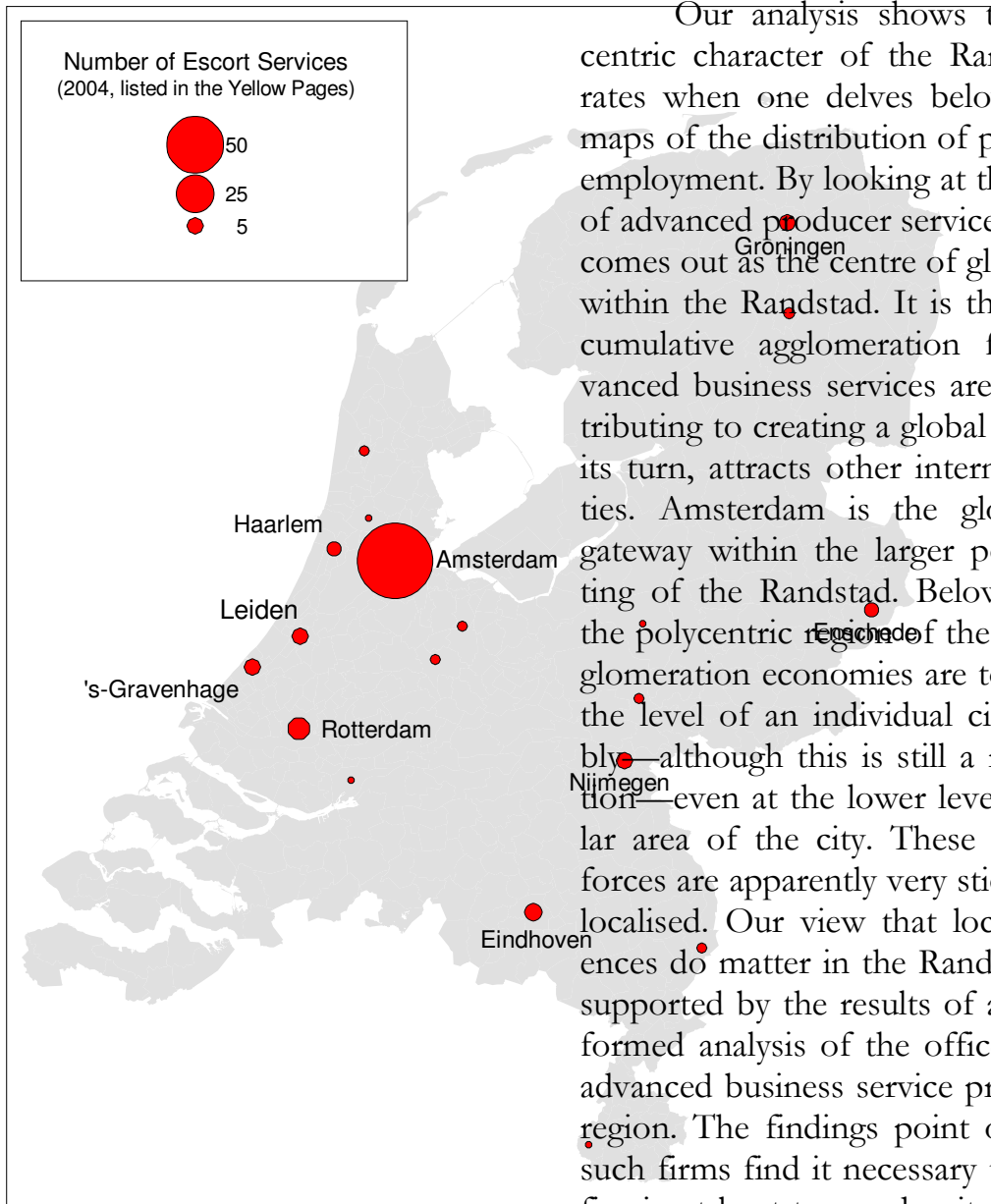
The GaWC selection of business services is inevitably arbitrary. In our research project, we are also trying to capture the spatial differentiation within the Randstad by using other indicators. Elsewhere, cultural industries were used as indicators of differences in urban milieus (Kloosterman, 2004). Below, we use another, somewhat unconventional, indicator to underline the central role of Amsterdam within the Randstad. We have used an-

