

Future Developments of Residential Differentiation in the Helsinki Metropolitan Area: Are We Following the European Model?

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Abstract

One of the main findings in the study on social inequality and spatial segregation in seven European cities is that, in spite of the scale of social differences in the different cities, a similar pattern of urban spatial development is evident. The physical pattern of area differentiation shows a strong spatial pattern of continuity in the location of advantaged and less advantaged neighbourhoods. In addition, a clustering of both advantaged and deprived neighbourhoods was observed. The same pattern of change appears both in London and Helsinki – cities that stand at opposite ends of the spectrum of social and spatial difference (BETWIXTⁱ; McIntosh and Vaattovaara 2001).

The spatial clustering of advantaged and more deprived neighbourhoods appears both in Helsinki and London, but the grounds for change are different. Are we still facing a similar future? The aim in this paper is to compare patterns of residential differentiation in Helsinki and London. Thus, the differences and connections between social and spatial differentiation and segregation are elaborated. GIS and census data will be utilized to examine social and spatial developments. A two-phase model for the background of the developments in the Helsinki area is introduced, resulting in a formulation for a model for future developments in residential differentiation in the Helsinki metropolitan area.

ⁱ The findings are from a larger research project on segregation and social exclusion in seven European cities which is due to be completed and published by the end of year 2001. This project is funded by US's TSER programme and is directed by Daniel Bertaux, EHSS, Paris. It is titled 'Between Integration and Exclusion: a Comparative Study in the Local Dynamics of Precarity and Social Exclusion in Urban Contexts – an acronym BETWIXT. The seven cities that are included in this study are Dublin, Helsinki, Lisbon, London, Toulouse, Turin and Umeå.

Social and spatial polarisation

There are two essential dimensions of difference when studying society: social and spatial (Vaattovaara 1998; Valkonen et al. 1998). Social inequity and its spatial outcome, residential differentiation or segregation, exists in all advanced societies. There can thus be differences in the social or spatial resources that are available to different households in different neighbourhoods, or both. Also, the trends that emerge from cities with regard to social inequality and spatial segregation can be manifold.

In debate, increasing social inequality and segregation are often connected to socioeconomic forces like globalisation, neoliberalism, and economic convergence between member states in the European Union. Globalisation – the opening up of economic processes to world competition, and the consequent potential for restructuring economies – has been seen as a major player in the debate on how to interpret growing urban inequalities (see, for example, Mollenkopf and Castells 1991, Musterd and Ostendorf 1998). Sassen's well-known argument is that global economic forces produce increasing urban polarisation and a concomitant interdependence, on both an occupational and income basis, between those with prosperity and a high level of education (employed especially in the new advanced business and financial industries) and those in low-level service or manufacturing jobs (the working poor) (Flately and McIntosh 1999).

Hamnett (1994 and 1996), however, has provided a thorough critique of Sassen through his work on income and occupation in London. He sees her proposal of an 'hour-glass' shaped occupational and income distribution, with its "shrinking supply of middle-income jobs", as specific to the United States, where there is a large downgraded manufacturing and service sector staffed predominantly by immigrant and young labour. Thus, he sees Sassen as using the US context to apply the idea of real growth in top and bottom level occupations to all global cities. In Europe, however, there is evidence of an increasing professionalisation of occupations (a growth in managerial levels of the expanding service sectors), combined with increasing inequality of incomes, and a substantial presence of economically inactive people. It is the welfare state that Hamnett brings in as an intervening explanatory factor at a national level, citing the comparative work of Esping-Andersen et al. (1993) on changes in class structure and mobility in different welfare regimes. The broad conclusion is that strong welfare state regimes, such as are found in Europe, provide a social wage, and thus tend to produce "a relatively large outsider surplus population" consisting of people who are unable to enter into employment, early retirees, long-term unemployed, and others subsisting on the social wage. In countries like the U.S., on the other hand, where the welfare state is weaker, there is a large, low-wage, service proletariat (Hamnett 1996, 1426).

There are two potential types of polarisation in post industrial societies, then – one is between a small but highly upgraded insider structure and a larger outsider surplus population, and in the other case (the U.S.), there is a large service class proletariat that constitutes the pivotal source of polarisation (Esping-Andersen, ed. 1993, 28).

