

2

Peripheral cities and their regions in the Dutch urban system until 1900.¹

In the Netherlands a kind of urban system emerged very early in the sea provinces, but inland the country cities functioned as regional capitals without many links to cities outside their regions. After 1800 political and economic unification accelerated and the peripheral towns lost their independence. Using two indicators—the division of labour and migration—the article analyses how this process of integration took shape after 1850.

Historians of urbanisation mainly use two sorts of theories to analyse the linkages between cities. The first are central-place theories: centres are hierarchically ordered according to their service functions. Cities act as market places and service centres for smaller centres, which in turn serve and control even smaller ones. This theory was developed by W. Christaller, who also stressed the regularity in size and distance of the centres, a part of the theory that has now been set aside.²

The second category contains urban-system theories, based on industrial and commercial differentiation among cities, where systems imply close interurban linkages. This approach is primarily focused on horizontal relations but does not exclude hierarchy: a very 'central' place in the urban system maintains ties to a large population.³ So it is not surprising that both theories sometimes use the rank-size rule as a tool to reconstruct urban relations, though its regularity and predictive value are discounted.⁴

A combination of both approaches is possible, for both focus on flows of goods, services, and people (migration), to which spread of political power and cultural impulses are sometimes added.⁵ Purely industrial centres were incorporated into the urban system as they acquired other central-place functions, which attracted people and gave the centres higher places in the urban hierarchy. In

¹ *The Journal of Economic History*, Vol. XLVIII, NO.2 (June 1988). The Economic History Association/Cambridge University Press.

² W. Christaller, *Die zentralen Orte in Süddeutschland* (Jena 1933).

³ Jan de Vries, *European Urbanization, 1500-1800* (London 1984).

⁴ According to the rank-size rule, the first city is twice as large as the second city, three times as large as the third, and so on.

⁵ See Eric Lampard, 'The evolving system of cities in the United States,' in H. S. Perloff and L. Wingo (eds.) *Issues in Urban Economics* (Baltimore, 1968) 81-139; P. Kooij, 'Urbanization: What's in a Name?' in H. Schmal (ed.) *Patterns of European Urbanisation since 1500* (London 1981) 31-61.

Table 2.1. *Largest Dutch cities ranked (1000 inhabitants)*

1600		1795		1900	
Amsterdam	65	Amsterdam	222	Amsterdam	511
Haarlem	30	Rotterdam	66	Rotterdam	318
Leiden	25	The Hague	41	The Hague	206
Utrecht	25	Utrecht	32	Utrecht	102
Delft	20	Leiden	31	Groningen	67
Middelburg	20	Groningen	24	Haarlem	62
Groningen	19	Haarlem	21	Arnhem	57
's-Hertogenbosch	18	Middelburg	20	Leiden	54
Enkhuizen	17	Dordrecht	18	Nijmegen	43
Zaandam	16	Maastricht	18	Tilburg	41
Dordrecht	15	Leeuwarden	16	Dordrecht	38
Rotterdam	13	Delft	15	Maastricht	34
Gouda	13	's-Hertogenbosch	13	Delft	32
Hoorn	12	Nijmegen	13	Leeuwarden	31
Nijmegen	12	Zwolle	12	Zwolle	31
Maastricht	12	Gouda	12	's-Hertogenbosch	31
Alkmaar	11	Zaandam	10	Schiedam	27
Leeuwarden	11	Arnhem	10	Deventer	26
The Hague	10			Breda	26
				Apeldoorn	26
				Den Helder	25
				Enschede	24
				Gouda	22
				Zaandam	21

Sources: For 1600: Jan de Vries, *European urbanization, 1500-1800* (London 1984); for 1795: J.C. Ramaer, *Geschiedkundige atlas van Nederland*; for 1900: Census 1899.

fact, only then did they become multifunctional central places, which is the best definition of a city.

On the other hand, central-place systems have been analysed on a regional scale and urban systems on an international scale. This has led Paul Hohenberg and Lynn Hollen Lees to speak of a dualistic system, consisting of a network system and of regional central-place systems, whose upper-level cities are linked with the urban network.⁶ Since this article is dedicated to peripheral cities, the Hohenberg-Lees distinction seems useful, but it is important to bear in mind that as time proceeds, the mixing of the two systems becomes very complicated.⁷

⁶ Paul M. Hohenberg and Lynn Hollen Lees, *The Making of Urban Europe, 1000-1950* (Cambridge, Mass. 1985) chap. 2.

⁷ *Ibid.*, 238-47.

