

# Residential Profiles of Surinamese and Moroccans in Amsterdam

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**Summary.** At present, politicians in the Netherlands tend to pay more attention to bridging cultural gaps between various ethnic groups than reducing class differences. In that context, it is frequently assumed that ethnic integration processes can be facilitated by establishing a mixed population. In order to reach that objective, municipalities and local housing associations are encouraged to realise heterogeneous residential areas. However, this kind of policy rests on the assumption of a clear relationship between a spatial mix of the population in ethnic terms and the level of integration in society. The validity of this assumption is challenged in this paper in its investigation of housing profiles for areas containing varying immigrant densities in Amsterdam. Micro-level spatial data for all (over 16 000) postal-code areas in the city were compiled to substantiate this claim. The rich data-set allowed a detailed comparison to be made of the housing situation outside, within and between various ethnic group concentration areas which were constructed from the postal-code areas. This paper discusses the findings for Surinamese and Moroccans, the two largest non-native groups in Amsterdam. It is shown that, in general, all the residential neighbourhoods identified have heterogeneous housing profiles. The results suggest that other factors should be taken into account in order to understand the spatial segregation of immigrant groups. Such factors particularly include economic restructuring, the welfare state—especially redistributive mechanisms—urban history, general housing policy and cultural orientation.

## 1. Introduction: Dimensions, Spatial Patterns and Housing

In many countries in the Western world, rapidly changing residential patterns in cities have sparked intense reactions and heated public debates. In this environment, concepts such as the 'dualisation' of society or the 'rising ghetto-underclass' are easily applied. In social science literature too, these topics are often raised, generally in relation to works on economic restructuring processes and welfare state transformations (Wilson,

1987; Sassen, 1991; Musterd and Ostendorf, 1998).

However, while debates about spatial inequality tend to focus on class differences in some countries, other countries place the issue of ethnicity centrally. The UK clearly falls into the first category and the class debate has persisted in Britain ever since Friedrich Engels' work on the class society over a century ago. Non-British researchers

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who encounter British research on inequality soon notice that professional class and other divisions are focal points in the debate. In other countries, different dimensions of inequality receive more attention. In countries with a history of more moderate class divisions such as Sweden or countries that experience a large and continuous influx of ethnic immigrants, such as the US, Canada, the Netherlands and Germany, inequality is studied using other—particularly ethnic or cultural—terms. In the US context, this goes hand-in-hand with class differences. Not surprisingly, the debate about the relevance of race and/or class differences across space is best developed there (Morrill, 1995; Massey and Denton, 1993).

In contexts such as the Netherlands, the ethnic dimension is considered to be relatively important in debates on integration in society. That does not imply that these debates are always open. For reasons of political correctness, it sometimes seems necessary that objectives aiming at ethnic integration be 'sold' to the people using class-based euphemisms or quasi-neutral terms. On the other hand, there is also room for open and direct debate. Currently (January–April 2000), an extensive debate is taking place in the Dutch media about the drawbacks of the 'multicultural society'. This debate largely gives voice to fears about the lack of integration of immigrants in mainstream society. The Ministry of Housing and the Ministry of Big Cities and Integration Policy also devote a lot of attention to this issue. In so doing, they frequently express their fears for ethnic ghettos, and try to develop policies to prevent such developments from occurring.

However, the great variety of national and local circumstances—not only in economic and administrative terms, but also in terms of urban and social history—makes it extremely difficult to understand completely the ethnic patterns and processes. This is part of the problem. Where theory is inadequately developed, local and national policy responses to ethnic spatial patterns and processes have weak foundations. Even though there seems

to be some agreement about the relevant factors that affect ethnic patterns and processes, this is not the case when the relative significance of these factors is brought into the discussion. In addition, most analyses that are supposed to support the policy objectives have used neighbourhood- or urban-district-level data to describe the developments. The latter may be sufficient to get an indication of the overall pattern. However, as we have stated elsewhere (Musterd and Deurloo, 1997; Deurloo and Musterd, 1998), when performing micro-level (postal-code) data analyses, additional insights may be attained when more detailed spatial analyses are carried out. Knowledge of what is happening at the micro-level is indispensable where micro-level policies are applied to regulate ethnic or social-spatial concentrations. That is exactly what is now happening in many cities in the Netherlands.

An important facet of Dutch spatial policy is to produce so-called mixed or heterogeneous neighbourhoods in terms of their population (Ministerie van VROM, 1997). Politicians assume that social and ethnic integration processes are helped by the establishment of a more-or-less forced heterogeneity of the various population categories—that is, a conscious mixture of the population in terms of ethnicity and social status. To reach that objective, local municipalities and housing associations are called upon to create mixed neighbourhoods. This kind of policy rests upon the assumption that not only is adequate knowledge about the actual micro-level processes available, but also that the ethnic and social heterogeneity of the population are closely related to the types of dwelling provided. However, serious doubts can be cast on these assumptions. Germain (1999, p. 247) argues that

generous but naive wishful thinking about residential mixing has long ago abandoned the idea that geographical proximity could be a factor in rapprochement. Many studies have demonstrated the friction differentiated populations are exposed to socially and culturally by making them

cohabit without providing space or a buffer zone.