The other empirical entry to the discussion of polarisation is spatial or socio-spatial polarisation. It emphasises the growth and existence of spatial differences and segregation between the rich and poor (Kasteloot 1998). The geography of segregation focuses on concentrations of socio-economically or ethnically different people. While urban social equality is generally defined as a negative force, urban spatial segregation has certain ambivalence. When groups or individuals choose to congregate, this can be seen as a positive and natural element in urban development. Urban spatial differences would then reflect individual housing preferences and cultural background (see, for example, Giddens 1991), and would therefore be interpreted through a different theoretical framework. These latest interpretations on the grounds of spatial differentiation have been put forward by behaviourists, whereas urban managerists (Pahl et al. 1983) emphasise the role of market forces, political decision-makers and urban planning. Also Harvey (1985), representing structuralism, emphasises the connection between economic imperatives, the different interests of investors and occupiers, and struggles over space (see Flatley and McIntosh 1999, Vaattovaara; 1998). The spatial element of area differentiation becomes active in the process of social polarisation if “rich and poor concentrate respectively in rich and poor environments in terms of the resources of collective consumption, housing, mobility and access to jobs” (Kasteloot 1998, 127). The boundary between positively and negatively interpreted differentiation is vague. Somehow urban spatial differences are emphasised when “wrongly similar people cluster too heavily together” (Bäcklund 1999).

Concept and measurement of segregation

The concepts of social and residential differentiation as well as segregation – with usually negative connotations – need more specific definitions and should be kept separate from each other. As already noted in this paper, social differentiation can exist without spatial differentiation. The problem in mixing the terms that have negative connotations with concepts that deal with natural city development is that the whole discussion on residential differentiation within urban areas becomes negative in tone. It also partly reflects the anti-urban tradition, a phenomenon that has been elaborated upon by Jakobson (1992).

Another general question relates to the study of spatial segregation: that of the appropriate geographical scope of the study. Patterns of social segregation may be

averaged out over too large an area. Traditionally, social wellbeing has been studied on an individual level or, if an area is of interest, by defining the areas on the basis of administrative boundaries (Valkonen and Kauppinen 2001). In urban studies, the most commonly used boundaries are administrative wards or different statistical areas. In these situations problems that relate to the great variation in population size are avoided, but other problems do arise.

When studying segregation – negative social developments – in Helsinki, many of the features related to the phenomenon are very local, showing up statistically only if the unit of analysis is small enough. As the structure of the existing pockets of poverty is diffused, these negative segregation processes are not visible if the unit of analysis is one of any of the traditional administrative areas. At the moment, some black holes of urban development do exist, but they are at the level of a city block, a house or even a staircase, not at the level of a neighbourhood. This approach is not unproblematic either, and the most obvious problems relate to questions about individual privacy and spatial level stigmatisation of a very local area.

This paper uses socio-economic data based on statistical areas from two cities, London and Helsinki. The data is retrieved from a BETWIXT study, where seven different cities were studied (see Footnote 1) using several area-based variables, such as male and female employment rates, foreign population percentages and youth employment. The use of area information allows the interrelationship between social and spatial to be elaborated upon. The trends in social changes as well as in physical patterns are examined. The use of GIS (geographical information systems) in this task is essential, as it shows both the appearance of spatial differentiation as well as its location.

Spatial clustering – no increase in social inequality – a case from Helsinki

Even if social and spatial differentiation are closely connected, they can also occur independently. Not only can spatial segregation occur without polarisation in theory, as Kasteloot (1998) notes, but it also happens in reality, within a welfare state. A case study from the Helsinki metropolitan area will be introduced to address this kind of rather unique development. The point here is that it is important to examine social and spatial developments also independently of each other.

Several international examples have shown how the increase in social inequality leads to an increase in spatial differences. The fear behind this kind of development is based on the idea that increasing spatial segregation will lead to increasing separation of different social classes. This would, in turn, produce additional,