The Dutch urban system before 1800

The territory now called the Netherlands is one of the earliest intensively urbanised areas of Western Europe. In 1600 it contained 19 cities with more than 10,000 inhabitants (see Table 2.1). One-fourth of the population lived in those cities.⁸ While in other early urbanised areas such as northern Italy, Spain, and parts of Germany, the number of large cities dropped after 1600, in the Netherlands 18 such cities remained in 1800, with two exceptions the same ones as two centuries before.⁹ Their location is shown on Map 2.1. The most striking fact is that they were mainly centred in the west. Outside Holland the distances between the densely populated centres were much larger, though still modest by standards other than those of the Low Countries.

Were there any relations between these cities and what were their spheres of influence? The literature provides two answers, one by Jean-Claude Boyer, the other by Jan de Vries.¹⁰ Boyer implicitly combines the urban-system and the central-place theories, but pays most attention to the latter. Therefore he searches for central functions and hierarchical positions, trying nearly all possible indicators. Although his observations are rather descriptive and fragmented, he found some kind of urban system in the seventeenth century, headed by Amsterdam and mainly confined to Holland, Zeeland, and Utrecht provinces.

The article by Jan de Vries, which is in the urban-system tradition, is much more analytical. He takes the construction of *trekvaarten* (canals) for barges as an indicator, because this efficient new means of transport reflected the integration of cities into an urban network, also mainly situated in the three provinces mentioned above. After 1700 this urban system lost its cohesion; Amsterdam gained dominance over a part of it, while the rest was centred around Rotterdam.¹¹ Here the hierarchical concept comes in. But how did the peripheral cities fit into the system? De Vries argues that around 1700 the large cities in the North, Groningen, and Leeuwarden, which were connected by *trekvaarten*, were integrated into the urban system, the Zuiderzee acting as a unifier.¹² Leeuwarden indeed had some trade relations with Amsterdam via the Frisian towns on the border of the Zuiderzee, but the links of Groningen with the urban system were very weak. Groningen's link to Leeuwarden was roundabout, passing through Dokkum in the extreme north and mainly promoted by that city, which had lost its place in the Republican naval organization and was trying to keep its transport functions. In fact, of the passengers embarking at Groningen, the greater part had already disembarked in the region's villages before the barge arrived in

⁸ Jan de Vries, *European Urbanization*, 29, 39.

⁹ Alkmaar, Enkhuizen, and Hoorn lost their rank mainly due to the rise of Amsterdam.

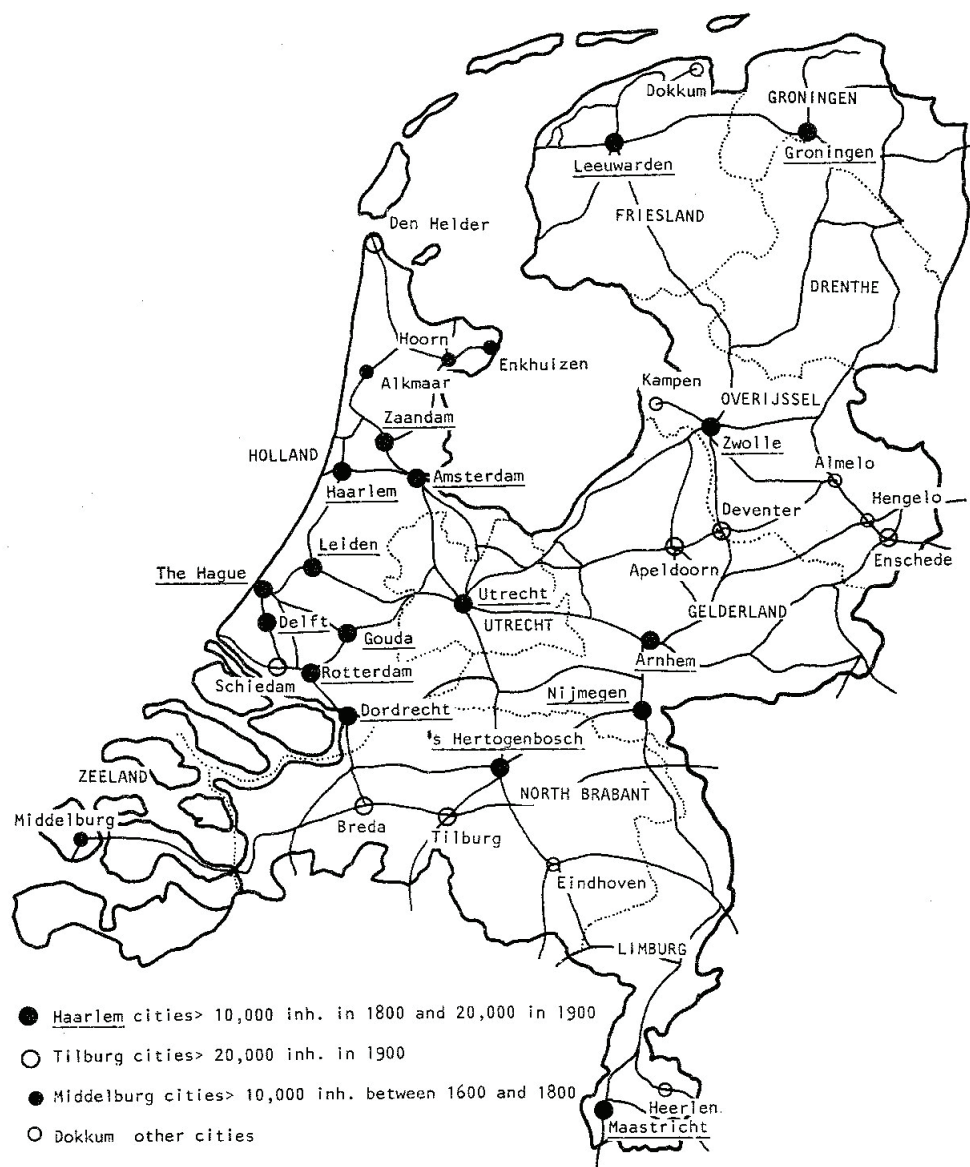
Newcomers were Zwolle and Arnhem. In a way these changes announced the events to come.