Quite a discrepancy still exists between policy objectives and actual developments. In the Netherlands, this was already illustrated in a debate between two former aldermen of the two largest cities of the Netherlands, Amsterdam and Rotterdam (Saris, 1996; Meijer, 1996) in the early stages of the current mixed-neighbourhood policy. Here, they expressed their doubts on whether urban policy was in tune with actual developments.

The present paper seeks to contribute to this ongoing debate on ethnic integration by presenting an empirical analysis of the relationship between the level of ethnic spatial concentration on the one hand and the relative mixture (heterogeneity) of the housing stock on the other. In our view too, the basis for drawing a clear relation between the two phenomena is weak. Other relevant factors, such as cultural orientation, historically grown urban structures, welfare state type and economic structure are too often overlooked. Consequently, irrespective of the answer to the question of whether it is sensible to stimulate heterogeneous populations at a local spatial scale, doubts can also be cast on the effects these kinds of policies will have.

This contribution expands the knowledge in the field of ethnic segregation by examining in detail the Amsterdam experience on ethnic-spatial concentrations. Two issues were central to this analysis. First, the investigation asked what relevant factors should be considered in order to understand the general spatial patterns of ethnic groups in a city like Amsterdam. What can be said about the changing importance of these factors over time? Secondly, following the discussion connected to the first issue, the study then delves deeper into the potential effects of segregation that are assumed to be related to the housing structure. To do so, the detailed micro-level spatial pattern of the total population of Amsterdam in terms of ethnicity was investigated empirically and linked to an analysis of the housing situation. We compared housing profiles of empirically

constructed residential areas with various concentrations of a particular ethnic group.

The first issue will be discussed primarily on the basis of the existing literature, research produced by our colleagues and our own work (section 2). The second issue will be dealt with in sections 3 and 4. In section 5, some conclusions will be drawn and used to speculate on the future spatial and housing market positions of ethnic immigrants and their offspring.

## **2. Factors Affecting Ethnic Spatial Segregation and their Importance over Time**

In order to understand the current ethnic population distribution, we must also consider much broader social processes. Present social transformations are first of all seen as related to the general economic restructuring processes of recent decades (see, for example, Sassen, 1991; Fainstein *et al.*, 1992). Manufacturing declined and/or became increasingly labour-extensive in virtually all European and North American cities. At the same time, new demands for high-skilled labour have grown in the service sector. Sassen (1991), Warf (1990) and others stressed that not only were high-end jobs developed in this sector, but large numbers of low-end jobs too (particularly consumer-oriented services). In the US context, many of these are 'dead-end jobs', which do not offer any real prospects for climbing the social ladder. It is argued by Sassen and others that the economic restructuring process will result in increasing social polarisation, which is expected to be expressed in spatial terms as well. Ethnic polarisation and segregation may also be discerned, due to differences in skills between different ethnic groups, but possibly also because of racism or xenophobia.

Although roughly similar economic restructuring processes took place in European countries, the effects on the social composition of the population are clearly different (see, for example, Hamnett, 1996, in his critique on Sassen, but also the comments of Burgers, 1996, on Hamnett's view). In our

opinion, local differences in the organisation and structure of the welfare state are most relevant in this respect (Esping-Andersen, 1990; Musterd and Ostendorf, 1998). In fact, this constituted the second major explanation of the social and ethnic makeup of the urban population. European models differ from the US model, but also from each other and over time in the level of attention given to access to the labour market, the quality of and access to social benefit systems, income redistribution systems, health care programmes, housing policy, housing subsidies and housing allocation systems. Again, the social inequalities that result from these welfare state models will be reflected in spatial inequalities.

A third factor that is relevant to understanding spatial segregation patterns in cities is the history of urban development itself. Major restructuring processes and urban renewal activities from the past should be borne in mind, since these can have clear impacts on residential patterns in the city (Wagenaar, 1993). Paris, for example, had its (then poor) inner city completely reconstructed by Baron le Haussmann some 150 years ago. The socio-spatial effects of that physical restructuring process are well known: the wealthy repopulated the centre and the poor were forced out towards the Banlieue (see, for example, Carpenter *et al.*, 1994). History is also important in understanding ethnic segregation. The moment at which specific immigrant groups settle in the country as well as specific circumstances in the city at that time may greatly explain local settlement decisions, and for this reason are important for understanding subsequent population development patterns.

A fourth major impact on urban social issues is related to the established ethnic or cultural or social spatial clustering itself. Put into an individual-choice perspective, increased concentration may be related to individual cultural orientation (enclave-formation; Boal, 1976). There is also a body of literature which is based on the assumption that a spatial concentration of poor immigrants will limit an individual's oppor-

tunity to escape such a concentration. Consequently, the ethnic concentration will intensify, as will the segregation from other population categories (Massey and Denton, 1993). The overemphasis of that perspective was recently challenged (Musterd and de Winter, 1998).

Finally, housing policy, and particularly that aimed at the realisation of so-called mixed neighbourhoods (in terms of the types of dwelling and population), seems recently to have received extra attention as a fifth explanatory dimension. Although this factor may be related to the type of welfare state involved (see Forrest and Murie, 1991; Murie, 1998), and therefore can be dealt with partly under that umbrella, there is not a one-to-one relationship between housing policy and type of welfare state. That can be illustrated by comparing the Belgian and Dutch situations. Housing policies in these countries have always differed and continue to differ tremendously, whereas other welfare state characteristics are much more similar.