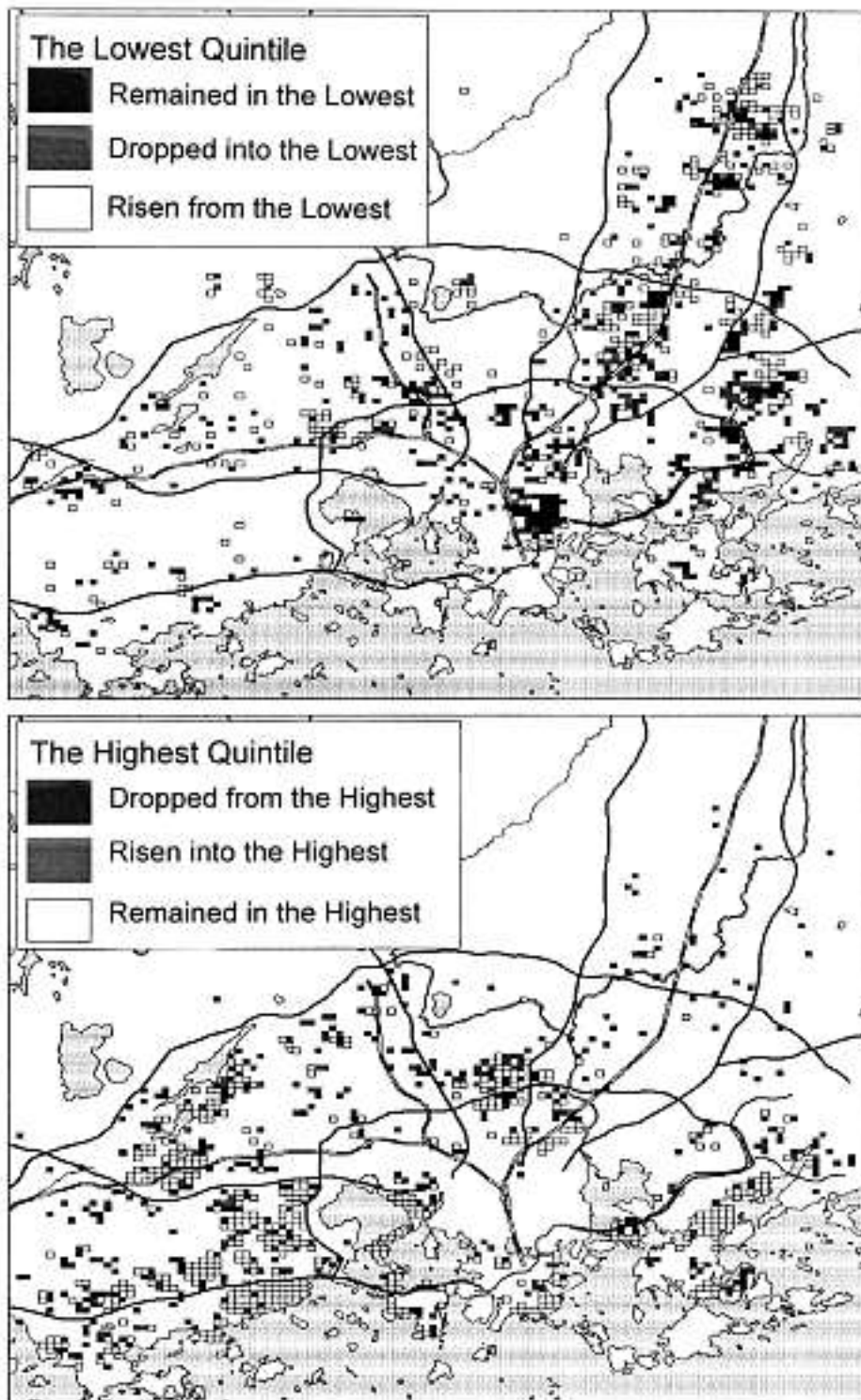
negative local developments and finally result in the disintegration of urban society (Fortuijn et al. 1998). To prevent this kind of development, both socially and spatially targeted policies are needed.

Because one basic assumption, from a geographic standpoint, is that location itself is of great importance in any pattern of human behaviour, the use of GIS in the examination of social spatial patterns is crucial. This fact can be demonstrated effectively by examining a study from Helsinki. Even if there really have been no societal changes – or growth in social inequality – in terms of a widening gap between the top and bottom of Helsinki's social structures during 1980–1994, it is possible to decipher notable spatial processes that are resulting in a more divided city (Vaattovaara 1998).

As an example of the above developments, income distribution is examined in more detail. It is important to note how income disparity has changed during the reference period. The starting point is the assessment of relative income disparity based on both quintile and decile distribution. There were two main findings. First, the inter-quintile (and inter-decile) ratio was examined. There was no change between 1980 and 1994; both years, the ratio was 2.1, and the result is the same whether measured by quintiles or deciles. In international comparative studies there are significant differences: in Toronto's city centre, the corresponding decile changed from 2.8 in 1970 to 4.1 in 1990 (Murie 1998), and in London, the ratio for the total population was 3.9 in 1978–1980 and 8.17 in 1989–1991. As regards households where the reference person was employed, the ratio had increased from 3.1 to 4.2 (Hamnett 1995). It seems that contrary to the findings of several international comparisons, general income disparities in Helsinki remained stable during the reference period. This may be connected to Finland being a Nordic welfare state, and to taxation and income transfers. The result is especially interesting as during the period in question (1980–1994) Finland experienced a recession that was deeper than that in any other OECD country since World War II. In the course of three years, labour shortage was replaced by mass unemployment that reached about one-fifth of the labour force. The welfare state appears to have coped well with that recession.