¹⁰ Jean-Claude Boyer, *L'Evolution de l'organisation urbaine des Pays Bas* (Lille 1978); Jan de Vries, 'Barges and capitalism: Passenger transportation in the Dutch economy 1632-1839', in *A.A.G. Bijdragen*, 21(1978), 33-139. The books were issued at almost the same time.

¹¹ De Vries, 'Barges and capitalism', 347-54.

¹² *Ibid.*, 64-65.

Map 2.1 Largest Dutch cities and the railway system, 1910



Dokkum.¹³

The other peripheral cities do not appear in de Vries's story, but Boyer has some observations on them. In his view the links of the peripheral cities with the urban system were not very strong in the seventeenth and eighteenth centuries. As tracked by the distribution of tropical products, the direct influence of Amsterdam stretched as far as Leeuwarden, Zwolle, Deventer, Arnhem, Nijmegen, and 's Hertogenbosch but not as far as Groningen and Maastricht.¹⁴ But this indicator overstates the degree of integration, since Amsterdam had a firm monopoly just on these products, and the volume of trade was small.

In my view the peripheral cities in these centuries were primarily concerned with obtaining a large sphere of influence, a region of their own.¹⁵ This was accentuated by the particular structure of the Dutch Republic, which was in fact a union of seven autonomous provinces. This situation granted the regional capital extra central-place functions and increased its growth potential. Moreover, when the Dutch revolt detached the inland provinces from their former, international networks, the peripheral cities had an even greater interest in the regions immediately around them.

Groningen is a good example of this development. Having lost its connections with Germany, it concentrated on its immediate region. In the beginning of the seventeenth century, Groningen sat like a spider in the centre of a web of newly constructed waterways. The city even bought large peat fields within its region and started to exploit them. By contrast, Leeuwarden never succeeded in subjecting the lesser towns in the province of Friesland in the way Groningen did. The smaller towns kept market functions of their own, connected with Amsterdam and subordinated to that city.

Three cities in Overijssel-Deventer, Kampen. Zwolle-had once belonged to the Hansa organisation and so enjoyed far-reaching connections. These links slackened during the sixteenth century. Deventer, the *primus inter pares*, suffered especially from the repercussions of the Dutch revolt.¹⁶ Then Zwolle took the lead, but did not succeed in establishing a region of its own. Amsterdam was then able to penetrate into this region.¹⁷

In Gelderland the commercial town of Nijmegen was transformed into a fortress, and during the wars its strategic situation between two rivers changed from a commercial advantage into a serious handicap.¹⁸ In the course of the eighteenth century Arnhem only barely passed the level of 10,000 inhabitants. Thanks to its pleasant surroundings, however, it developed into a residential city even though

¹³ Ibid, 119

¹⁴ Boyer, *L'Evolution*, 163-69.

¹⁵ In the international literature there is no consensus on the size of regions. In Dutch economic history the term is used to indicate an area of limited scale, mostly a province or a part of it.

¹⁶ Paul Holthuis, 'Deventer in oorlog: Economische aspecten van de militaire conjunctuur 1591-1609,' in *Economisch- en Sociaalhistorisch Jaarboek*, 50 (1987), 32-51.

¹⁷ Boyer, *L'Evolution*, 166.

¹⁸ Hubert Nusteling, *Binnen de vesting Nijmegen* (Zutphen 1979).

it had few central functions for its region.