Nevertheless, state attitudes towards housing are regarded as crucial. In the Netherlands, the physical restructuring of the housing stock, which is aimed at creating mixed neighbourhoods, has become the most important item in current urban renewal policy. The basic idea is that a homogeneous housing stock will be reflected in a homogeneous neighbourhood population and, consequently, that such a neighbourhood will have negative effects upon the social and cultural integration of its population into society. These objectives may also be fuelled by the fact that the country has a very large share of public housing, but where owner-occupier tenure is rapidly gaining ground. It is our feeling that, especially with regard to this fifth factor, insufficient empirical evidence exists to substantiate the theoretical ideas on which the policy measures are based.

Although it is difficult to say if one of the factors dealt with here (economic structure and restructuring, type of welfare state and its restructuring, urban history, spatial concentrations and housing provision and

policy) is more significant than the others, some remarks can be made about their relative importance when cities in different countries are compared, and when different time-periods are considered. Obviously, differences over space and time will translate themselves into specific private and public market positions of households, which will then be reflected in socio-ethnic urban residential patterns. After discussing this point, the focus will shift to the Dutch context, and Amsterdam in particular. To reiterate, not enough is known about the relative impact of each of the factors mentioned above, and this holds true for the Dutch situation as well. This lack of knowledge is particularly noticeable with regard to the impact of Dutch housing policy. In an effort to contribute to the body of knowledge on this subject, we narrowed the focus of our analysis to the spatial distribution of ethnic categories in relation to the housing stock (i.e. housing profiles in different types of area). Since this housing policy seems to enjoy a privileged position in the 'battle against segregation', there is good reason to engage in some critical thought on the subject. Before doing this, however, we will first sketch out the contours of the Dutch context.

### *Spatial Variation*

Looking at the factors mentioned above, several conclusions seem to surface with respect to Dutch cities in general and Amsterdam in particular. First, the economic restructuring process has touched all Western countries in a somewhat similar way. However, this has been powerfully mediated by differences in welfare state types, which affect among other things minimum wages and access to and exit from the labour market. It is evident that the specific characteristics of the Dutch welfare state prevent the development of bottom-end labour market entry, as was experienced in the US. That certainly does not mean that no new jobs were created in the Netherlands. On the contrary, the Dutch 'polder model' is famous for its job creation.

However, due to the stringent productivity requirements, the majority of these jobs were part-time and temporary positions and often occupied by women who had had a very low labour market participation rate in the Netherlands. Unemployment rates among low-skilled ethnic immigrants therefore remain high.

However, other characteristics of the welfare state model result in producing a fairly weak link between one's position on the labour market, income level and housing situation. Therefore, unemployment has much less drastic consequences on income and housing opportunities in the Netherlands than in the US. As a result, social and ethnic spatial clustering are more moderate in the Netherlands, as expressed in low indices of segregation. Bearing this in mind, there is good reason to refrain from uncritically accepting the predominant US experiences and social polarisation theory, a theory in which the global economic restructuring and ghetto-neighbourhood effects are the most prominent features.

Urban history plays a crucial role in determining segregation patterns and plays by definition a local role as well. When we reflect upon urban history, we can see that Amsterdam's inner city did not experience the type of reconstruction that was carried out in cities such as Brussels, Paris, Rome and Budapest in the 19th-century (Wagenaar, 1993). This fact is considered to have had important effects on the social patterns which later developed in these cities. However, one should keep in mind that the differences between these cities and Amsterdam in terms of 19th-century urban renewal efforts may also have been a function of the differences in social inequality in these cities at the time. Whatever the case may be, since Amsterdam did not explicitly divide its territory into rich and poor areas in the 19th-century, this might have had a cushioning effect on today's segregation patterns. In recent history, the influx of large numbers of immigrants, coupled with the availability of newly built but relatively unpopular high-rise public housing in the city, seems to be crucial for explaining

the overrepresentation of Surinamese in the south-eastern part of Amsterdam.

Other housing market characteristics are supposed to play their part as well, as we pointed out before. However, there is little evidence so far to support the ideas which lie at the heart of today's housing and urban policy regarding the link between the characteristics of the housing stock and the population mix. The social composition of the population, which is largely dependent upon the economic situation and welfare state arrangements at the time, may be more important. It may be argued that where social inequality is large, social-spatial inequality will be large as well. Elsewhere, we have tried to show that the relationship between housing stock characteristics, particularly regarding tenure, and the segregation of the population is rather complicated. A large public housing sector clearly is not a sufficient condition to explain a moderate level of segregation. Moderate levels of segregation can also be perceived where ethnic immigrants live in private-sector housing and segregation may also occur within the public housing sector.

### *Temporal Variation*

Time has also had its effects upon the relative importance of the factors mentioned above. This section will discuss changes in welfare state models or 'regimes' and housing market and housing policy over recent decades.

After the Second World War, the Netherlands was characterised by a high degree of state intervention in the economy and society. The Dutch welfare state featured a plethora of subsidies, generous social benefits as well as good access to education and health care. All of these factors had major impacts upon the reduction of social inequality and the decoupling of income levels from labour market positions and residential situations. These welfare-state-related factors are crucial for understanding the relatively moderate levels of social and ethnic segregation in the Netherlands. Where an

adult stage of the Dutch welfare state had already been reached by the 1960s and lasted until the late 1980s, it is no surprise that both fairly stable and moderate levels of segregation could be shown over the years until 1994 (see Table 1).

