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Dealing with Deconcentration: Population Deconcentration and Planning Response in Polynucleated Urban Regions in North-west Europe

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Summary. The process of population redistribution is influenced by a complex set of factors which can be grouped in economic, socio-cultural, demographic and policy factors. Most countries in Europe have to a certain extent tried to influence population redistribution through policy measures, mostly in the sphere of spatial planning, in the recent past. This paper offers a critical evaluation of the degree to which 'spatial planning matters' in the population redistribution process. First, the focus will be on the Netherlands, a country with a polynucleated settlement pattern that is known for its ambitious policies to counteract the continuous deconcentration of population. In addition, an international comparison with three other areas in north-west Europe (also characterised by a polynucleated settlement system) will be presented, in which the key question is: to what extent do different spatial planning systems lead to different developments in population distribution? The evidence presented, with striking similarities in population redistribution in the four case-study areas, suggests that the influence of spatial planning is very modest. To conclude this paper, the possible future role of spatial planning in the deconcentration process is questioned. Will spatial planning be able to counteract or control the formation of urban fields, in which people, companies and services are seemingly spread out 'at random' over large areas?

1. Introduction

In recent years, the future spatial design of the Netherlands has regained a prominent position on the policy agenda. The government published the Fifth Report on Physical Planning in early 2001. This is provoking a lot of discussion about which direction planning policy should take. An important part of Dutch planning policy has traditionally been urbanisation policy, with a strong focus on the choice between concentration and deconcentration. Recently, several scientists and politicians suggested the formation of so-called urban fields. These urban fields are said to lack a clear centre. Within them, population, work, services and recreational facilities are spread across a large area. The mobility pattern in urban fields is characterised by a 'criss-cross' pattern: daily journeys are no longer for the largest part between suburb and city, but more and more city-to-city and suburb-to-suburb. Although the urban field concept was

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launched more than 30 years ago (Friedmann and Miller, 1965), it has only recently reached a policy document on the future spatial design of the Netherlands for the first time (Vromraad, 1998). The formation of urban fields would be the next step in the process of continuous deconcentration of population, work and services that has characterised north-west Europe in the post-war period. This deconcentration process has already led to the coalescence of monocentric urban regions into polynucleated urban regions in large parts of north-west Europe (Dieleman and Faludi, 1998), but the formation of urban fields is yet one considerable step further. If this development of urban fields is really underway, it is highly questionable whether Dutch planners will have an answer to it.

This paper offers a critical evaluation of the degree to which 'spatial planning matters' in the population redistribution process. First, the main trends in the distribution of population in the Netherlands are analysed for the period since 1970. These trends were certainly influenced by spatial planning policy but, as will appear from the analysis, only to a modest extent. In addition, an international comparison with three other regions in Europe was undertaken. This comparative study was meant to check if the trends in population distribution in the Netherlands, and the influence of spatial planning measures on these trends, were 'typically Dutch' or comparable with trends in other European countries. The selected regions share a number of characteristics with the Netherlands, one of the most important being that all regions in the comparative study have a polynucleated settlement system. The main focus of the international comparison is the influence of spatial planning on population distribution changes in the four selected regions. This leads to a judgement about the degree to which planning has proved itself able to redirect trends in population distribution in the recent past. Connected to this, the question is what expectations we might have about the possible influence of planning on population distribution in the near future.

2. Urbanisation and Urbanisation Policy in the Netherlands since the 1970s

Settlement behaviour is influenced by a large number of factors. There are several economic, socio-cultural and demographic influences involved. These groups of factors have already been analysed in many studies (for example: Champion, 1989; Cheshire, 1989; Hall, 1993; Vining and Pallone, 1982). A factor that was generally not included in these studies was government intervention in population distribution through spatial planning. Spatial planning might have a considerable influence on the pattern of population distribution. This influence can certainly be expected in the Netherlands where, since the 1960s, the national government has attempted to put a stop to the continuous deconcentration trend of people as well as economic activities. The policy of concentrated deconcentration in particular, in which the Dutch government tried to direct outmigration from the largest cities to a selection of growth centres, reached international acclaim (Faludi, 1994; Hall, 1992). After the policy of concentrated deconcentration was abandoned during the 1980s, the ambitions of the Dutch planners hardly became less. The new aim was to promote compact-city growth. Although this policy has so far turned out to be much less successful, the influence of spatial planning on the distribution of population in the Netherlands still makes itself felt.

Table 1 shows the growth rates of the Dutch municipalities, grouped in a typology expressing the degree of urbanisation of the municipalities, for the period between 1970 and 1995. This period is divided into three sub-periods that more or less coincide with shifts in national urbanisation policy.

Between 1970 and 1975, the main trends were a great population loss for the largest cities and a rather fast growth rate in rural, urbanised rural and suburban municipalities. In short, the main trend of this period was deconcentration. This process had already started in the 1960s, when household incomes increased at a rapid pace and many

Table 1. Percentage change in population, in the Netherlands, 1970–95, by municipality type

Municipality type	1970–75	1975–85	1985–95	1970–95
Cities > 200 000 inhabitants	− 9.6	− 10.0	4.1	− 15.3
Cities 100 000–200 000 inhabitants	− 0.5	0.8	3.3	3.9
Cities 10 000–100 000 inhabitants	4.5	5.8	6.2	17.4
Suburban areas	12.0	6.9	6.2	27.1
Urbanised rural areas	11.1	9.1	6.1	35.7
Rural areas	11.5	9.5	6.1	29.5
Growth centres	27.0	74.3	28.3	184.2
The Netherlands	4.8	6.4	6.8	19.3