It is interesting to note that variation in income disparities in different areas has become more marked during the same period, i.e., between 1980 and 1994. The new findings (Vaattovaara 1998) provide new reason to discuss the spatial differentiation of the urban structure. It seems that between 1980 and 1994, small weak areas began to proliferate and become concentrated in eastern and northern suburban housing areas. The variables fall into a mosaic-like structure (Figure 1), but in such a way that the majority of new weak areas emerged next to the old ones. This means that although the overall income distribution did not change, people are distributed more clearly according to income.

Figure 1. Change in income 1980 – 1994 in the Helsinki metropolitan area (Data: Statistics Finland).



London and Helsinki – similar cities?

The described pattern of area differentiation can be seen in the Helsinki metropolitan area also when different variables are used. Thus a change towards an increase in spatial differentiation appears evident also in Helsinki. Similar spatial patterns of change appear also in London.

The past development of the Helsinki region seems somewhat exceptional in international terms: in contrast to the international debate on how to interpret growing urban inequalities (Sassen 1991; Fainstein 1998; Hamnett 1994 and 1998, Borgegård et al. 1998), the development of the Helsinki region has been characterised by a slow but steady levelling out of spatial socio-economic differences (Lankinen 1997). Two major national political factors are connected to this balanced spatial structure, where the distribution of the underprivileged is spatially scattered (rather than concentrated in few selected areas) (Kortteinen and Vaattovaara 2001). The first one is the Nordic welfare state, which has kept income differences to a minimum (BETWIXT). The second is strong city planning. A major trend in city planning in Helsinki has been a close connection between housing policy and social policy. The aim has been to prevent housing shortages as well as social segregation (Schulman 2000). As a result, at the turn of the 1990s, the region was in the best socio-economic balance of its recorded history (Lankinen 1997).

Even if the policy of social mixing has been present for decades and has produced exceptionally homogenous city structures, recent studies suggest that the trend has turned: socioeconomic differences between housing areas have been slowly increasing (Vaattovaara 1998; Kortteinen and Vaattovaara 1999). This has happened with no political turn that could account for it. The Finnish version of the Nordic welfare state survived well over the depression and its aftermath, and the political pursuits of the City of Helsinki have persistently been designed to prevent the emergence of segregation. And yet a historical turn toward increasing inequality has been emerging.

In a study on social inequality and spatial segregation in seven European cities we summarise that London, together with Dublin, is the most segregated of the seven cities. Helsinki has consistently low levels of segregation, and could reasonably be considered the extreme opposite of London. The social differences and their variations, depending on the variable, are described in the summary statistics tables 1 and 2 (Table 7 from BETWIXT), and the box and whisker plots (Figures 2 and 3). The box and whisker plots show the data distribution for each variable based on quintiles. It is important to note that the box represents the range for *areas*, not for individuals or households. The box represents the range of values for the three central quintiles, containing 60 percent of the areas, while the whiskers above and

below the box represent the range for top and bottom quintiles (20 percent each). The difference between the top and bottom whisker is therefore equivalent to the full range that is also shown in the tables. By the use of the box and whisker plots it is possible to depict the area-based scale of social inequality as well as to get a grasp of the scale of spatial differentiation. Also the direction of change can be seen in that specific presentation. What is still missing is the spatial geographical pattern of differentiation, which is dealt with separately (Flatley et al. 1999).

Figure 2. Box and whisker plot, male employment rate, BETWIXT cities.

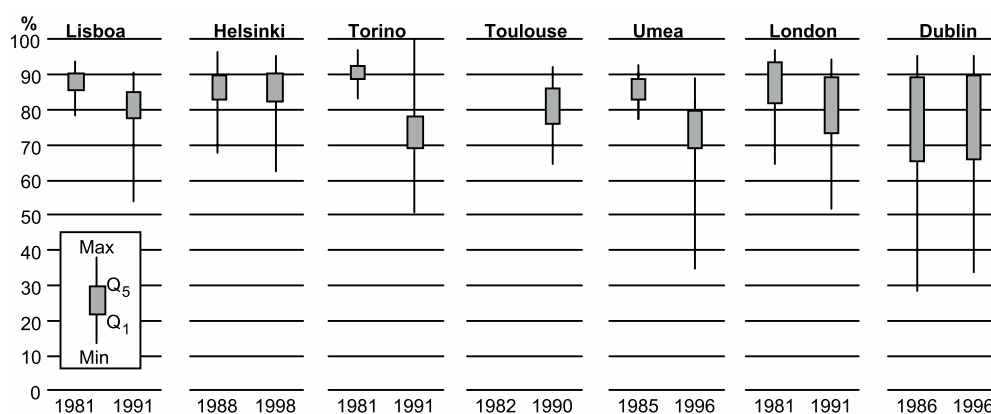


Table 1. Male employment rates, BETWIXT cities.