The stable level of segregation also provides evidence for our hypothesis that the availability of or accessibility to public housing does not play a major role in explaining the moderate level of ethnic segregation. Around 1970, Turks and Moroccans, for example, could be found in inner-city districts in lodging arrangements. Around 1980, the private rented sector in the 19th-century residential districts was the primary residence for these groups. By 1995, about 75 per cent of Turks and Moroccans lived in the public housing sector, not being segregated from each other at the neighbourhood level, but frequently segregated from each other at the micro (postal-code) level.

Some crucial changes have occurred since the beginning of the 1990s. The Dutch welfare state—albeit still comparatively generous—has been in a state of retreat: subsidies have been cut and benefits reduced. In addition, income inequality has been rising, labour market entry and exit have tended to become easier, housing provision has been shifting to the private sector, housing associations increasingly act as if they were private companies and many other former state facilities have become privatised.

The new Dutch housing market tends to reach a demand–supply balance, certainly in quantitative terms where there is an increase in choice for those who can afford it (and

**Table 1.** Segregation index at the neighbourhood combination level in Amsterdam for major immigrant groups, 1980–94

	1980	1986/87	1994
Turks	37	39	40
Moroccans	39	37	38
Surinamese	28	34	35

Sources: SCP (1994, Tables 3.4 and 3.5) and van Daalen *et al.* (1995).

consequently a reduction of choice for those who are left behind). The overall trend seems to be towards increasing deregulation and cutbacks, implying higher levels of social inequality and freedom of choice for those with sufficient means. This will inevitably result in increased spatial inequality. The question is whether some signs of this are already evident.

In the sections to come, we will try to provide part of the answer to this question. We will do that by examining the spatial distribution patterns of several ethnic groups in Amsterdam and relate these to the housing profiles in various areas in the city.

### 3. Ethnicity and Housing at the Postal-code Level

In the two empirical sections that follow, we will present information about the residential situation of Moroccans and Surinamese in Amsterdam, the two largest ethnic groups in the city. In 1994, Amsterdam had approximately 720 000 inhabitants of whom almost 68 000 were Surinamese (9.4 per cent) and over 46 000 were Moroccans (6.4 per cent). We were fortunate enough to have the use of unique and extremely detailed micro-level data for the composition of the population and for the composition of the housing stock—namely, data at the level of six-position postal-code areas (over 16 000 in Amsterdam). For each of these very small areas, we know both the number of people falling into 8 different ethnic groups and various characteristics of the housing stock. In 1994, 32 per cent of the total population belonged to one of 5 ethnic immigrant groups from non-industrialised countries: Surinam, the Antilles, Turkey, Morocco and ‘other’. In order to be able to compare the various spatial settings of different immigrant categories, we used a relative measure to judge whether a category is overrepresented in a postal-code area. Take the example of Moroccans. On average, only 43.5 persons lived in a postal-code area in Amsterdam in 1994. As 6.4 per cent of the Amsterdam population was of Moroccan descent, 93.6 per cent was

not. The binomial standard deviation corresponding with these numbers is

$$\sqrt{(p.q)/n} = \sqrt{(6.4*93.6)/43.5} = 3.7\%$$

per cent. We then defined a postal-code area as ‘clearly overrepresented by Moroccans’ when the percentage of Moroccans living there was over 2 standard deviations above the city average, thus over  $6.4 + 2*3.7 = 13.8$  per cent. The corresponding minimum defining a postal-code area as ‘clearly overrepresented by Surinamese’ is 18.2 per cent ( $9.4 + 2*4.4$ ). Figures 1 and 2 show the locations of these overrepresented post codes. Surinamese are mainly to be found in south-east Amsterdam. Very few Moroccans can be found there; they mainly live in the western and eastern wings of the city and in the older part of the northern district.

With these criteria in mind, each of the 16 665 inhabited postal-code areas was categorised with respect to Moroccans as:

- an area with a clear Moroccan overrepresentation if the percentage of Moroccans is over 13.8 per cent;
- an area with Moroccans, but no clear overrepresentation, if the percentage of Moroccans is between zero and 13.8 per cent; and
- an area without Moroccan residents (0 per cent).

A similar categorisation was made with respect to Surinamese.

We were interested in the differences in the residential situation between these categories. If the housing stock in areas where Moroccans or Surinamese are clearly overrepresented is more homogeneous than in other areas where Moroccans or Surinamese live, it may be worthwhile to aim at producing a more differentiated housing supply in those areas to reach a more mixed composition of the population (if that remains the goal).

The results of the classification show that only 59 per cent of all Surinamese live in the (2464) areas with a clear overrepresentation of Surinamese, whereas 75 per cent of all



**Figure 1.** Moroccans in Amsterdam, 1994: postal-code areas clearly overrepresented by Moroccans.



**Figure 2.** Surinamese in Amsterdam, 1994: postal-code areas clearly overrepresented by Surinamese.

Moroccans are found in the (3096) areas having a clear overrepresentation of Moroccans. The first conclusion is that Moroccans are much more concentrated than Surinamese. In other words, Surinamese are more geographically integrated in the Amsterdam community than Moroccans. A substantial share of the Surinamese (41 per cent) and a much smaller proportion of the Moroccan population (25 per cent) have housing situations which resemble that of the average Amsterdam population.