Source: CBS, *Bevolking der gemeenten van Nederland* [Population of the municipalities of the Netherlands], annual data 1970–95.

people were able to realise their long-awaited move to the suburbs. As we will see later, the early 1970s were a period of strong suburbanisation, not only in the Netherlands, but all around north-west Europe. Parallel to this suburbanisation trend, the growth centres already attracted many inhabitants, despite the fact that the financial and political instruments to accommodate the development of the growth centres were not yet in place. The growth centre policy really started to work from 1975 onwards, when large subsidies for the growth centres became available. This resulted in a stunning population growth rate of 74 per cent in 10 years. In the same period (1975–85), the largest cities kept losing inhabitants and suburbanisation outside the growth centres continued, but both trends were less extreme than in the early 1970s. Both the development of the growth centres and the relatively fast growth of medium-sized cities can be seen as indicators of the Dutch settlement system becoming more polynucleated in terms of population distribution.

From 1985 onwards, the growth centre policy was traded for a compact-city policy. The main housing projects were now projected in and near the large and medium-sized cities. The last projects in the growth centres still had to be finished, which (together with the relatively high birth rate of the young growth centre population) explains why the growth centres were still growing quite fast. The largest cities recovered and gained inhabitants again, which *seems* to fit perfectly with the compact-city policy. However, since the largest building projects connected to the compact-city policy, the so-called VINEX locations, only started around 1995, the recovery of the largest cities between 1985 and 1995 can hardly be linked directly to the compact-city policy. The major explanatory factor for renewed urban growth was the considerable growth of foreign migration to the Netherlands, and the strong preference of these migrants for the largest cities as their living environment. Another influential development was the proportional growth of young one- and two-person households from the 1960s onwards. These households have traditionally demonstrated a higher preference for an urban living environment than the family households that formed the dominant household type before the 1960s (Jobse and Musterd, 1992). The renewed growth of cities was also helped a great deal by the economic recession following the second oil crisis, which restrained out-migration to suburban locations (Jobse *et al.*, 1990). Meanwhile, growth rates in the municipality types became very similar; one could speak of a stabilisation of the Dutch population distribution in this respect.

The compact-city policy tends to be increasingly criticised. The gap between the housing preferences of the majority of the Dutch people and the policy of their government seems to widen more and more. How-

ever, the Dutch government seems determined to retain its compact building policy. Although new concepts were introduced in the Fifth Report (published in 2001), the main idea remains the same: concentration of houses and working locations in and near to the large and medium-sized cities. Open areas should be kept open according to Dutch policy. The strengthening of transport links between the cities, contributing to a more integrated polynucleated settlement system, is an additional policy goal, but the possible formation of urban fields should still be prevented. We will return to this issue in section 6.

3. Dutch Urbanisation and Urbanisation Policy in a European Perspective

An international comparison between the Netherlands and other areas in north-west Europe was undertaken to clarify whether the development of population distribution in the Netherlands is a country-specific trend or a reflection of general trends in north-west Europe. For the international comparison, countries or regions were sought that were as much like the Netherlands as possible in several respects. The most important aspects were population density, the settlement system, the geographical size of the area and recent trends in demographic, socio-cultural and economic development. The case-study areas that were eventually selected were Switzerland, west Sweden and northern England. The case-study area of west Sweden consists of the counties Västra–Götaland, Halland and Skåne and stretches from the Norwegian border in the north-west to Öresund in the south. The case-study area of northern England includes the 'standard planning regions' of the North West, North East and Yorkshire and Humberside, and is bordered by Scotland in the north and the west and east Midlands in the south.

All the regions that are included in the case studies have a size of about 40 000 sq km. The regions are characterised by a fairly high population density. In 1995, northern England had the highest population density of the 4 regions: 381 persons per sq km, closely followed by the Netherlands with 372 persons per sq km. Switzerland has about half this density (167 per sq km), but density figures in the most urbanised part of the country, the Mittelland (the area between the mountain ridges of the Alps and the Jura), come close to the figures for northern England and the Netherlands. West Sweden as a whole has only 70 persons per sq km, but the population in this area is distributed very unevenly, with a heavy concentration (close to the Dutch, Swiss and northern English figures) on the coast and in the county of Skåne.

The case-study areas all have a polynucleated settlement system, without a primate city that dominates the region in all respects. An equivalent of metropolises like London or Paris is lacking. Instead, each of the regions contains a number of relatively small cities that have gradually grown together into a network configuration. The area's population is spread quite evenly over the several cores of this network. Each core within the network has its own economic specialisations that are largely complementary to each other. The polynucleated configurations in the case-study areas are:

—the Randstad and its wide surroundings in the Netherlands;
—the 'transPennine' zone with the metropolitan regions of Merseyside, Greater Manchester and South and West Yorkshire in northern England;
—the Mittelland in Switzerland;
—the border-crossing Öresund region in west Sweden (with Malmö and Lund on the Swedish side, and Copenhagen on the Danish side of the Öresund as its major centres).

In different gradations, each of these polynucleated urban configurations has the potential to grow into an 'urban field' in the near future. A marked difference between the Randstad and the polynucleated urban regions in the other three case-study areas lies in the spatial configuration. The Randstad consists of a ring of cities around a relatively

empty core (the 'green heart'), while the other polynucleated areas have the shape of a chain of cities.