		Mean %	IoD	IQ range %	Range
Toulouse	1982	81.3	n/a	n/a	n/a
	1990	81.2	0.19	10.4	27.6
Dublin	1986	78.1	0.33	24.1	67.1
	1996	79.0	0.33	24.2	61.9
Turin	1981	91.2	0.12	4.5	14.4
	1991	71.8	0.09	9.3	49.4
Lisbon	1981	88.7	0.10	5.1	15.3
	1991	82.4	0.11	7.8	36.4
Helsinki	1988	86.1	–	7.8	28.7
	1998	85.4	–	8.1	33.0
Umeå	1985	85.7	0.14	6.0	15.5
	1996	74.2	0.13	10.9	54.4
London	1981	88.0	0.24	11.8	32.8
	1991	81.6	0.24	16.4	43.0

Figure 3. Box and whisker plot, 'foreigners/ethnic minorities', BETWIXT cities.

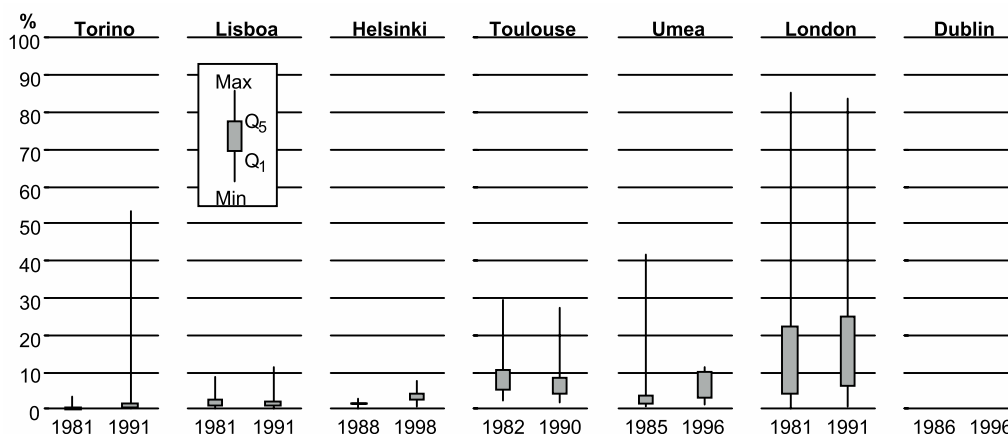


Table 2. 'Foreign'/ethnic minorities, BETWIXT cities.

		Mean %	IoD	IQ range %	Range
Toulouse	1982	11.0	0.25	5.7	26.8
	1990	7.9	0.27	4.5	25.5
Dublin	1986	n/a	n/a	n/a	n/a
	1996	n/a	n/a	n/a	n/a
Turin	1981	0.3	–	0.4	3.7
	1991	1.0	–	1.4	53.4
Lisbon	1981	2.2	0.22	1.9	8.6
	1991	1.9	0.26	1.8	11.2
Helsinki	1988	1.5	–	0.8	2.7
	1998	3.6	0.003	2.1	7.1
Umeå	1985	4.4	0.01	2.6	40.8
	1996	6.3	0.02	6.9	10.3
London	1981	14.6	0.38	18.5	84.9
	1991	17.0	0.35	19.3	83.0

The extent of area differentiation from the seven cities based on male employment rate indicates that London and Dublin appeared as the most differentiated cities, and the direction of change in London is toward a more differentiated city. Helsinki, on the other hand, appeared as a fairly stable city. The direction of change in social equality was slightly toward increasing differences. Another rather problematic variable that was examined, ethnic minorities, shows basically how different London and Helsinki in fact are. In Helsinki, the area with the highest percentage of ethnic

minorities has as low a percentage of them as London in its most ethnically homogenous area (less than 10 percent).

The examination of the spatial pattern of area differentiation yields an interesting result (Figures 4 and 5). The physical pattern of area differentiation shows a strong spatial pattern of continuity in the location of advantaged and less advantaged neighbourhoods. In addition, a clustering of both advantaged and deprived neighbourhoods was observed. That pattern of change appears both in London and Helsinki, the two cities that stand at the opposite ends of the spectrum of social and spatial differences. As a similar process of change seems to be characteristic of both London and Helsinki, the question remains of whether we are inevitably moving towards a divided city?