The other peripheral large cities, 's Hertogenbosch and Maastricht, did not belong to independent provinces. They were parts of the *Generaliteitslanden* in the south, which were obtained by the peace with Spain in 1648 and were governed directly by the federal government. Maastricht had few links with the rest of the country, but retained some of its international relations with Germany and the southern Netherlands. The region controlled by 's Hertogenbosch was very extensive.

As a result of their regional orientation and their relative autonomy, the peripheral cities did not profit a great deal from the Golden Age, but they also did not decline in the eighteenth century as some cities in Holland did, the textile manufacturing cities of Leiden and Haarlem being the most striking examples (see Table 2.1).

The Dutch urban system in the nineteenth century

The half-century between 1850/60 and 1900/10 witnessed the formation of an integrated Dutch urban system. Cities with more than 20,000 inhabitants in 1900 are shown in Table 2.1 and Map 2.1. Since the population of the Netherlands doubled in the nineteenth century, the higher threshold makes for a better comparison with the earlier period. With the rise of cities in the east and south, the main towns are now more regularly spread over the country. The only newcomers in the west are Schiedam, with its gin industry, and, rather peripherally situated, Den Helder, which was designated the main naval port of the newly founded Kingdom of the Netherlands. Middelburg stayed below the threshold. The other five newcomers were peripheral cities: two old towns obtained new functions—Breda and Deventer; the other three small centres which grew rapidly were Apeldoorn, Enschede, and Tilburg.

One key to the formation of an integrated urban system was the development of industrial areas outside Holland. Around Tilburg as well as Enschede an old textile proto-industry transformed itself into a manufacturing sector with international relations. In Apeldoorn the manufacturing of paper became important, and the town also developed as a residential centre. Earlier, mainly rural, examples of specialisation have been studied by J. A. de Jonge: potato-flour and straw-board in the province of Groningen; cottons in Overijssel; shoe, leather, and woolen manufacturing in North Brabant; butter in Friesland, and fruit preserves in Gelderland and Limburg.¹⁹ With the exception of textile and shoe manufacturing, these small-scale and sometimes season-bound industries did not foster urbanisation.

True regional specialisation outside Holland awaited the emergence of an integrated transportation system. This was constructed in the second half of the

¹⁹ J. A. de Jonge, 'The role of the outer provinces in Dutch economic growth in the 19th century,' in J. S. Bromley and E. H. Kossman (eds.) *Britain and the Netherlands, vol. 4: Metropolis, dominion, and province* (Den Haag 1971) 208–26.

nineteenth century and consisted of a combination of canals, railroads, and roads. Investment in railways reached its peak between 1850 and 1885. This was followed by a canal boom between 1885 and 1910.²⁰ The remainders of the old *trekvaart* network complemented the new canals, as the new dense system of tramways did the railways. At first most attention was given to the connection of the peripheral cities and regions with Holland, but around 1900 north-south connections were constructed. Looking at the towns in relation to the railways and waterways makes clear the correlation between population growth and accessibility by means of transport, although the direction of causation remains unclear.²¹

According to recent estimates, the starting point of modern Dutch economic growth has to be placed around 1850, coincident with the railway boom. Industrialisation—textiles, foods and allied products, metals—had a larger share in it than is generally accepted, though the growth of the service sector probably still dominated.²² This special pattern of modern Dutch economic growth should explain why the changes in the rank-size order of Dutch cities were not as dramatic as in the United Kingdom. In most old cities the initial lack of industrial functions was compensated by the growth of existing commercial central-place functions and the initiation of new ones. The only pre-dominantly industrial city which attained a high rank in the nineteenth century was Tilburg (see Table 2.1). As demonstrated below the old towns took an important share in the industrialisation wave beginning in the last decade of the nineteenth century, and so kept a high rank.²³ The example of Tilburg after 1900 was imitated only by ‘Philips-town’ Eindhoven, by Enschede (textiles), and by Heerlen in the newly developed mining district in Limburg. New cities were small in number. Between 1900 and 1930 only 13 centres succeeded in collecting enough functions to be classified as genuine cities and none numbered more than 30,000 inhabitants.²⁴ But the rise of smaller centres then did check the growth of the largest cities. After 1910 their share in the total population decreased and the population became more regularly spread.²⁵ The urban system became denser and less hierarchical.

The period between 1850/60 and 1910/14 thus proved to be a very special one for Dutch urbanisation. The Dutch urban system was then in its most mature and balanced phase. Suburbanisation was only beginning and so

²⁰ O. A. van der Knaap, *Population Growth and Urban Systems Development: A Case Study* (Boston 1980) 73.

²¹ Ibid., 105. Correlation analysis to distinguish a dependent and an independent variable gave insignificant results.

²² J. L. van Zanden, ‘Economische groei in Nederland in de negentiende eeuw: Enkele nieuwe resultaten,’ in *Economisch- en Sociaalhistorisch Jaarboek*, 50 (1987) 51–77.