Although the regions have reacted to economic, socio-cultural and demographic developments in different ways, the main trends of the past 30 years have basically been the same in all of the regions. The economy of the case-study regions experienced a crisis period in the 1970s and early 1980s, followed by a recovery in the late 1980s. However, the Dutch and British experience in the 1990s are quite different from those of both Switzerland and Sweden. In Switzerland and even more in Sweden, the 1990s were a crisis period, with some recovery, but only slightly, since 1995. The Netherlands and the UK also had economic problems in the early 1990s, but these were very much less severe than in the other two countries, and were followed by a period of strong growth. Still, all of these regions have a high standard of living in common. Switzerland, Sweden, the Netherlands and the UK rank amongst the countries with the highest gross national products per capita in the world. Although northern England is one of the least prosperous parts of the UK, it still posesses quite a high standard of living, seen in an international (European) perspective. Other factors that influenced population distribution are more or less the same for all the case-study regions: mobility trends, such as motorisation; demographic trends, such as the rapidly dropping birth rate and the decrease of average household size; socio-cultural trends, such as the increase of foreign migration; and the changes in internal migration behaviour resulting from all the processes mentioned above.

At the start of the comparative study, the most significant differences between the case-study regions were expected in the influence of spatial planning. The countries and regions selected are representatives of groups of planning systems in Europe. The British planning researchers Newman and Thornley (1996) constructed a typology of planning systems in Europe that proved useful for the international comparison. They divided Europe in five groups of countries (Table 2). The groups are mainly based on the country's legal and administrative systems and the division of responsibilities between the national, regional and local levels. Within the case-study selection, northern England, being a part of the UK, represents the British group; the Netherlands is a member of the Napoleonic group; Switzerland belongs to the German group; and west Sweden is an example of the Scandinavian group.

Newman and Thornley's fifth group is called 'East European'. However, since the only common feature of the East European planning systems is their socialist heritage, and these countries all went their own ways after the end of the socialist regime—some developed Germanic-style systems; some more or less stuck to the old system; and some took no actions at all—it is hard to choose a region that is more or less representative for the group. The 'Napoleonic' group is also a very diverse one. It is not easy to find a country that is representative for this group. In practice, the countries vary between intensive government involvement in planning at the national level (the Netherlands, France) and almost no national government involvement (some of the southern European countries). Adding to the complexity is the tendency to increasing federalism in Italy, Belgium and Spain. But the planning systems of the countries of this group are based on the same principles: a systematic approach with a national law on spatial planning and a hierarchical planning system with national, regional and local levels, each with its own clearly defined responsibilities.

The planning systems of the four countries where the case studies took place will now be discussed briefly, in turn.

The Netherlands. In the Netherlands, the national government is very influential in the spatial planning system. It sets up reports on spatial planning regularly. Since the 1970s, these reports have contained very concrete directions about the locations and amounts of houses to be built. Building outside these

Table 2. Groups of national planning systems in Europe

Group	Countries	Characteristics
1 'British'	**UK**, Ireland	'Evolutionary case law' (legal framework for planning is built up gradually, 'decision by decision') No legal protection of local government Strong control/monitoring from national level of local planning actions
2 'Napoleonic'	**Netherlands**, Belgium, Luxembourg, France, Spain, Portugal, Italy, Greece	Planning is 'systematic', with general rules and laws (national law on spatial planning) Planning system is hierarchical, with a clear division of tasks and responsibilities between the national, regional and local levels (subsidiarity) National and local levels are the most influential; regional level is relatively weak
3 'Scandinavian'	**Sweden**, Norway, Denmark, Finland	National (and regional) planning reduced to minimum Local level is most important; local governments make very detailed plans
4 'Germanic'	**Switzerland**, Germany, Austria	Planning 'systematic', with general rules and laws (like the Napoleonic countries) Planning system is hierarchical, with a clear division of tasks and responsibilities between the national, regional and local levels (subsidiarity) Regional level (*Bundesländer*, *cantons*) is the most powerful Federal government gives 'guidelines', but has hardly any powers to force the regions to follow these guidelines
5 'East-European'	Poland, Hungary, Czech Republic, Slovakia, Bulgaria, Rumania, Croatia, Slovenia, Bosnia, Macedonia, Yugoslavia, Albania, Russia, Belarus, Ukraine, Estonia, Lithuania, Latvia, Moldavia	

Note: Countries in bold contain case-study areas discussed in the text.
Source: Newman and Thornley (1996).

locations is generally severely restricted, at least in theory. However, the enforcement of spatial planning policy in reality tends to be much less strict, as was illustrated by the population growth figures presented in Table 1. Apart from the dominant national government, local government also has a powerful position in Dutch spatial planning. In between are the provinces that have planning on a regional level as their responsibility. However, compared to the national and local levels, the position of the provinces in spatial planning is quite weak. The planning system is strongly hierarchical. Local plans have to be approved by the provinces, and regional plans have to be approved by the national government. The Dutch planning authorities have some powerful instruments at their dis-

posal which considerably help to reach the ambitious planning goals. Probably the most powerful tool is the dominant role of Dutch municipalities in the land market. Land is explicitly treated as a public good in the Netherlands (Dransfeld and Voss, 1993). The municipalities release land for development according to the preferred land uses they have laid down in their local development plans.