The residential characteristics of the three postal-code area types are shown in Table 2 for Moroccans and in Table 3 for Surinamese. Moroccans and Surinamese therefore have different residential situations. But that is not our main focus of interest here. The objective is to compare the housing conditions according to the level of differentiation between the types of area that were distinguished. The comparison showed us that differences exist in the residential profiles of the three area types mentioned. However, the variation of a housing characteristic is also substantial within each of these types. For example, with respect to the age of the dwellings, in areas with a clear overrepresentation of Moroccans, a relatively large share of dwellings were found that were built between 1946 and 1960, but large shares of dwellings that were constructed in other periods were also found (Table 2). The areas with overrepresentation of Surinamese show fairly high shares of relatively recently built dwellings (Table 3), but here too the variation across the construction periods is still great.

Similar conclusions hold for both ethnic groups if we consider the number of rooms in each dwelling. In fact, the prevailing idea that Moroccan households live in certain areas due to a combination of their large household size and allocation policies of housing associations (granting large homes to big families), seems to be invalid. Instead, Moroccans tend to live in areas where all dwelling sizes are available. In fact, areas with a clear overrepresentation of Moroccans even have a slight

overrepresentation of two-room (i.e. small) dwellings.

With respect to areas where Moroccans are clearly overrepresented, the tenure mix is somewhat smaller than for the two other area types, but still varied (Table 2). Areas with an overrepresentation of Surinamese tend to be more homogeneous according to tenure type (Table 3). Over three-quarters of the dwellings are owned by housing associations, which is clearly above the approximately 45 per cent average for the entire city.

In areas with Moroccan overrepresentation, the only remarkable exception to the rule of 'comparable heterogeneity relative to the other two types of area' can be shown with respect to the type of dwelling: almost 93 per cent of the dwellings are medium-rise (as against 76 per cent for the entire city) and only 1 per cent are high-rise. In other area types, the share of high-rise dwellings is clearly higher.

The variation within each of the housing characteristics for the different area types is summarised through the information measure  $H$ , also known as entropy, in Table 4. It is one of the usual measures of dispersion for nominal variables. The information measure  $H$  is defined as:

$$H(X) = -\sum p_i \ln p_i$$

where,  $p_i$  is the probability of an observation belonging to category  $i$  of variable  $X$ . Here  $X$  is a specific housing characteristic and  $i$  denotes a category of that characteristic.

In Table 4, the measure has been standardised by dividing  $H(X)$  by the maximum attainable value, which is dependent on the number of categories ( $\ln I$ ). The resulting scale runs from 0 to 1, where 1 represents a maximum variation (all categories are present to the same degree) and 0 stands for maximum homogeneity (all values belong to one category). In addition to the three types of area discussed above, the table also presents  $H$  values for a new type of area—namely, those with strong overrepresentation of an ethnic group. This will be discussed at the end of this section.

Focusing on the areas with a clear overrep-

Table 2. Housing profiles of three types of postal-code area for Moroccans

	Areas with clear overrepresentation of Moroccans	Other areas with Moroccans	Areas without Moroccans	Entire city
<i>n</i> (total Moroccans)	34 380	11 731		46 111
<i>Age of dwelling</i>				
Pre-1919	25.8	27.0	26.3	26.4
1920-30	26.4	14.9	12.9	15.8
1931-45	8.8	7.7	11.0	9.7
1946-60	20.5	7.6	10.9	11.7
1961-70	6.7	8.1	12.5	10.2
1971-80	1.3	11.6	8.2	8.0
1981-90	8.1	18.5	13.0	13.7
1991-96	2.4	4.5	5.2	4.5
<i>Tenure</i>				
Privately rented	21.9	30.6	38.3	33.2
Owner-occupier	1.6	5.4	16.9	10.9
Publicly rented municipal	17.0	10.4	8.0	10.3
Publicly rented housing association	59.2	53.2	35.4	44.7
<i>Number of rooms</i>				
1	2.3	4.8	4.1	4.0
2	30.1	31.1	23.1	26.6
3	37.5	35.5	32.3	34.1
4	21.6	23.1	28.3	25.6
5	6.6	4.2	7.5	6.4
6 +	1.9	1.3	4.8	3.3
<i>Type</i>				
Low-rise	5.7	5.0	15.8	10.9
Medium-rise	92.9	79.2	69.3	76.3
High-rise	1.4	15.8	14.9	12.8

Table 3. Housing profiles of three types of postal-code area for Surinamese

	Areas with clear overrepresentation of Surinamese	Other areas with Surinamese	Areas without Surinamese	Entire city
<i>n</i> (total Surinamese)	39 926	27 936		67 862
<i>Age of dwelling</i>				
Pre-1919	9.8	28.5	31.8	26.4
1920-30	11.1	18.0	14.9	15.8
1931-45	2.2	10.4	12.4	9.7
1946-60	6.9	11.6	14.3	11.7
1961-70	13.5	8.8	10.8	10.2
1971-80	22.7	4.3	6.1	8.0
1981-90	31.5	12.8	5.8	13.7
1990-96	2.4	5.6	3.9	4.5
<i>Tenure</i>				
Private rental	6.7	35.6	43.3	33.2
Owner-occupier	2.8	9.3	17.9	10.9
Publicly rented municipal	13.6	9.7	9.4	10.3
Publicly rented housing association	76.5	44.5	28.0	44.7
<i>Number of rooms</i>				
1	2.5	4.3	4.2	4.0
2	29.1	27.7	23.4	26.6
3	28.4	37.1	32.4	34.1
4	32.1	23.8	25.2	25.6
5	6.8	4.9	8.6	6.4
6 +	1.0	2.2	6.3	3.3
<i>Type</i>				
Low-rise	4.0	7.9	19.5	10.9
Medium-rise	71.5	83.5	67.0	76.3
High-rise	24.5	8.6	13.5	12.8