²³ See for the ‘industrial revolution’ in the Netherlands: J. A. de Jonge, *De industrialisatie in Nederland tussen 1850 en 1914* (Amsterdam 1968).

²⁴ Pim Kooij, ‘Stad en platteland,’ in F. L. van Holthoon (ed.) *De Nederlandse samenleving sinds 1815* (Assen 1985) 93–117, esp. 111–12.

²⁵ Van der Knaap, *Population Growth*, 68.

was modern industrialisation outside the cities. This was the era of the large cities, and it was also marked by the total incorporation of the larger peripheral towns into a national urban system.

Peripheral cities and the division of labour around 1900

As they lost their political autonomy, peripheral cities had to develop closer interurban links. Some political central-place functions were taken over by The Hague, the centre of government. Amsterdam dominated some central-place functions in the services sector (banking, insurance). Although commercial relations of the peripheral towns with places outside their regions (which had been at a low level) grew, they were largely controlled by branches of trading companies from Amsterdam and Rotterdam, so incorporation into the urban system implied subordination to the three largest cities in the west, which together formed the top of the Dutch urban hierarchy.²⁶ Nonetheless, the peripheral cities profited greatly from better access to the Dutch market.

Table 2.2 attempts to capture the changes in terms of shifts in sectoral employment shares. In 1860 the principal peripheral towns were service oriented (Groningen, Nijmegen, Leeuwarden, and Breda) or balanced ('s-Hertogenbosch and Arnhem). In the west of the country, however, where services concentrated in the largest cities, some secondary towns already were principally industrial: Haarlem (printing and metal) and Dordrecht (shipbuilding). Better data would probably add Delft (ceramics, weapons, yeast, spirits), Schiedam (gin), Gouda (pottery, candles), and Zaandam (oil, paint) to the list.

The old peripheral cities in 1860 had mainly traditional, region oriented handicraft industry, Maastricht, Zwolle, and Deventer already representing interesting exceptions. Maastricht, situated between the German and Walloon industrial regions, had a head start. The war that followed Belgian independence in 1830 cost Maastricht its external linkages. Belgian refugees and others subsidised by King William I started up new industries. One success story was that of Petrus Regout, who among other things founded a china factory, an arms factory, and a paper mill.²⁷ Deventer and Zwolle had iron foundries and some food and wood-processing.

By 1900 the differentiation among larger cities had become very clear. The peripheral cities ceased to be self-supporting and no longer produced the whole range of products their regions needed. They could import goods and services from other cities and export those products they had focused on. The different flows of goods and services, which were the result of this development, reflect the linkages between cities, the outlines of the urban system.²⁸ Intensification of

²⁶ Engelsdorp Gastelaars and M. Wagenaar, 'The rise of the Randstad 1815-1930,' in Schmal (ed.) *Patterns*, 229-47.

²⁷ A. J. F. Maenen, *Petrus Regout* (Nijmegen 1959).

²⁸ B. Robson, 'The impact of functional differentiation within systems of cities' in Schmal (ed.) *Patterns*, 111-31.

Table 2.2. Sectoral distribution of the labour force, 1860 and 1900 (percentages)

	1860		1900	
	Industry	Services	Industry	Services
Amsterdam	46.1%	53.2%	46.9%	52.6%
Rotterdam	43.0	56.6	42.5	56.2
The Hague	46.1	52.4	41.2	53.7
Utrecht	48.2	47.5	44.4	52.2
Groningen*	45.0	52.1	42.3	55.5
Haarlem	51.3	43.9	46.5	49.9
Arnhem*	48.8	48.4	40.7	53.2
Leiden	53.2	45.0	54.0	43.5
Tilburg*			64.2	29.3
Dordrecht	49.9	48.8	46.0	52.8
Nijmegen*	42.4	47.4	40.6	50.8
Maastricht*	53.6	43.5	60.2	38.1
Leeuwarden*	43.9	53.4	37.8	57.6
Delft			56.2	40.3
's- Hertogenbosch*	49.0	49.3	51.7	46.2
Zwolle*	48.7	44.9	39.7	54.0
Schiedam			60.9	36.0
Deventer*	53.0	42.6	50.9	43.5
Breda*	44.8	52.9	46.3	51.3
Apeldoorn*			39.5	30.1
Den Helder*			29.2	62.2
Enschede*			77.4	20.5
Gouda			54.0	42.5
Zaandam			46.1	48.4

* = 'Peripheral' cities

Source: Census, 1859 and 1899

trade flows coupled with industrial specialisation could push the employment shares in either direction.