Switzerland. Switzerland gives a dominant position to the *cantons* (regional level) in spatial planning issues. There are national plans, but these are not issued very often and they only have an advisory status. The national government has written down its ideas about how Switzerland should be planned in the coming decades (Bundesamt für Raumplanung, 1996), but the cantons are not in any way obliged or forced to follow these ideas. The national plans are only meant to be 'guidelines'. The eventual decisions on land use are largely left to the cantons, which operate almost as independent states in many fields of policy, and to the municipalities. The municipalities are expected to issue regularly detailed development plans. An interesting feature in these plans is the division between 'building land', containing already built-up sites as well as potential sites for new housing, infrastructure and commercial development, and 'non-building land'. The latter category consists of agricultural land and nature protection sites. This is a potentially quite powerful tool to prevent the loss of valuable open areas. However, many municipalities draw the borders of their 'building land' very widely, so that dispersion is encouraged instead of discouraged (Wachter, 1995). Furthermore, a serious obstacle to planning at any scale is formed by the huge influence that Swiss civilians can exert on policy via the referenda, which are organised on a very frequent basis on all kinds of topics.

Sweden. In Sweden, the national government agency 'Boverket' advises municipalities and counties about how to deal with spatial planning. This agency has recently published a national plan for the preferred spatial development of Sweden in the near future, but this plan has only an advisory status (Nyström, 1996). Planning actions at the national level are mainly connected to issues of the natural environment and mineral resources; population (de)concentration is not really a matter of concern for the national planners. The dominant government level in spatial planning is the municipality; one could even speak of a 'planning monopoly' on the part of the municipalities (Newman and Thornley, 1996). The municipality plans are the only plans with a legally binding status. Regional planning largely depends on voluntary co-operations between municipalities. The municipalities in the case-study region of west Sweden have apparently not felt much need for such co-operation in recent decades. There is no regional plan for west Sweden, which is reasonable since the area is usually not seen as one entity. However, there are also no land-use plans for the counties that are part of this region (county planning merely has the function of co-ordinating municipality planning), and there are not even plans for the metropolitan regions of Göteborg and Malmö.

England. In England, local governments implement the actual land-use planning. The local authorities decide about which developments are allowed to take place and issue local development plans regularly. The national government supervises the local planning actions. This is done via legislation and a series of 'planning policy guidance notes'. These notes are each devoted to a certain topic relevant for planning decisions. Since the late 1980s, the national government has also issued 'regional planning guidance notes' which are meant to set the regional framework for local planners. These are a regional translation of national planning aims, rather than a separate regional tier of planning. In the near future, regional planning might become more independent from national planning as a consequence of the devolution process started by the Blair government (Baker, 1998). The national

government also decides on appeals against local development plans. All this means that, although the local authorities make the plans for their territory, in the end it is the national government that is the most influential planning authority in England (Newman and Thornley, 1996). In contrast to the Dutch land market, however, the English land market is dominated by the private sector. The government sees land as a commercial good and leaves land transactions entirely to the free market. The major exceptions to this rule were initiatives to regenerate city centres and derelict industrial sites, like the Urban Development Corporations and the Single Regeneration Budget (Dransfeld and Voss, 1993; Cullingworth and Nadin, 1997).

The comparative study. The hypothesis to be tested in the comparative study of recent population distribution trends is that differences in spatial planning systems lead to different trends in population distribution. If this hypothesis is true, the four selected cases should show clear differences in their population distribution trends since the 1970s, despite all the characteristics they have in common (see section 2). More specifically, what could be expected beforehand is that urban sprawl would be much less pronounced in countries where the national government takes a strong position in physical planning, against countries where planning powers are concentrated at the regional or local level. During the 1980s and 1990s, compact-city policy appeared in some form on the planning agenda in almost every western European country. However, only in countries where such a policy is co-ordinated at the national level, can an effective nationwide compact-city policy be expected. Within the case-study selection, this would mean that urban sprawl would be less prominent in the Netherlands and northern England than in west Sweden and Switzerland.

In the next section, recent urbanisation trends and the influence of planning policy on these trends will be discussed for the cases of Switzerland, west Sweden and northern England and parallels with the Netherlands will be drawn.

4. Urbanisation and Urbanisation Policy in West Sweden, Switzerland and Northern England

The following presentation of the major growth trends in municipality types in west Sweden, Switzerland and northern England illustrates that the growth trends presented earlier for the Netherlands are not a specifically Dutch phenomenon. Trends like the decline of large cities in the 1970s and their recovery in the late 1980s, the strong suburban growth in the early 1970s and the decline of suburban growth afterwards are recognisable in the three comparison regions as well, although to different degrees.

The municipality typologies presented for the respective case studies have been used in government statistics and scientific research as the standard typology during the period under study. As can be seen from the tables, each country has its own way of grouping municipalities, but still, the typologies show many similarities so that the broad categories of urban, suburban and rural municipalities can be compared between the four case-study regions.

West Sweden

Recent growth and decline trends in west Sweden (Table 3) showed clear similarities with the trends presented earlier for the Netherlands. The large difference between the Netherlands and Sweden was obviously due to the Dutch growth centres. A comparable planning policy promoting a form of 'concentrated deconcentration' or compact-city growth has never been practised in Sweden. However, in west Sweden also, the largest cities lost inhabitants until 1985 and then started to grow again. Smaller cities also grew faster after 1985 than before 1985, like in the Netherlands. The growth of the suburbs was more extreme than in the Netherlands. This might have something to do with the presence of the growth centres in the

Table 3. Percentage change in population by municipality type, in west Sweden, 1970–95

Municipality type	1970–75	1975–85	1985–95	1970–95
Metropolitan centres	− 5.8	− 4.7	+ 6.0	− 4.8
Large cities (50 000–200 000)	+ 2.9	+ 2.2	+ 8.7	+ 14.4
Medium-sized cities (20 000–50 000)	+ 2.7	+ 1.9	+ 7.1	+ 12.1
Manufacturing towns	+ 3.3	+ 0.6	+ 3.1	+ 7.1
Suburbs	+ 22.8	+ 12.5	+ 12.7	+ 55.7
Urbanised rural areas	+ 1.8	+ 4.1	+ 3.1	+ 10.4
Other, 15 000–50 000 inhabitants	+ 4.8	+ 4.2	+ 5.9	+ 15.7
Other, < 15 000 inhabitants	+ 6.9	+ 10.9	+ 8.5	+ 28.7
West Sweden	+ 2.7	+ 2.1	+ 7.3	+ 12.6
Sweden	+ 1.5	+ 1.8	+ 5.7	+ 9.2

Source: Statistics Sweden, population per municipality, yearly data 1970–95.