Figure 4. Spatial clustering of wellbeing and deprivation in London.

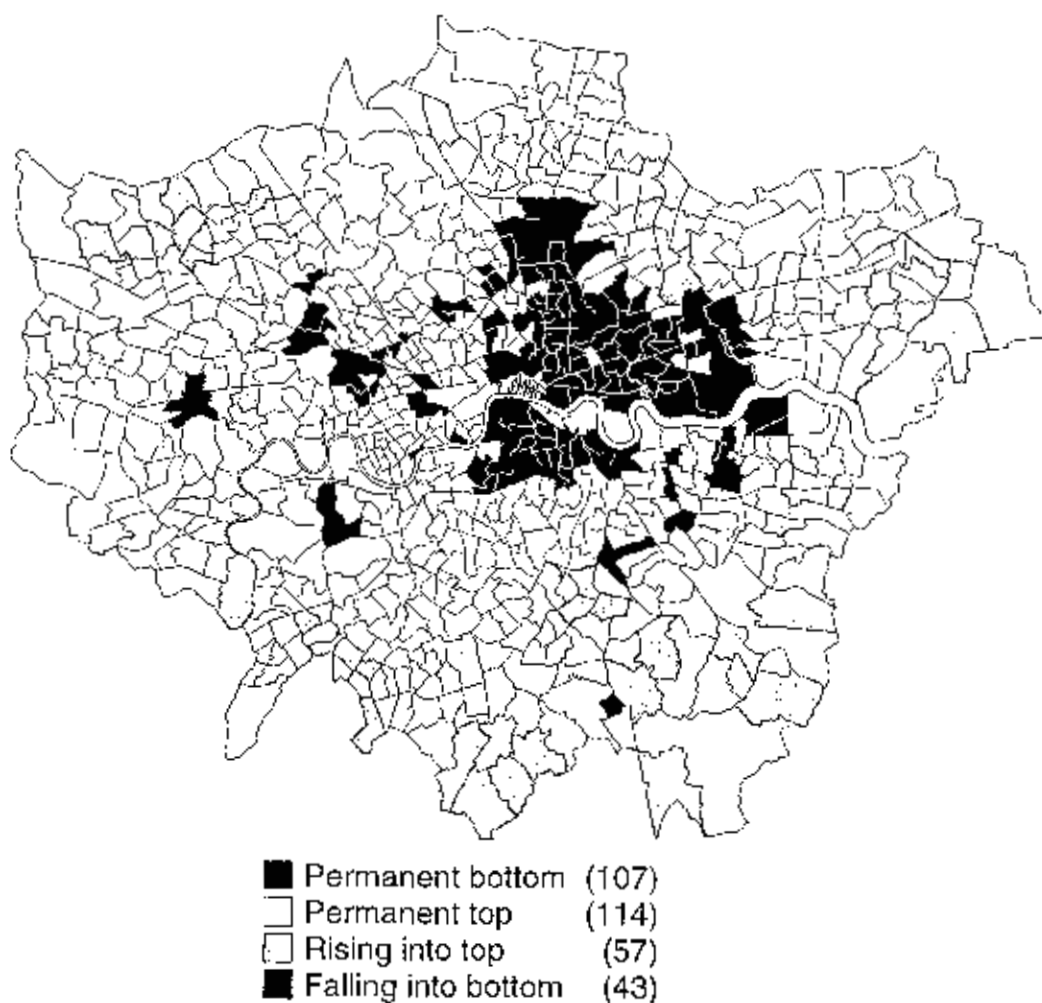
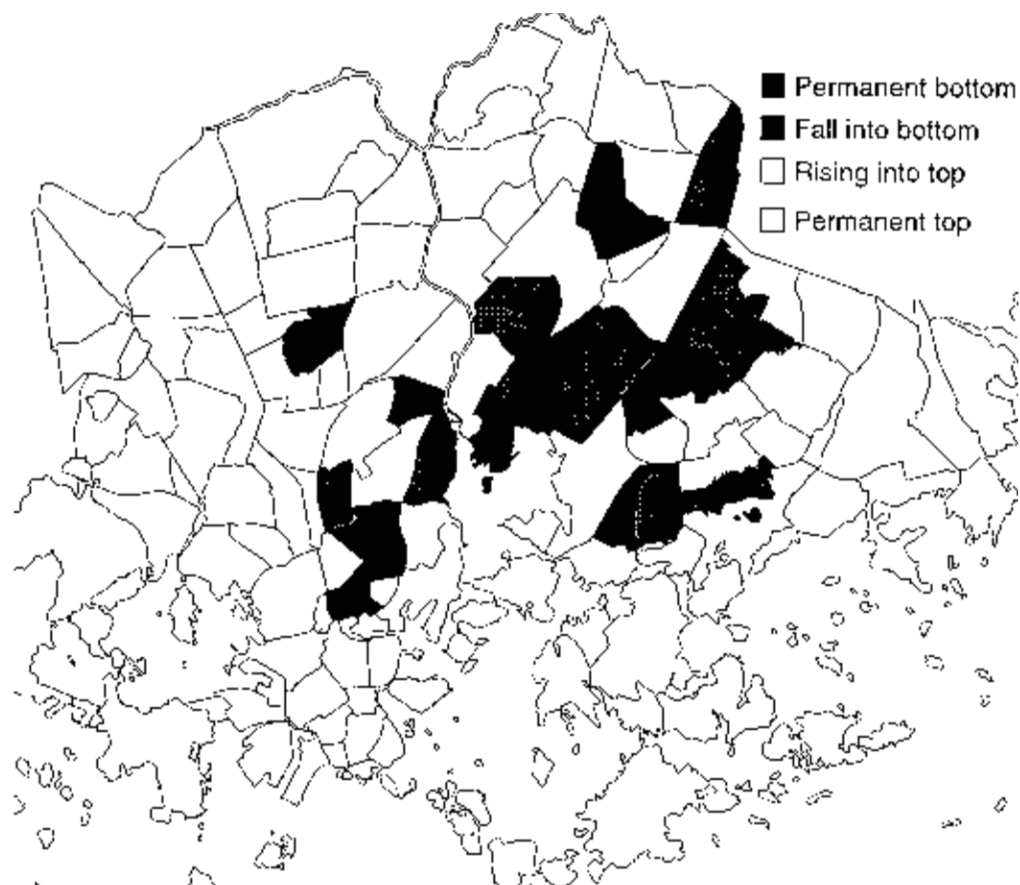