**Table 4.** Heterogeneity (relative  $H$  values) of housing characteristics in various postal-code area types, based on the share of Moroccans or Surinamese

	Age of dwelling	Tenure	Rooms	Type
<i>Share of Moroccans</i>				
Areas with strong overrepresentation	0.84	0.59	0.80	0.25
Areas with clear overrepresentation	0.85	0.64	0.78	0.26
Areas without clear overrepresentation	0.93	0.69	0.78	0.57
Areas without Moroccans	0.95	0.81	0.85	0.75
<i>Share of Surinamese</i>				
Areas with strong overrepresentation	0.70	0.31	0.78	0.70
Areas with clear overrepresentation	0.87	0.48	0.78	0.65
Areas without clear overrepresentation	0.93	0.75	0.80	0.51
Areas without Surinamese	0.91	0.81	0.88	0.78
Entire city	0.95	0.77	0.83	0.65

resentation of Moroccans, the age of the dwellings received a fairly high score on the  $H$  value in each area type: 0.85 or above (Table 4), this indicates a high mix or variation (heterogeneity) in terms of age. For areas with a clear overrepresentation of Surinamese, high  $H$  values result in each of the types (0.87 or above), also expressing heterogeneity in housing stock age.

The overall picture that emerges from Tables 2–4 is that areas with a clear overrepresentation of Moroccans are rather heterogeneous in terms of housing construction year, tenure and size and, in that respect, are comparable with areas without a clear overrepresentation of Moroccans or areas without Moroccans. Even the relative shares of the categories of the variables applied are not significantly different from one another when we compare the various area types. The one exception is that high-rise housing can hardly be found in areas with a clear overrepresentation of Moroccans.

Areas with a clear overrepresentation of Surinamese are somewhat special because of their higher share of high-rise housing, but are almost as heterogeneous in terms of age and size. The tenure structure of Surinamese areas is noteworthy, with over 90 per cent living in public housing, as opposed to just over 50 per cent for areas without a clear overrepresentation of Surinamese (which to-

gether house 41 per cent of all Surinamese in Amsterdam). So, at first sight, areas with a very homogeneous housing stock in terms of tenure—that is, dominated by relatively new public rental housing—seem to be related to specific ethnic concentrations. There are, however, other explanations for this situation. First of all, there are other areas in the city with comparable concentrations of public rented dwellings that are not inhabited by Surinamese. But secondly, and most importantly, there is an historical explanation for this concentration. The areas exhibiting an overrepresentation of Surinamese are mainly located in the south-east of Amsterdam, where medium- and high-rise dwellings have been built since the 1960s. A large number of these units became available at the same time that Surinamese were entering the country, following its independence in 1975. Immigrants arriving later tended to look for housing in that area too, were allocated there, or succeeded in finding vacant dwellings there. It is generally assumed that a fair share of the Surinamese living in these areas chose to live there, and that the level of ‘constrained choice’ was certainly not higher than that experienced by other people who are dependent on the rental stock in Amsterdam.

The analysis presented thus far does not generally support the idea that overrepresentations of ethnic categories are associated



**Figure 3.** Moroccans in Amsterdam, 1994: postal-code areas strongly overrepresented by Moroccans.

with homogeneous areas in terms of housing stock. However, one might argue that the requirements for ethnic overrepresentations are insufficiently strong to denote a significant presence. To examine the validity of this claim, we also looked at areas that have ethnic concentration of at least four standard deviations above the mean. In this test, postal-code areas were identified as 'strongly overrepresented by Moroccans' if they had a share of at least 21.2 per cent ( $6.4 + 4 \cdot 3.7$ ) Moroccans. Similarly, a 'strong overrepresentation of Surinamese' is reached when at least 27.1 per cent of a given postal-code's inhabitants is Surinamese (Figures 3 and 4).

The number of Moroccans living in these areas is still rather large: 23 598. Similarly, 26 726 Surinamese live in such postal-code areas. The reader should be cautioned, however, that nearly 50 per cent of all Moroccans and over 60 per cent of all Surinamese do not live in these areas of strong overrepresentation. One should also keep in

mind that the Moroccan population only comprises 33 per cent of the total population of these areas, while this is 39 per cent for the Surinamese.

To facilitate comparison, the *H* values for strong overrepresentations are also given in Table 4. From this table, one can see that the residential heterogeneity of these areas is still very large and hardly differs from that in the more moderate overrepresentations discussed before. The most evident homogeneous element in the areas with strong Moroccan overrepresentation is again the type of dwelling: over 90 per cent of the areas considered consist of medium-rise housing (as opposed to 76 per cent of the entire Amsterdam housing stock). The most evident homogeneous element in the areas with strong Surinamese overrepresentation is the tenure type: as much as 97 per cent of all dwellings in these concentrations are publicly rented, against 55 per cent for Amsterdam as a whole. The explanation for this has already been addressed.