Dutch case, which took away a part of the potential for 'spontaneous' suburban growth. Apart from that, the suburbanisation pattern in Sweden seems to have been slightly different: more growth in the suburbs, directly outside the cities, and less growth in the rural and urbanised rural areas. West Sweden experienced stronger population growth than Sweden as a whole. Despite the regional economic policy, that has attempted to improve the socioeconomic situation in the northern periphery, there is still a net migration from the north to the urbanised regions of west Sweden and Stockholm.

As stated before, municipalities are dominant in Swedish planning. No national plan for urbanisation was made in the period between 1970 and 1995. Regional land-use plans were also lacking in the region of west Sweden. Only recently, a regional plan for the Danish–Swedish Öresund region has been made, aimed at promoting the integration of the Copenhagen region with the Malmö–Lund region, but earlier plans are hard to find. The Öresund plan is probably also the first plan to promote the formation of a polynucleated urban region in west Sweden. The Skåne region could already be considered polynucleated, but the relationship between the two main centres Malmö and Lund has long been more one of competition than of co-operation. Recently, the two former 'enemies' have seemed more willing to integrate in a larger urban region.

The regional economic policy has had some effect on the distribution of labour over the country and with that, population distribution at the national level also changed. At the national level, this regional economic policy has led to the strong growth of several cities, especially in the peripheral north. It could therefore be stated that regional economic policy has led to a more polynucleated settlement system in Sweden. However, this policy has largely by-passed the case-study area of west Sweden. In west Sweden also, some smaller cities have grown considerably, but the dominant position of Göteborg and Malmö in terms of population size has remained unchallenged.

Switzerland

For Switzerland (Table 4), another division in time-periods is used, since the data-set was based on censuses that are conducted every 10 years. In Switzerland, the largest cities had declining populations in the 1970s as well. Growth returned, albeit only slightly, in the 1980s. The largest centres appear to have the most severe population loss in the 1970s, which was followed by zero growth in the 1980s. The medium-sized and small centres have performed

Table 4. Percentage change in population, by municipality type, in Switzerland, 1970–90

Municipality type	1970–80	1980–90	1970–90
Large centres	− 11.6	− 0.2	− 11.8
Medium-sized centres	− 6.3	+ 0.5	− 6.0
Small centres	− 0.9	+ 4.5	+ 3.7
Centres in periphery	− 3.0	+ 6.0	+ 2.7
Suburbs	+ 15.8	+ 14.1	+ 32.1
Peri-urban municipalities	+ 17.4	+ 14.8	+ 34.7
Manufacturing municipalities	+ 3.1	+ 11.0	+ 14.4
Rural commuter municipalities	+ 4.0	+ 15.0	+ 19.6
Rural municipalities	− 3.2	+ 10.4	+ 7.0
Other municipalities	+ 6.7	+ 9.2	+ 16.5
Switzerland	+ 1.5	+ 8.0	+ 9.6

Source: IREC/Swiss Bureau of Statistics, Census data 1970, 1980 and 1990.

much better, while the peripheral centres show a spectacular recovery of population growth since 1980. Decentralisation was the main trend in the 1970s, with the population of suburbs and peri-urban municipalities growing significantly. The rural areas lost inhabitants in the 1970s, in contrast to the Netherlands and west Sweden. This is mainly due to peripheral areas in the Alps and Jura region. The rural municipalities in peripheral mountain regions managed to stop the outward flow of their population in the 1980s, thanks to huge investments in these areas by the Swiss national government. These investments, which are also reflected in the growth of the peripheral centres, were not part of spatial planning policy, but of regional economic policy. The investments in the periphery have counteracted the spatial planning policy because it encouraged people to move from the cities to the countryside, while Swiss federal planning has traditionally been aiming at the opposite.

Spatial planning did not influence the population redistribution trends significantly. National plans were made in the early 1970s and in 1996, but they were only advisory. Some *cantons* were very active in spatial planning, like the *canton* of Bern which tried to concentrate new building locations at nodes of public transport lines (Regierungsrat, 1992). But other *cantons* never came further than plans on paper without concrete actions linked to them. An interesting parallel with the Netherlands is found in the concepts used. In the 1970s, Swiss planning documents speak of 'concentrated deconcentration', in this case meaning that regional centres should be expanded, while building in the countryside was restricted. The expansion of regional centres is a logical outcome of the political history of Switzerland. In all federal policies, a central principle is to distribute power, wealth, economic activities and people as evenly over the country as possible. The growth figures of peripheral, medium-sized and small centres suggest that some success was achieved with this policy. However, the fast growth of suburbs and rural settlements around these regional centres were certainly not in line with the federal spatial planning strategy. In the most recent national planning guidelines (Bundesamt für Raumplanung, 1996), the compact city plays a prominent role. While growth of the regional centres is still encouraged, large cities are also being allowed to grow again.