Figure 5. Spatial clustering of wellbeing and deprivation in Helsinki



Are we inevitably moving towards a city divided ?

The underlying differences for the clustering of deprivation and wellbeing are significantly different in London and Helsinki. In London, there is a high level of social segregation, which grew greatly between 1981 and 1991 and continues to be substantial. The traditional (geographical) areas of deprivation and prosperity have remained in their positions. These areas apparently attract similarity in their neighbouring areas. Between 1981 and 1991, there was a widening gap between the top and bottom of spatial distribution. During that period of time, there was an almost twofold increase in dispersion of one of the most important indicators, the employment rate. As a consequence, both income equality and poverty grew dramatically.

In Helsinki, the situation is different. Where the processes that build a more differentiated city are functioning in London at both ends of the societal scale – in

the growth of poverty as well as the growth of prosperity, in Helsinki the main driving force is the new economic growth of the information sector, which emphasises the role of education as a labour market resource. As a result, the growth lifts up different areas at a different pace, depending mainly on the educational standard of the population. The less educated and more working-class areas are lagging behind, and the western areas with a better-educated population are leading the upswing. Consequently, the already existing educational divide of the city is gradually breeding both unemployment and income differences.

New analysis on the nature and background of the turn (Kortteinen, Lankinen and Vaattovaara 2000) strongly suggests that it is linked not only to the exceptional severity of the depression, but especially to the new nature of economic growth of the late 1990s. It seems that growth based on information technology and the globalised economy – or informational economy, as Castells suggests (1996) – breeds urban inequality even in political conditions that are specifically designed to prevent this from happening.

The model of residential differentiation in Helsinki

Two phases of development are identified in the process towards a more segregated city.

The turn started with the depression of the early 1990s. At the beginning of that decade, Finland experienced a recession deeper than any other OECD country since World War II. In the course of three years, labour shortage was replaced by mass unemployment that reached about one-fifth of the labour force. Within just a few years, 100,000 jobs were lost. The eastern suburbs, built during the strong wave of urbanisation in the 1960s and 1970s, were somewhat underprivileged already at the time they were built. In the beginning of 1990s, unemployment hit these residential areas, where the population was older and less educated and had a mostly working class background, the hardest and the fastest. Not only did unemployment grow more quickly and with more intensity in these areas; recovery from unemployment also started several years later than elsewhere, and the recovery has been slow. What also is exceptional now is how the differentiation has continued during the economic upswing of the late 1990s (Kortteinen and Vaattovaara 2000; Kortteinen and Vaattovaara 2001).