other high-end service activity that is a part of the fabric of global cities, namely escort services. The oldest profession in the world can take on many forms and shapes, but our contention is that escort services can be seen as the expensive segment catering for both local and foreign persons (Cameron, 2004). Part of the demand for escort services is related to doing business (e.g. closing a business deal) and can, therefore, actually be seen as another pro-

ducer service (though one might have a very different normative appreciation of this particular activity). We expect, therefore, that the spatial distribution of this particular service activity is related to specific urban milieus that are characterised by the presence of high-earners and the clos-

ing of frequent business deals. Map 6 shows the distribution of firms providing escort services in the Netherlands. Again, we find a highly monocentric pattern with Amsterdam towering over the other Randstad cities.

5. Conclusions



Our analysis shows that the polycentric character of the Randstad evaporates when one delves below the general maps of the distribution of population and employment. By looking at the distribution of advanced producer services, Amsterdam comes out as the centre of global functions within the Randstad. It is there where the cumulative agglomeration forces of advanced business services are at work contributing to creating a global milieu that, in its turn, attracts other international activities. Amsterdam is the global node or gateway within the larger polycentric setting of the Randstad. Below the level of the polycentric region of the Randstad, agglomeration economies are to be reaped at the level of an individual city and, arguably—even at the lower level of a particular area of the city. These agglomeration forces are apparently very sticky and highly localised. Our view that locational differences do matter in the Randstad is further supported by the results of a recently performed analysis of the office strategies of advanced business service providers in the region. The findings point out that many such firms find it necessary to have an office in at least two and quite often in even all of the four largest cities in the Randstad, suggesting that they consider it not feasible to serve the entire Randstad from

Map 6: Distribution of escort services

a single, strategically located office (Lambrechts, Van der Werff & Kloosterman, 2004). Apparently, the four largest cities constitute 'business markets' of their own; defined by their own set of localised agglomeration economies and difficultly accessed from the outside.

In a sense, then Amsterdam, or a part of Amsterdam on the southern rim (the Zuidas area) is the central business district of the global city region of the Randstad. It is there where a wide spectrum of global linkages makes their land-fall. For Amsterdam, this situation is anything but new. From about the end of the 16th century into the 18th century, Amsterdam was not just one global city but the global city co-ordinating flows of goods, services and capital across much of the globe. Then as now, the activities connected to the global node function were highly spatially concentrated (Lesger, 2001). Notwithstanding, the advances in ICT and transport close physical proximity remain a prerequisite for maintaining intensive global links. The example of Amsterdam also shows that it might be the case that these specific agglomeration economies can be reproduced over a very long time through the presence of key firms (e.g. banks), key institutions (educational facilities), key infrastructure (both transport and communication) and an open cosmopolitan atmosphere.

The monocentric picture of the global region the Randstad is at loggerheads with the standing policy practice of promoting the entire Randstad as the country's most important trump card as regards international competition. It begs the question of whether it might not be more effective, as far as international pro-

filing is concerned, to continue building on the qualities and image which the Amsterdam region apparently already has.

On a more general level this article has shown that the study of polycentric spatial patterns is a complex business. Regions that appear highly polycentric in terms of population or employment distribution may as well show strong indications for 'monocentricity' when different, more restrictive measures are used. Even a quintessential polycentric urban region as the Randstad is, at second glance, home to just one, global node that offers the right conditions for global service providers to feel at home. Polycentricity, hence, is up to certain extent in the eye of the beholder. Indicators that suggest that the Randstad is 'polycentric' have to be weighed against others that show that the Randstad is not polycentric at all. Further studies of polycentric urban regions should therefore aim to lay bare the multi-layered complexity of which such regions consist. Only in this way will we (as geographers and planners) be able to get a better grasp of what polycentricity, both as an analytical concept and as a key feature of many contemporary urban regions, really amounts to, and also only in this way will we be able to help spatial policymakers in their efforts to make the best of the opportunities offered by such regions.

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