Northern England

The fourth case-study area, northern England (Table 5), differs markedly from the other three areas in its population development: the total population of the area declined while all

Table 5. Percentage change in population, by municipality type, in northern England, 1971–95

Type	1971–76	1976–86	1986–95	1971–95
Principal metropolitan cities	− 5.7	− 6.7	− 1.0	− 12.8
Other metropolitan districts	− 0.5	− 2.4	+ 0.6	− 2.3
Non-metropolitan cities	− 1.3	− 4.0	+ 2.0	− 3.5
Industrial districts	+ 1.3	− 1.1	+ 1.0	+ 1.2
Districts with new towns	+ 5.3	+ 5.6	+ 0.4	+ 11.7
Port, resort and retirement areas	+ 3.0	+ 1.1	+ 4.6	+ 9.0
Mixed urban–rural areas	+ 4.0	+ 4.3	+ 2.3	+ 11.1
Remoter largely rural areas	+ 6.6	+ 3.9	+ 7.0	+ 18.6
Northern England	+ 0.0	− 1.8	+ 1.0	− 1.0
England	+ 0.5	+ 1.5	+ 3.3	+ 5.4

Sources: OPCS Monitor PP1 84/2, 27 March 1984; PP1 94/1, 15 February 1994; PP1 96/2, 29 August 1996.

the other areas experienced considerable growth. This happened in the context of the slow growth of England as a whole, with growth concentrated in the southern half of the country.

Nevertheless, the growth pattern of municipality types in northern England shows a picture already quite familiar from the cases presented earlier: decline in the largest cities, especially in the 1970s, and strong growth in the rural areas. Once again, the early 1970s appear as a period of rapid deconcentration. Like in the other three case-study areas, this was a trend that had already started during the 1960s. The recovery of the largest cities is also apparent in northern England, but this recovery was only very modest: the decline of population was stopped, but growth was still absent. Some of the principal metropolitan cities (most notably Liverpool) still suffered from a declining population even in the early 1990s. The major reason for this is probably the economic structure of the northern metropolitan cities. Although all English cities suffered from deindustrialisation, the northern cities were hit most severely. In contrast to London, these cities generally did not manage to attract enough employment in the service sector to compensate for the heavy job losses in manufacturing and, especially in Liverpool, in port-related activities.

British planning policy in the post-war period has set an example for a number of other European countries, with long-standing famous concepts like the green belts (still maintained) and New Towns (until 1974). The severe building restrictions in green belts still appear to be quite effective; the poor growth performance of the category 'other metropolitan districts' is probably partly explained by the impossibility of building on green belt land. Although the British planning system provides no powers to the national government to force local governments or private builders to follow their building philosophy, this is apparently a policy that is generally agreed with at the local level as well. The British government has the intention to hold on to the green belts, a policy that appears to have been quite successful so far. Holding on to the green belts policy, however, might have the adverse effect that urban out-migrants move even further into the countryside than they might have done had the green belts been absent. The high growth figures for the remoter rural areas in Table 5 provide some support for this hypothesis.

Building in the countryside in general was also restricted, but this did not stop the rural areas, especially the areas at some distance from the conurbations, from being the fastest-growing part of northern England.

Several local governments preferred population growth above protection of the countryside and allowed housing projects where the national planners would not like them. The problem of enforcement of planning policy, as mentioned earlier with respect to the 'green heart' in the Netherlands, also seems to apply here. The effect of abolishing the New Towns policy is clearly visible in the declining growth rates from the late 1970s on. The promotion of compact-city building since the late 1970s has not yet led to a real recovery of the largest cities in northern England. It is questionable if growth will be reached in the future while the cities do not manage to attract new employment in economic growth sectors.

5. The Four Case-study Areas in Comparison

The four case-study areas have a lot of features in common. Their settlement structure, size and population density are alike, as well as recent socio-cultural and demographic trends and trends in mobility (increasing car traffic). There were some differences in economic growth and decline periods in the 1990s, but the developments in the 1970s and 1980s were also comparable in the Netherlands, Switzerland, northern England and west Sweden.

The largest differences between the case-study areas, as intended, were in spatial planning; more specifically: government attempts to influence trends in the concentration and deconcentration of the population, and the powers available to the government to reach the desired results. The examples of the Netherlands and northern England have shown that spatial planning can certainly have some influence on trends in population distribution. Without the growth centres, suburbanisation and urban–rural migration in the Netherlands would probably have been much stronger. And the New Towns and green belts in northern England made some difference, too. From these examples, one could conclude that the Dutch and British policies on deconcentration have been successful: they led out-migrants to the places where the government wanted them, or (in the green belts context) kept them out of areas where the government did not want them. The Dutch and British deconcentration policies also contributed to the coalescence of monocentric urban regions into larger-scale polynucleated urban regions. The same can be stated for Switzerland, where the development of regional centres was encouraged. Nevertheless, suburbanisation to 'unwanted' locations and urban–rural migration could not be entirely stopped by these policies. In the case of the green belts, a negative effect was probably produced, with the encouragement of longer-distance migration from cities to remoter rural areas. In this case, a strict anti-suburbanisation policy in some areas (the green belts) may have led to an adverse effect (the urbanisation of remoter rural areas). In the Dutch case, one could question the extent to which the growth centre successes were really government policy successes. Would people have moved to them if the Netherlands had not experienced a deep economic recession including a collapse of the owner-occupied housing market in the late 1970s and early 1980s?

