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#### Resumen

Lévy Jean-Pierre.- Población y trayectorias residenciales: el ejemplo de Sena- San Denis Este articulo anahza el proceso de transformación del poblamiento del departamento de Sena- San Denis (distrito del area metropolitana, situado al noreste de Paris, 500.000 ho- gares) desde très perspectives: las estrategias residenciales de diferentes grupos sociales, el impacto de la estructura de la oferta y las demarcaciones o estructura social del territorio. A partir de los datos del censo general de población de 1990 se construyen categories de habitat en base a tipos de vivienda cuyos résidentes tienen caracteristicas similares. Estas categorias son ordenadas jerárquicamente y se interpretan en base a un indice de status socio- residencial, las variaciones espaciales del cual permiten estudiar la influencia de la categoria social del municipio sobre su poblamiento (areas residenciales), tanto en lo relativo al parque inmobiliano (zonas de vivienda) como a su situación geográfica (efectos de localización). Estas tipologias sirven de base para estudiar la movilidad residencial de los hogares que se instalaron en Sena - San Denis en 1994. La explotación de los datos relativos a los 1,568 hogares encuestados tiene très objetivos: observar las trayectorias residenciales de los hogares, describir la selección de localización de los hogares, las opciones disponibles y las restricciones existentes a la hora de tomar una decision. Las trayectorias residenciales se uti- lizan como indicador de la evolución del poblamiento territorial.

#### **Abstract**

Levy Jean-Pierre.- Population Patterns and Household Trajectories in the Residential Milieu: the Example of the Seine-Saint-Denis This article examines the processes underlying changes in the residential population of the Seine-Saint-Denis department (a suburban district to the north and east of Paris, containing 500,000 households) from three points of view: 1) the residential logics of different social groups, 2) the effects of the housing supply structure and 3) the effects of the social markers attributed to the different local areas. Data from the 1990 Census are used to establish housing categories containing housing types whose residents have similar characteristics. These categories are then ranked and interpreted using an index of socio-residential status, whose spatial variations indicate the influence of the social markers of the communes on the population (residential areas). These markers can derive from the composition of their housing stock (housing zones) or from their geographical situation (local effects). These typologies are then used to interpret the residential mobility of households who moved into a dwelling in the Seine-Saint-Denis in 1994. Data pertaining to the 1,568 surveyed households are analysed in three ways: to determine the residential trajectories of households; to shed light on the locational choices of households, and on the scope for action and constraints shaping their decision; and current residential histories are used as an indicator of change in local populations.

#### Résumé

Levy Jean-Pierre.- Peuplement et trajectoires dans l'espace résidentiel : le cas de la Seine-Saint-Denis L'article porte sur les processus de transformation du peuplement du département de la Seine-Saint-Denis (banlieue nord et est de Paris, 500 000 ménages), du triple point de vue des logiques résidentielles des groupes sociaux, des effets de la structure de l'offre et des marquages sociaux des territoires. À partir des données du recensement général de la population de 1990, on regroupe en classes d'habitat des types de logements dont les habitants ont des caractéristiques proches. Ces classes sont ensuite hiérarchisées et interprétées à partir d'un indice de statut socio- résidentiel, dont les variations spatiales nous permettent d'identifier l'influence des marquages sociaux des communes sur le peuplement (aires résidentielles), qu'ils relèvent des composantes de leur parc immobilier (zones d'habitat) ou de leur situation géographique (effets locaux). Ces typologies sont ensuite utilisées pour interpréter la mobilité résidentielle des ménages entrés dans un logement de la Seine-Saint-Denis en 1994. Les données relatives aux 1 568 ménages enquêtes ont été exploitées dans une triple direction : pour cerner les trajectoires résidentielles des ménages ; pour mettre à jour les choix de localisation des ménages, les marges de manœuvre et les contraintes pesant sur leur décision ; en utilisant les parcours résidentiels du moment comme un indicateur des évolutions des peuplements territoriaux.



# Population Patterns and Household Trajectories in the Residential Milieu: the Example of the Seine-Saint-Denis

### Jean-Pierre LÉVY\*

Conducting analysis at several levels to improve understanding of human behaviour is one of the new challenges for social science research. To determine the different factors underlying changes in local population patterns as well as the strategies of households who enter, leave or stay in particular residential contexts, Jean-Pierre LÉVY here develops an approach that relates the physical characteristics of housing to the social position of residents. He then takes into account the fact that the status of any particular type of housing also depends on the vicinity, neighbourhood, the local infrastructure, in a word on its environment. The method is applied to examine changes in the population of communes in a suburban department of Paris and also serves to describe the residential trajectories of their inhabitants.