**Figure 4.** Surinamese in Amsterdam, 1994: postal-code areas strongly overrepresented by Surinamese.

#### 4. The Residential Situation in Ethnic Neighbourhoods

So far, the analysis has been at the relatively small postal-code area level (with 40 inhabitants per postal-code on average). This implies that areas with an overrepresentation of an ethnic group may or may not show a highly dispersed pattern across the city. Geographical proximity has not been a criterion in the analyses so far. If these areas of concentration are dispersed throughout Amsterdam, one can hardly speak of substantial ethnic areas, as these postal-codes are very small indeed. Postal-code areas are therefore a poor indicator for developing area-based anti-segregation policies. The question at hand is thus whether substantial areas with an overrepresentation of a particular ethnic group (distinct ethnic residential areas) can be found at all. And if so, what housing situation is related to these areas?

To answer these questions, we grouped the postal-code areas with a clear overrepresentation of Moroccans which were adjacent to

one another. The same was done for the Surinamese cases. This was achieved by applying GIS techniques. For an in-depth elaboration of the methods applied, please see Deurloo and Musterd (1998). After this exercise, the 3096 postal-code areas with a clear overrepresentation of Moroccans were aggregated to 563 new areas, and the 2464 postal-code areas with a clear overrepresentation of Surinamese were aggregated to 683 new areas. Most of these new areas were still very small. For example, the average area for Moroccans is only 1.4 hectares, or 274 total inhabitants and 61 Moroccans. For the Surinamese, the average for the new areas was only 0.9 hectares, 206 total inhabitants and 58 Surinamese. All other ethnic and housing information was also aggregated from the postal-code level to these newly constructed areas. Useful samples of these areas could then be carried out on the basis of criteria such as size, number of inhabitants and population density. Because we were interested in finding and comparing the housing situation in the selected ethnic neighbour-



**Figure 5.** Moroccans in Amsterdam, 1994: ethnic neighbourhoods.

hoods, we used strict requirements in defining them. To be included in what we call an 'ethnic neighbourhood' an area must: be strongly overrepresented by one of the ethnic groups under consideration (at least four standard deviations above the mean); and house at least 1 per cent of the total population of this group in Amsterdam. In other words, using our terminology, a Moroccan ethnic neighbourhood must have at least 461 Moroccans, and Moroccans must comprise at least 21.2 per cent of its population. Likewise, a Surinamese neighbourhood must have at least 678 Surinamese and make up at least 27.1 per cent of the population in the area. As a result of these strong demands, from a total of the 563 Moroccan new areas, only 14 Moroccan ethnic neighbourhoods remained, and only 6 Surinamese ethnic neighbourhoods could be identified out of the 683 Surinamese new areas (Figures 5 and 6).

Tables 5 and 6 give the variation ( $H$  values) for the different housing characteristics in each of these ethnic neighbourhoods, and

the absolute and relative size of the ethnic group.

In the 14 Moroccan ethnic neighbourhoods (Table 5) a total of 11 192 Moroccans—i.e. 24.3 per cent of the total Moroccan population of the city—can be found. These neighbourhoods are relatively heterogeneous in terms of construction period and tenure of the dwellings. Significant variation in the number of rooms can also be found, which underlines our finding that Moroccans reside in areas with dwellings of various sizes. The heterogeneity exists with respect to both the internal structure of some of the neighbourhoods and the differences between the 14 neighbourhoods under consideration.

The 6 Surinamese ethnic neighbourhoods add up to 8509 Surinamese, which is only 12.5 per cent of the total Surinamese population of the city. Surinamese are thus much less spatially clustered—at least at the neighbourhood level—than Moroccans. All 6 Surinamese ethnic neighbourhoods are located in Amsterdam's south-eastern quarter. It is not surprising that, given their spatial concen-



**Figure 6.** Surinamese in Amsterdam, 1994: ethnic neighbourhoods.

tration, all these areas, save one, are homogeneous in terms of construction period and, to a somewhat lesser extent, in housing type (Table 6). In terms of tenure, all 6 ethnic neighbourhoods are publicly rented, if no distinction is made between municipal and housing association dwellings. However, even in these Surinamese ethnic neighbourhoods, variation in number of rooms per dwelling is rather high.

In the end, only one type of dwelling remains which is underrepresented in the residential neighbourhoods of both ethnic categories—namely, owner-occupied homes. That appears to be a general phenomenon for all ethnic categories originating from non-industrialised parts of the world. This is especially true in Amsterdam, where only 11 per cent of the entire stock is owner-occupied. Moroccans and Surinamese are very much dependent on the (public) rented sector. In other respects, however, we do not find clear evidence that these population categories would be more limited in their relative housing choice than others.

## 5. Conclusions

The spatial distribution of the population is frequently assumed to be associated with housing allocation processes and the spatial distribution of relatively homogeneous segments of the housing market. It is therefore assumed that a higher probability exists of finding an ethnically mixed population in a more mixed or heterogeneous physical environment.