The version of urbanisation policy that has been most popular in north-west Europe since the 1980s is the compact-city policy. The switch to a compact-city policy was a response to the renewed popularity of inner-city living, especially among young people, in the early 1980s. The various forms of compact-city policy have hardly reached notable results so far. In most European countries, the population development of large cities recovered in the 1980s, but growth remained well under the national or regional average, as could be seen from the four case studies. The recovery of urban growth was very modest, connected to housing renewal and new building projects in or near the cities. The switch to a compact-city policy coincided with demographic developments like the rising proportion of small, urban-oriented households and the increase in foreign migration, focused on cities. So, looking back on the last three decades of the 20th

century, the conclusion of the comparative study should be that the influence of spatial planning policy on population distribution cannot be denied, but was very limited. Since the 1970s, economic, demographic and socio-cultural processes have contributed much more to the development of population distribution in north-west Europe.

6. Urban Fields and the Future of Urbanisation Policy

In many European countries, urban fields are seen as the next step in the process of urbanisation. So far, the urban field is more a concept than a clearly defined functional geographical unit. Within these urban fields, the traditional cities will have become highly integrated with their wider surroundings. There will still be locations within the urban fields where services, work and people are concentrated to a certain extent, but the traditional contrasts between city, suburb and countryside will hardly be visible anymore. Economic functions will be spread out over a complex network of centres and sub-centres. Connected to the spread of economic activities, it is also expected that the population will spread out more or less 'at random' over the entire urban field area.

The idea of urban field formation was heavily influencing the preparation of the Fifth Report on Spatial Planning in the Netherlands. In an advisory document for the Fifth Report, the formation of urban fields is described as "the most far-reaching development with which planning bodies will be confronted in the coming decades" (Vromraad, 1998, p. 40). Another example of the increasing acceptance of the urban field concept amongst Dutch planners is the 'Deltametropolis' manifesto. This document was drawn up by the aldermen responsible for spatial planning in the four largest cities of the Netherlands. The Delta-metropolis manifesto is a plea for stimulating housing and commercial development along corridors between and around the metropolitan areas of the large cities. This would inevitably lead to much more intensive contacts between the large cities and would strengthen the position of the area as a whole (much larger than the traditional 'Randstad') in European and global economic competition (Deltametropool, 1998).

However, in the document in which the government declared its intentions concerning the future spatial planning of the Netherlands, due to be put into concrete plans in the Fifth Report, the formation of urban fields was not mentioned as the most desirable development. The possible promotion of planned corridor development was indeed described as part of the future spatial planning policy, but it was not the main target. The core of Dutch planning remains to build as compactly as possible. The Dutch government seems to have given up on the compact city in its original strict sense, but this does not mean that the national planners have lost their ambitions to regulate the urbanisation process. The compact-city concept has been traded for the 'network of cities'. The network of cities as the Dutch planners see it consists of a number of formerly monocentric urban regions integrated into a polycentric urban region, which is still very close in scale to the traditional monocentric urban regions (VROM, 1999).

In the other case-study areas presented above, the possible formation of urban fields has also led to heated debates in the planning community, although this development is not always labelled 'urban field'. In Switzerland, the national government is highly ambivalent in its aims for the future spatial design of the country. On the one hand, the compact city and the protection of 'open' agricultural land are seen as the way forward to keep Switzerland liveable. On the other hand, the national planners present the mutual complementarity of Swiss urban regions and the improvement of their interconnections as other important aims of future spatial development. The Mittelland, the relatively flat, highly urbanised region between the Alps and the Jura, is labelled 'the Swiss network city' in the latest national planning guidelines (Bundesamt für Raumplanung, 1996). Some scientists go even further in their

future image of Switzerland. Boesch (1996), for example, likes to look at the Swiss Mittelland as one fully integrated 'garden city'.

In northern England, promoters of the urban field concept and building blocks that could lead to urban field formation can also be found. As early as the early 1970s, the famous study *The Containment of Urban England* had been based on the notion of 'Megalopolis England'. This megalopolis was said to stretch from the south-eastern to the north-western coast of England, including the metropolitan areas of London, Birmingham, Liverpool, Manchester, Leeds and Sheffield (Hall *et al.*, 1973). On a more modest geographical scale, this notion of a polynucleated urbanised whole has recently returned in planning discussions. A lobby group of north English entrepreneurs and regional politicians has been actively promoting the integration of the so-called transPennine corridor. This corridor exists between the metropolitan regions of Merseyside, Greater Manchester, South and West Yorkshire, and the port of Hull. The transPennine area would be only a part of a large-scale corridor, forming

> a landbridge between the USA and Ireland and Northern Europe on a trade corridor opening up by a unified Germany, developing markets in Eastern Europe and the introduction of Scandinavian countries into the EU (Baker, 1996. p. 1).

The lobbyists have not yet managed to convince the national planners to include the transPennine corridor concept in their planning strategy and it is not to be expected that this will happen in the near future. The promotion of corridor development would be in sharp contrast with the national policy of keeping metropolitan areas separated from each other through green belts. Moreover, the transPennine corridor crosses the Peak District National Park, a landscape of high natural and cultural value in which building is restricted to a minimum.

In west Sweden, the urban field is a far less prominent, but not entirely absent, concept in planning discussions. The latest national document on the future spatial development of Sweden presents the image of the Swedish settlement system as a collection of islands (urban regions) floating in a sea of forests, agricultural land and small communities. The national planners want to improve the interconnections between these 'islands', predominantly by high-speed rail transport. This would offer the advantage of larger local housing and labour markets. The new image that should come to life in this way is labelled the 'strand of pearls network' (Nyström, 1996). On a regional scale, it is mainly the southernmost part of west Sweden that is looking for the expansion of its housing and labour market. Together with the neighbouring Danish capital Copenhagen, the cities of Malmö and Lund and the county of Skåne are working on the integration of the Öresund region. A first step towards integration of the region has been the recent completion of the bridge across the Öresund. In documents concerning the integration of the Öresund region, several remarks similar to the ones about the transPennine region can be found, including ambitious plans to compete with the largest European metropolises (Ministry of the Environment, 1993).