The role of housing in spatial population patterns is not really a new question for students of the city. It has already been widely addressed by the French regional geography of the early twentieth century—admittedly predominantly rural in focus (Demangeon, 1921)—and by research into social and demographic segregation (Brun and Rhein, 1994; Le Bras and Chesnais, 1976), and indeed by economic studies of land and property values (Gaubert et al., 1996; Calcoen and Cornuel, 1999). In the presentday context, however, the issue is tending to assume greater complexity as a result notably of new forms of territorial determination (Berger and Rhein, 1988; Arbonville and Bonvalet, 1992), the emergence of less direct links between housing stock characteristics and those of occupants (Ballain et al., 1984; Lévy, 1995, 1998a and 1998b) and the more systematic inclusion of households' scope for action in studies of residential

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This article is the result of a study conducted by the Centre for Research on Housing (CRH) and commissioned by the Direction départementale de l'équipement (DDE) and the Conseil général de Seine Saint-Denis (cf. Lévy and Haumont, 1997). Translated by Zoé Andreyev.

choices (Clark and Onaka, 1983; Courgeau, 1985; Lelièvre, 1992; Clark and Dieleman, 1996; Bonvalet, 1997; Baccaïni, 2000). Although each of these factors has been studied in different contexts and on different scales, the linkages between them and their impact on residential population patterns remain to be explored. In any given urban context, what weighs more in the decisions of households: location or housing type? How much scope for choice do households have? To what extent do the trade-offs they make influence changes in local population structures and contribute to the organization of residential itineraries in society at large?

To address these questions, this article presents an analytical method based on the study of the social and territorial organization of a particular housing stock and the residential mobility patterns associated with it. This method is used to describe the dynamics of population in the mid-1990s in the Seine-Saint-Denis, a département (administrative district) in the northern and eastern suburbs of Paris, inhabited by 500,000 households. Its housing stock comprises older dwellings, to which were added in the twentieth century single-family dwellings constructed in small-scale developments, generally in periurban locations, and public sector housing estates built on a vast scale in the 1960s and 1970s. The industrial crisis of the 1970s devastated the social fabric of the department, and the sociodemographic structure of the population is currently characterized by high proportions of young people who have never worked, long-term unemployed people, one-parent households and low-income households. Nonetheless, despite this concentration of vulnerable households, the Seine-Saint-Denis is also able to attract and retain a proportion of households whose socio-economic situation is altogether stronger. These households belong to the middle and higher social strata: young households who have moved in from other areas having found good jobs in this disadvantaged department, young couples attracted by low property prices, as well as families who have been established there for long periods. These groups are responsible to varying degrees for the embourgeoisement or "gentrification" of specific parts of the Seine-Saint-Denis. The choice of this study site thus provided an opportunity to compare the experiences of populations who face severely constrained options and those who do not. This social diversity also made it possible to compare different communes (the basic territorial and administrative unit) with particular emphasis on the impact of the social markers of local areas.

In studying mobility, we are seeking to understand how and to what extent the residential choices of households influence the population of urban areas over time. But our aim is to go beyond methodological considerations, to capture the broader pattern of contrasts and regularities in the spatial organization of housing and in the population of French residential environments. For this reason, we begin by studying the interactions between two dimensions: first, the housing supply and the attraction or repulsion it exercises on different categories of households within the urban

area; second, the local social markers which can influence present or future population structure. The insights gained into these interactions are then used in an original analysis of the joint influence of social and demographic factors on residential mobility, focusing in particular on how this mobility is adapted to local conditions.

## I. Structures of housing and population

# 1. Housing occupancy: housing categories and socio-residential statuses

It is difficult to compare the occupancy pattern of different areas solely on the basis of the physical characteristics of the housing stock. In a given social milieu, the status that a particular type of housing confers upon its occupants derives as much from the characteristics of the dwelling or the property, as from its environment broadly defined (e.g. the neighbourhood, the social composition of the local population, the quality of local infrastructure). Previous research has already shown how the residential choices of households adapt to local housing contexts (Lévy, 1995). It follows from this that a comparison of occupancy patterns based solely on housing characteristics is almost bound to conclude for a heterogeneity of the social functions of each housing type.