Although no data are available to reconstruct the flows, it is possible to examine the heightened interurban division of labour with concentration numbers. These measure the share of one industry's labour force in a given town relative to that town's share of the total population. A number greater than 100 indicates an overrepresented industry. Concentration numbers are given in the Appendix Table for the larger Dutch cities in 1900.²⁹ Of course most numbers exceed 100 because agriculture was almost absent in cities, but true overrepresentation is well shown.

²⁹ See for the concentration numbers of 1889 and 1909, Kooij, 'Urbanization,' 52-53.

Industrial specialisation was different in every peripheral city, as it ought to be in a real urban system. Groningen had printing firms and a clothing industry. It was also overrepresented in some food and allied products categories, such as coffee, tobacco, meat products, and sugar. Leeuwarden specialised less, but housed dairies and a large paper mill. Leeuwarden was also the printing centre for Friesland. Zwolle, too, was a printing and newspaper centre, but its neighbour Deventer was far more industrialised, producing bicycles, cast iron, cottons and carpets. Yet Enschede was the true industrial leader of Overijssel. In Gelderland Apeldoorn was a centre for papermaking; Arnhem industrialised little, as did Nijmegen for the time being. The southern peripheral cities also specialised their industrial functions; 's Hertogenbosch featured printing, shoemaking, and the production of cigars. The concentration number for textiles is high for Tilburg, while Breda had iron foundries, engineering works, and a match factory (chemicals). In Maastricht the initiatives of Regout were emulated by others, reinforcing the industrial character of the city. Peripheral cities sometimes specialised in the services too, as some high concentration numbers reflect. Arnhem, a city without industry, became a banking centre.³⁰ The city attracted relatively wealthy people from the west and from the colonies who provided a clientele for government and railway bonds sold through banks. In some cities (Den Helder, Deventer, Nijmegen, 's Hertogenbosch, Breda) high service numbers also betray the presence of a garrison.

In most peripheral cities, however, the high concentration numbers in the services sector indicate a continuing regional central-place role. In Friesland Leeuwarden in addition controlled the butter industry, and Groningen, the regional capital, housed the head offices of potato-flour and straw-board factories. In other provinces the dominant position of the regional capital was somewhat challenged by the incorporation of old specialised towns into the urban system and the emergence of new ones. Thus Zwolle had to leave some central-place functions to its adjacent cities, Kampen and Deventer. In the eastern part of Overijssel the textile town of Enschede and its smaller neighbours Hengelo and Almelo collected a complete range of central-place functions.³¹ They served the eastern part of Gelderland, while the west of the province was the hinterland of Apeldoorn, Arnhem, and Nijmegen. Nijmegen also became the export centre for the brickyards along the river Waal. The Waal had become a mainstream in European trade connections, but existing urban histories give no indication that Nijmegen had a share in this trade, which was dominated by Rotterdam.³²

The situation around 's Hertogenbosch changed fundamentally. At the beginning of the nineteenth century, the city dominated the larger part of the vast province of North Brabant. But first Tilburg emerged and, after the foundation

³⁰ J.Th.W. Willemsen, *De volkshuisvesting in Arnhem* (Arnhem 1969).

³¹ Jan Buursink, *Centraliteit en hiërarchie* (Assen 1971) 116–39.

³² Johan de Vries, *Nieuw Nijmegen, 1870-1970: Moderne economische geschiedenis van de stad Nijmegen* (Tilburg 1969).

of the Philips plant in 1891, Eindhoven's great spurt began. By the beginning of the twentieth century, this city had gained a region of its own. During the period observed here, this development was only in its initial stages, but Tilburg had already taken over some functions. Together with Hertogenbosch and Tilburg controlled the regional shoe industry, which was of national importance as the low concentration numbers in this category in other cities show. In the west of North Brabant, Breda centred its own region.³³

Perhaps Maastricht had the best opportunities to gain control over an extended region. But around 1900, as the Limburg coalfields opened up, the industrial centre of gravity shifted to the fast-growing town of Heerlen. Maastricht remained the most complete city, however.

Peripheral cities and migration around 1900: the example of Groningen

Urban systems are characterised not only by flows of goods and services but also by flows of people. It is possible to measure to what extent people migrated along the communication lines of the urban system and how strongly capital cities in the central-place system pulled people from the lesser centres in their hinterland. Since peripheral cities combined functions in both systems in the second half of the nineteenth century, it is very useful to analyse migration for just those cities. I have undertaken this very labour-intensive analysis so far for one city: Groningen, in many ways the ideal type of a peripheral city.

To analyse Groningen migration I tested samples taken at random from the Civil Register every 10 years between 1870 and 1910.³⁴ The evidence on the changing places of origin is given in Table 2.3. Most immigrants, with overrepresentation of women and families, came from the province of Groningen and the rest of the north. In the eighties this percentage rose considerably, due to the agrarian depression. After that decade Groningen increasingly attracted people living outside the north.