On the whole, however, recovery from the recession has been rapid – acting as the second phase in the development toward a more differentiated city. The number of jobs has reached the same level as before the recession. The information sector has

been the main engine of economic growth in the Helsinki region after the depression. About two-thirds of new economic growth – measured by the number of people employed – after 1993 is based on the information sector. Most companies in the new information sector have been located in the centre of the city or in its western parts, surrounding the Technical University. Practically all firms responsible for the new growth in the region are located around the bay of Ruoholahti, i.e., in the western armpit of the peninsula of Helsinki.

Additionally, this new growth has clearly strengthened the interrelation or link between a high level of education and high income (Kortteinen, Lankinen and Vaattovaara 2000). A historical analysis of the development of the region has revealed a slow educational divide starting already in the early 1960s (Vaattovaara 1998). If the educational status of an area is described on the basis of the proportion of people with a university degree, the educational social structure of the city has, with time, become more and more polarised. The further west one goes, the higher the proportion of inhabitants with a university degree. As the link between high education and high income has, during the 1990s, become stronger, this previously created educational divide has begun to produce growing spatial income differences (Kortteinen, Lankinen and Vaattovaara 2000).

The Helsinki region as a whole is the main centre for economic growth in the country, attracting young, well-educated people to migrate to south from other parts from the country. Almost half of new jobs are filled with incoming migrants. It seems that during the 1990s the desirability of the eastern parts of the Helsinki region has diminished and the desirability of the west has grown with the main dividing line being linked to the educational standard of the migrant population. A separate study on incoming migration has shown how selectively migration works: the eastern and north-eastern parts of the region are clearly in a different position compared to the south and the west. If we look at the educational structure of the people that move to single-family houses we get a rough picture of how people value different areas. In the west, over one third of the incoming migrants have a university degree, but in the eastern and the north-eastern parts of the region, the proportion is about one-tenth (Vaattovaara and Vuori 2000).

In other words, it seems that a kind of vicious circle of underdevelopment is evolving in the east: the relative impoverishment of the population is reflected in the low desirability of the area and vice versa. It seems that both the companies involved in the new economic growth and the well-educated migrants prefer the west, and new elite districts have begun to develop on the basis of the information economy.

Future developments

In Helsinki, a concern for a socially balanced city has been systematically present through the policy of social mixing, since the start of modern city planning in the 1960s. The aim has been to ensure a mixture of different tenure types and income levels. This development has been aided by several means: strong public ownership of municipal land, planning against differentiated communities, and price regulation. Lately, because some eastern housing areas have been lagging behind in development for various reasons, a unique decision, contrary to the principle of social mixing, was made by the city council: to build a housing area with private housing only in the eastern parts of Helsinki (Lankinen 1997). While new personal preferences and migration patterns evolve, city planning has to constantly strike a new balance in policy targets – e.g. appropriate social balance and competition for good tax-payers among neighbouring cities.

Attempts to prevent segregation have been successful, as noted in this paper. In the future, however, attempts to maintain a socially balanced city structure will face several challenges. At the moment, we are on the brink of the first one – how to deal with growing spatial differences in a situation where social inequality has begun to increase (Uusitalo 1999). Is the question more about differences in housing preferences and in aims to distinguish – or are we dealing with a social problem that actually exacerbates the problem of the underprivileged (the neighbourhood problem; see, for example, Friedrichs 1997). There is a big open question in research that would give answers to that question. Whatever the case, it is likely that we will see an increase and an acceleration in spatial residential differentiation.

Another phenomenon that affects future developments in residential differentiation is the ongoing slowdown of the ‘hype’ in the information and communication technology sector. As the boom subsides, other issues besides economic interests may receive more consideration when making decisions concerning housing. The role of the image of the housing area will most certainly become more important in the future. It will be interesting to see how the image factor will be used in the marketing of different housing areas by developers and real estate agents, and as a tool to prevent segregation by the city.

As demonstrated earlier in this paper, inequality and segregation do not necessarily go together. Studies that investigate both of the elements – social and spatial – and thus bring about a deeper understanding of their relationship, are needed. In addition, as social inequality translates into spatial inequality in cities, primarily through the housing markets, more studies focusing on the role of housing markets should be conducted.

As an outcome of the developments described above, studies that attempt to model the social spatial differences based on socioeconomic factors (Valkonen and Kauppinen 2001) will become more complicated. Other ‘residual’ factors, such as perceived image, will most likely intervene in the equation.

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