To study successfully the dynamics of population structure from the triple viewpoint of the residential logics of individuals or social groups, the impact of housing supply structure and of local social markers, we need to elaborate a method that can be applied regardless of the characteristics of the buildings and localities. In particular, this method must avoid two important biases: those introduced by the presence of a specific type of housing in a given locality (such that housing types cannot be effectively compared); and those due to variations between areas in the characteristics of the occupants of a given housing type (which usually result in equating housing types whose social status is not the same in each place).

To overcome these difficulties, we developed a new housing classification based not on the physical or legal aspects of housing but on the characteristics of the residents. To do this, we constructed a synthetic variable, the *socio-residential status* of housing types, which expresses the symbolic links between the characteristics of a given dwelling and the social position of its occupant. This status is determined on the basis of the relationship between the physical attributes of the housing stock and the type of occupant.

The method involves grouping into housing categories the housing types whose occupants present identical characteristics. These categories

are then ranked and interpreted using an index of socio-residential status. The spatial variations in the values of this index allow us to identify the influence of the social markers of the communes on the population (residential areas); with these markers pertaining either to the components of their housing stock (housing zones) or to their geographical situation (local effects).

The first stage was thus to elaborate an analytical grid with which to compare and classify all the housing units regardless of the area being studied. This grid must be the same for the resident population and for the mobile population, whose propensity to move to one or other type of housing is what we wish to investigate. A secondary analysis of data from the one-quarter sample of the 1990 Census of the French population was used to draw up a list of housing types potentially present in the department, by cross-relating two categories of variables: the first pertains to the type of building and its legal status (single-family or multifamily housing, date of construction, private or public sector housing); the others pertain to the dwelling (occupancy status, amenities, number of rooms).

A total of 144 theoretical housing types were identified. However, to define a "type", we set a minimum level (corresponding to 1,000 housing units in the unweighted frame). A dendrogram was used to form subsets, and 31 housing types were finally obtained for analysis (see appendix).

Next, for each of these 31 housing types, the socio-economic characteristics of the households occupying them were described: socio-occupational category of the reference person, his or her nationality (French or foreign), and activity status (unemployed or employed) (Table 1).

Third, a principal components analysis (PCA) was used to establish the correspondences between the housing types and the socio-occupational characteristics of the occupant households (Figure 1); and last, using an agglomerative hierarchical cluster analysis, the housing types whose occupants had similar characteristics were grouped into three categories.

Each of these categories contains about one third of the housing units in the department. The first contains 29,000 dwellings (31% of the total housing stock); the second a little over 30,000 dwellings (33% of the total); and the third over 33,000 units (36%).

Once the categories have been determined, they must be interpreted. Projection of these categories onto the factorial plane allowed an initial analysis of the hierarchy of socio-residential statuses in the department (Figure 1). This analysis was facilitated by the fact that the first axis of the plane represents the scale of social positions of the occupants of the different housing types, going from the low-income and vulnerable households (left of the axis) to the highest social groups (right of the axis). This shows that the households situated at either extreme of the social hierarchy do not live in the same type of housing. From this we conclude that

the scale of socio-residential statuses approximates the general social hierarchy. Following this logic, category 1 contains the lowest-status housing, category 3 the highest-status housing, and category 2 occupies an intermediate position between these extremes.