In this contribution, however, we have shown that the housing profiles in various types of postal-code area in Amsterdam, either with or without an overrepresentation of Moroccans or Surinamese, are generally heterogeneous. This is even true for the more pronounced Moroccan and Surinamese ethnic neighbourhoods. In other words, no clear relationship can be found between the type of residential area in terms of ethnicity and the heterogeneity of the housing stock. Where some correlation does exist—for example, a few neighbourhoods with a strong overrepresentation of Surinamese tend to be homogeneous in terms of tenure—the results are

**Table 5.** Heterogeneity (relative  $H$  values) of housing characteristics in each of the 14 Moroccan ethnic neighbourhoods (residential areas with at least 461 Moroccans and at least 21.2% Moroccans)

Code	$H$ values				Percentage of Moroccans	Number of Moroccans
	Age	Tenure	Rooms	Type		
1	0.00	0.01	0.70	0.08	24.8	508
2	0.21	0.34	0.49	0.09	25.8	484
3	0.00	0.00	0.37	0.00	31.3	719
4	0.00	0.35	0.79	0.27	30.3	465
5	0.07	0.10	0.63	0.24	46.8	1 032
6	0.06	0.08	0.57	0.13	25.5	603
7	0.00	0.00	0.79	0.26	28.7	561
8	0.02	0.50	0.61	0.02	22.5	666
9	0.58	0.66	0.70	0.00	29.1	786
10	0.53	0.60	0.71	0.00	22.2	861
11	0.34	0.24	0.80	0.50	23.9	586
12	0.70	0.67	0.76	0.35	23.5	1 062
13	0.26	0.26	0.72	0.54	23.9	696
14	0.59	0.51	0.60	0.10	23.4	2 163

somewhat confusing. On the one hand, one might argue that the homogeneous stock resulted in homogeneous populations; on the other hand, similar homogeneous public housing elsewhere in the city did not attract concentrations of Surinamese residents. In Amsterdam, a more-or-less random housing allocation mechanism does not seem particularly useful. In fact, the analysis presented here suggests that tenure is not really the key to understanding ethnic segregation. There seems to be some relationship, but ethnic groups are generally not allocated to similar public rented dwellings. Tenure type neither

seems to induce nor prevent ethnic segregation.

In the end, there is no simple relationship between the homogeneity-heterogeneity of the physical structure and the intensity of ethnic population present. Since the housing situation in Moroccan or Surinamese ethnic neighbourhoods is generally hardly more homogeneous than in areas where Moroccans or Surinamese are living but not pronounced, it does not appear very effective to aim at reaching a more heterogeneous composition of the population by providing a more differentiated housing supply. In addition, one

**Table 6.** Heterogeneity (relative  $H$  values) of housing characteristics in each of the 6 Surinamese ethnic neighbourhoods (residential areas with at least 678 Surinamese and at least 27.1% Surinamese)

Code	$H$ values				Percentage of Surinamese	Number of Surinamese
	Age	Tenure	Rooms	Type		
1	0.00	0.00	0.75	0.01	38.6	1 045
2	0.00	0.00	0.62	0.00	34.2	1 041
3	0.00	0.43	0.67	0.37	37.8	700
4	0.00	0.42	0.79	0.00	45.4	1 535
5	0.27	0.00	0.54	0.41	37.6	2 541
6	0.00	0.00	0.71	0.00	44.1	1 647

should not forget that even the most strongly overrepresented areas with respect to an ethnic group are still rather mixed, both in terms of population and in terms of residential structure. In section 4, we showed that the highest share of Moroccans or Surinamese in ethnic neighbourhoods does not exceed the 50 per cent level.

If a stronger link between the composition of the housing stock and the location of ethnic neighbourhoods were to develop in the future—which is not inconceivable, given the neo-liberal restructuring of the welfare state—this study makes it clear that anti-segregation policies should not focus exclusively on increasing differentiation in housing stock, but should instead be targeted to specific groups and housing characteristics. Perhaps targeted policies should be applied for different population categories in different ‘ethnic neighbourhoods’.

In our view, the fairly heterogeneous residential profiles of ethnic neighbourhoods must be ascribed to the many different factors that have brought themselves to bear on the spatial distribution of the population. The effect of each of the relevant dimensions differs across space and time, and includes economic restructuring, welfare-state-related factors, housing policy, urban history and cultural orientation. Because of the character of the Dutch welfare state, social inequality has remained at a relatively moderate level. We regard that as one of the most important factors governing ethnic segregation patterns in the Netherlands. This is certainly more important than housing-policy-related factors, although these cannot be discounted entirely. The relatively flat income distribution in the Netherlands required a relatively flat housing market in terms of rent levels. These factors go hand-in-hand with a housing allocation system that, for a long time, was based on household size rather than household income. In addition, there were severe housing shortages which only recently seem to have been overcome. That will have hampered the functioning of the housing market. Specific historic events also occurred—for example, the construction of

the urban district of south-east Amsterdam coincided with the peak influx of Surinamese. The overall result of all of these forces was a spatial distribution of specific ethnic groups in Dutch cities, which has thus far not developed into strong and homogeneous ethnic clusters.

However, if and when the balance of the relative importance of these factors shifts towards more market-led mechanisms—dismantling of the welfare state, increasing income disparities and a more relaxed housing market—the relationship between the residential profile and the population structure may become stronger. So far, this has not happened to a great extent in the Netherlands.

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