In 1870/80, 14.1 percent of the immigrating units came from cities with more than 20,000 inhabitants. By 1900/10 this rose to 21.6 percent. The share of Amsterdam, Rotterdam, and The Hague grew from 6.5 to 11.9 percent. Of the other larger towns, in the beginning only those closest to Groningen—Leeuwarden, Zwolle, Deventer—delivered a substantial share. After 1900, however, the other large cities, with the exception of Tilburg, participated, the number of migrants proportional to their size. This shows well the complete incorporation of Groningen into the urban system.

The proportions of migrants coming from each part of the north helps fix the boundaries of a regional Groningen migration system. It contained the whole province of Groningen, the extreme east of Friesland, and the north of the spar-

³³ Jan Buursink, *Centraliteit*, 139–70.

³⁴ A full account is given in Pim Kooij, *Groningen 1870-1914: Sociale verandering en economische ontwikkeling in een regionaal centrum* (Groningen 1986).

Table 2.3 *Origin of Groningen immigrants (percentages)*

Region	Individual Men				Individual Women				Families			
	1870-1880	1880-1890	1890-1900	1900-1910	1870-1880	1880-1890	1890-1900	1900-1910	1870-1880	1880-1890	1890-1900	1900-1910
Province of												
Groningen	46	51	45	42	57	66	60	57	47	60	51	55
North	26	27	22	20	23	21	15	17	27	22	21	15
Middle	13	9	12	15	11	5	7	7	10	3	6	9
West	9	10	18	14	8	8	15	16	10	10	14	15
South	3	1	0	4	0	0	2	1	3	1	5	3
Foreign												
Countries	3	1	3	3	0	0	2	2	2	3	2	4
N	353	336	263	342	276	316	295	313	261	239	215	215

Note: North includes Friesland and Drenthe; Middle includes Overijssel, Gelderland, and Utrecht; West includes North and South Holland; South includes Zeeland, Brabant, and Limburg. *Source:* See text.

sely populated province of Drenthe.³⁵ Groningen acted as a link between the regional and the national migration system. Almost all people who left the north went there first. But for most regional migrants Groningen was also a barrier. As Table 2.4 shows, they either stayed or returned where they had come from.³⁶ Return migration was indeed important. Even among Groningen immigrants, 10 percent proved to have been born in the city itself and a fourth of the ‘immigrants’ from Amsterdam, Rotterdam, and The Hague were in fact returning to their place of birth.

About 25 percent of Groningen’s immigrants took up domestic service, nearly all unmarried women with a low level of education. A job as domestic servant was almost their only opportunity. The greatest share of unmarried men, a fourth in 1900, became journeymen bakers, followed by shop assistants. The shares of merchants, valets, clerks, shoemakers, tailors, carpenters, printers, butchers, or labourers stands at 2 to 4 percent. Men with higher education found their occupations in administration, at the university or other institutions of education, in court, in banking, and in the professions. These were mainly heads of families who traveled relatively large distances. Better-educated, unmarried women also traversed long distances to obtain a job as teacher or nurse.

On a national scale it is difficult to draw a clear distinction between migration in the setting of an urban network and in the setting of a central-place system. The central-place system for instance shows up in the fact that migration was in

³⁵ Drenthe was never a full member of the Republic. It was covered with large peat fields which were mainly exploited in the second half of the nineteenth century. Groningen had a central place in the peat trade.

³⁶ Real mobility was even higher because the sample in Table 2.4 also includes people arriving at the end of the decade and perhaps departing at the beginning of the next.

Table 2.4 Mobility of immigrants to Groningen from the province or Groningen (percentages)

	1870-80	1880-90	1890-00	1900-10
Died	2%	10%	1%	2%
Stayed in city	54	54	51	49
Returned to province of Groningen	30	33	34	33
Went elsewhere in the north	5	4	4	5
Went to Amsterdam, Rotterdam, The Hague	3	4	3	5
Went to other city over 20,000	2	1	2	2
Went to other municipality	2	2	3	3
Went to foreign country	2	1	1	0
<i>N</i>	<i>443</i>	<i>527</i>	<i>407</i>	<i>451</i>

Note: The table reflects the situation at the end of the decade of migrants during the decade. *Source:* See text.

part hierarchically structured, The three largest cities in the west attracted a considerable proportion of the emigrants from the province of Groningen who left the north (see Table 2.4). Retail clerks, for instance, came to Groningen from the smaller towns in its region and then moved to the top of the urban hierarchy. On the other hand, Amsterdam, Rotterdam, and The Hague sent people to occupy top positions in the Groningen service and public sectors. The urban network is indicated by the immigration of entrepreneurs from other large cities in the Netherlands. In 1900 six of the thirteen largest factories in Groningen had managers who originated in one of those cities. They largely induced the increased industrial specialisation.