The above futuristic concepts of spatial development are almost exclusively based on theory and hypothetical thinking. But are these urban fields really being formed already? So far, most researchers and politicians mentioning the formation of urban fields have not based their opinion on empirical data. Judging from the data presented earlier on recent trends in population distribution, at least in west Sweden the possible formation of urban fields seems an unrealistic perspective in the near future. Suburbanisation has been a strong trend in this region, but so far it has almost exclusively taken place in the immediate surroundings of the large cities. The further integration of the Danish–Swedish Öresund region could actually take place, if the national governments are not too opposed to this, but this would create a region still quite modest in size. The formation of an urban field on the scale that

scientists and policy-makers tend to see, would need an extension of the Öresund region in the direction of Göteborg. However, contacts between the urban regions of Malmö and Göteborg have been only marginal so far and are not likely to intensify much in the near future, despite considerable improvements in the traffic infrastructure between the two cities.

In the other three case-study regions, the formation of urban fields is a much more realistic possibility. Perhaps the most likely candidate to have an urban field is Switzerland. The metropolitan region of Zürich already includes an area of about 50 km in diameter. The metropolitan regions of Genève and Lausanne and the smaller cities nearby (Nyon, Vevey, Montreux) have gradually grown into one metropolitan area, currently labelled the 'Métropole Lémanique'. Halfway between these two continuously decentralising metropolitan regions is the federal capital of Bern and, in addition, there is an already heavily urbanised corridor from Zürich to Basel in the north-west. Apart from the *canton* of Bern, which actively promotes compact-city development (Regierungsrat, 1992), the planners in this area do not seem to have taken much action to prevent the metropolitan regions from growing into one urban field. The federal government aims at compact cities and network intensification at the same time, which is not really an anti-urban-field stance either. Although the federal government planning documents have only an advisory status, they might help to create a climate in which urban-field formation is allowed to take place.

Planners wanting to prevent the formation of urban fields, which apparently is the case in the Netherlands and the UK, are confronted with serious problems. If further deconcentration is really to be the trend of coming decades and traditional concentrations of population, work and services are to lose their dominance, what would be the further use of a policy aimed at compact cities? It might still be possible to stop the deconcentration trend, but this probably requires national government to have a much more influential role than can be realised in the current situation. As can be seen from the actual population growth trends and planning aims presented earlier, even in a highly planned country like the Netherlands, the planners have not been able to counteract completely the recent deconcentration trend to 'unwanted' suburban and rural locations. New planning concepts will be needed if urban fields are really going to be the settlement patterns of the near future in north-west Europe. This presents an enormous challenge to planners in the coming decades.

7. Concluding Remarks

The comparative analysis of trends in population distribution and the attempts to influence these trends through spatial planning presented in this paper provides some empirical basis for judging the potential for spatial planning actually to redirect the distribution of population. The presented data suggest that the spatial policies encouraging deconcentration and the formation of a polynucleated settlement system, dominant in the 1970s, were generally quite successful. The subsequent shift to compact-city policies in the 1980s has not so far led to comparable successes. The recovery of urban population growth seems well in line with the compact-city policy, but was caused by other factors. In the Dutch, Swedish and Swiss cases, the major factors were the economic downturn in the 1980s (discouraging suburbanisation), the increase of foreign migration, focused on large cities, and the growing proportion of small non-family households with a predominantly urban housing preference. In northern England, the recovery of the large cities can be attributed much less to foreign migration, but the other above-mentioned factors apply to this area as well.

Still, in all four case-study regions the main trend in population distribution since the early 1970s has been deconcentration, with the strongest population growth in the suburban and rural areas. Even when urban population growth recovered, it was still at a

considerably lower level than the growth of the suburbs and rural areas. This trend seemed to occur independently of the planning context. It happened in countries with a strong, and in countries with a weak, government influence on land use, and it apparently did not matter much either whether the national, the regional or the local level was dominant in the planning system. The hypothesis that compact-city policies would work better in countries with a strong planning control by national government cannot be supported with the data presented in this paper.

If the deconcentration trend continues in the coming decades, the formation of urban fields in north-west Europe may become a reality. Planners in the Netherlands and other European countries might want to reconsider their urbanisation policies and think of new concepts to deal with urban fields. If urban fields are really the settlement pattern of the near future for north-west Europe, holding on to the currently dominant compact-city policy would be unrealistic and impractical. Today, there is already a considerable gap between urbanisation policy intentions and the preferred living environments of the majority of the inhabitants of the Netherlands as well as of the other three case-study areas. While the settlement system in which people live and work is of a highly polynucleated nature in all four case-study areas, the dominant spatial concept that planners use in these areas is still the compact city, situated in a monocentric urban region. If deconcentration continues while the planners keep holding on to the same compact-city concept, the gap between urbanisation policy and actual settlement behaviour may become too wide. A planning concept that tries to bring spatial order to north-west Europe on the scale of an urban field, possibly bridging the gap between individual and collective spatial preferences, presents a huge challenge to planners in the coming decades. Maybe the 'network of cities' concept that seems to becoming into fashion in the Netherlands and Switzerland might be a step in the right direction.

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