After 1900 an interesting change took place in the migration pattern. More and more people who were born in the areas near the city left the Groningen region without residing any length of time in the city. The more distant industrial area in the southeast of the Groningen region also showed this pattern. This means that Groningen was beginning to lose its function as a link between a regional and a national migration system. Smaller centres were incorporated directly into the urban network.

Conclusion

My analysis of the division of labour and migration reveals three stages in the relation of peripheral cities to the Dutch urban system. First, between 1600 and 1850 the system of cities was mainly limited to the west of the country, with the peripheral cities semi-independent from this system. Each dominated a more or less extended region of its own. Economic, political, and cultural contacts with this area were mediated by the regional capital. Second, between 1850 and 1900 the large peripheral cities became integrated into one urban system characterised by new, efficient means of transport and by a growing division of labour. The three largest Dutch cities—Amsterdam, Rotterdam, and The Hague—did not directly influence the hinterland of the peripheral cities. These kept their positions

as regional gateways. But industrialisation favoured the emergence of some new large towns that carved out regions of their own at the expense of the regional capitals. Third, after 1900 the subordination of regions to their capital cities diminished further. Small centres, notably ones based on industry, began to claim their full-fledged place in the Dutch urban system. This system therefore ceased to be fully urban in the nineteenth-century sense of city-based.

Table 3.5 Concentration numbers of the largest Dutch cities, 1900

	Population	Pottery, Glass	Printing	Chemical Products	Wood,Cork, Straw	Clothing	Leather, Rubber	Metal, Shipbuilding	Paper	Textiles	Gas, Electricity	Foods and Allied Products	Trade	Traffic, Transport	Banking, Insurance	Professions	Free Labor	Civil Service
Amsterdam	510,853	18	234	113	99	166	80	126	142	9	208	118	170	131	359	214	187	91
Rotterdam	318,407	13	155	96	132	146	74	139	82	31	203	113	169	202	191	157	475	90
The Hague	206,022	16	217	78	127	180	84	103	60	16	235	84	139	94	206	240	74	198
Utrecht	102,086	88	205	143	101	170	89	135	121	12	362	119	125	159	242	149	117	178
Groningen	66,537	16	285	136	129	189	89	91	122	33	210	143	177	149	156	229	286	128
Haarlem	61,702	9	429	209	73	176	82	194	89	54	157	99	135	153	188	174	196	107
Amhem	56,812	25	208	70	109	171	100	111	128	48	236	97	140	113	235	215	28	176
Leiden	53,657	30	306	139	115	168	117	133	155	538	261	136	146	68	134	151	126	187
Nijmegen	42,755	42	220	146	76	145	94	101	113	4	181	106	114	121	124	105	144	177
Tilburg	40,628	63	70	60	57	131	316	131	31	1162	157	95	82	146	126	30	1	21
Dordrecht	38,386	35	172	155	112	144	86	307	110	4	202	118	147	220	237	158	3	107
Maastricht	34,220	2159	78	67	64	140	118	94	813	21	83	139	108	92	126	113	2	110
Delft	31,589	204	136	639	112	144	105	205	79	15	191	202	123	73	95	111	205	127
Leeuwarden	31,162	55	240	138	94	182	87	102	658	24	190	108	216	132	184	209	275	165
Zwolle	30,560	5	183	265	135	128	112	120	112	27	201	130	142	241	171	138	58	109
s-Hertogenbosch	30,517	13	302	47	92	150	306	167	199	68	86	265	128	104	153	182	44	195
Schiedam	27,126	229	184	929	194	94	69	87	226	11	176	356	120	89	101	72	193	74
Deventer	26,212	104	170	183	150	115	89	217	67	220	239	165	142	83	107	108	8	194
Breda	26,096	2	173	402	90	151	147	202	62	37	174	149	115	76	138	115	97	358
Apeldoorn	25,761	7	63	85	139	154	71	73	1204	92	97	61	67	81	63	95	1	58
Den Helder	25,159	0	88	24	32	70	86	235	17	2	77	55	99	66	32	48	243	925
Enschede	24,353	28	87	29	50	120	61	113	281	2299	215	51	95	60	88	56	4	60
Gouda	22,085	332	193	1342	120	175	88	116	132	171	165	148	163	118	134	81	69	109
Zaandam	21,146	12	134	515	85	54	58	223	217	10	151	161	214	96	82	59	538	63
Percent labour force		1.3%	0.7%	0.5%	2.0%	4.8%	2.0%	4.3%	0.4%	2.6%	0.2%	5.9%	9.7%	7.0%	0.5%	0.7%	1.7%	3.5%

Note: Situation as of 31 December 1899. Source: Census 1899