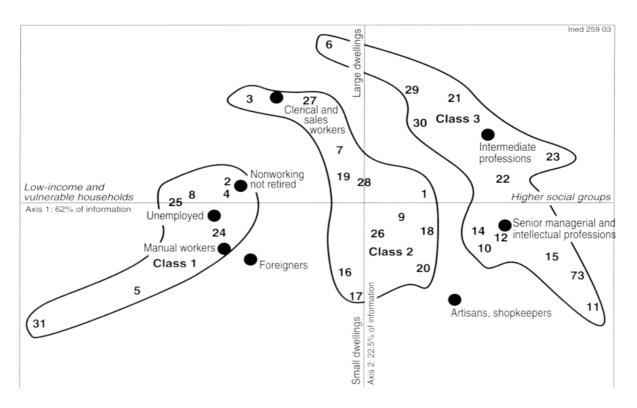
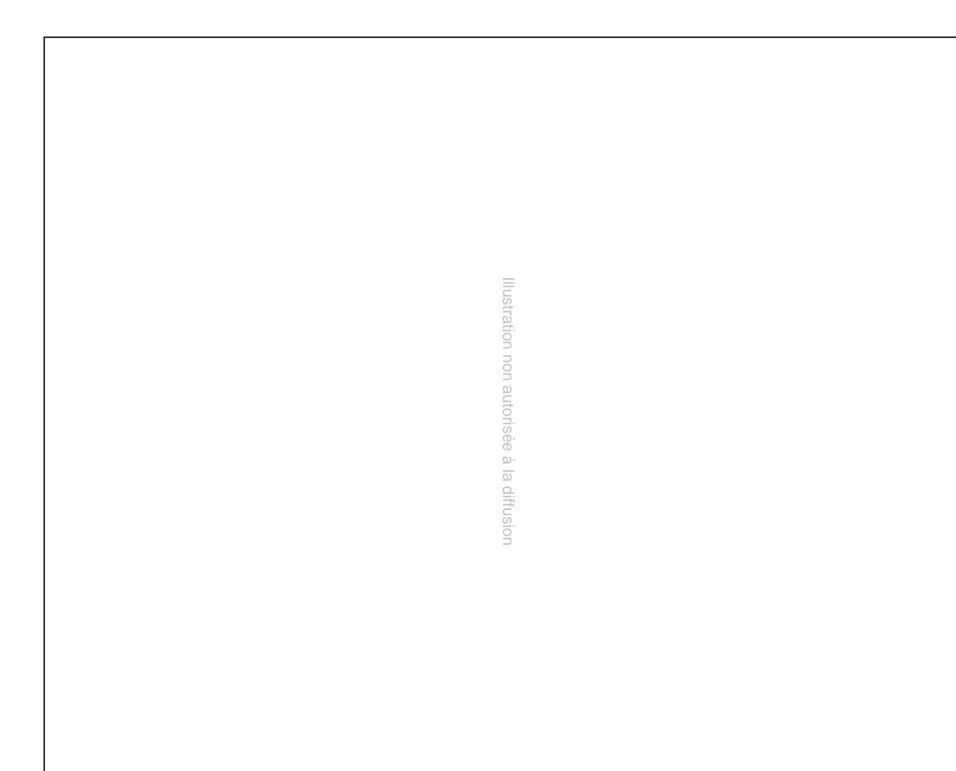


Figure 1.– Projection of the three housing categories onto the factorial plane

Note: The numbers refer to the housing types defined in Table 1.

Factor analysis and hierarchical cluster analysis thus enable the various housing types to be grouped qualitatively by the characteristics of their occupants and to be situated on a scale of socio-residential statuses. However, we know nothing at all about the distances between the positions of the different housing types or housing categories. In addition, the ultimate goal of this research is the measurement and analysis of the spatial variations of these positions, with a view to evaluating the impact of social markers and local effects on the general organization of the population in the different housing types. To achieve this, the results of this initial analysis must therefore be converted into quantitative terms.

On the basis of the previous results, the socio-residential statuses of housing types and housing categories were interpreted using a quantitative indicator. This was constructed by considering that the households which occupy the best positions in society at large are also those with the best socio-residential status in local space. For each housing type, the indicator



gives the ratio of the proportion of household reference persons in managerial and intermediate level professions (taken to reflect a high socioresidential status of the housing unit) to the proportion of foreigners and/or unemployed (taken to reflect a low socio-residential status of the housing type). The index value was then divided by the value for the entire département<sup>(1)</sup> (Table 2).

An index value close to zero means that the socio-residential status of the housing type is low: relative to the population of the department as a whole, foreigners and unemployed persons are over-represented among its occupants, while managerial staff and intermediate professions are underrepresented.

An index value equal or close to 1 means that the socio-residential status is average, i.e. the upper and poorer sections of the population are present in the same or similar proportions in the given housing type and in the department.

The more the index exceeds 1, the higher the socio-residential status of the housing type: in this case, managerial and intermediate professions are over-represented among its occupants, and foreigners and unemployed are underrepresented, relative to the overall population of the department.

The same calculations were performed for each housing category. We thus obtained a representation of the housing types in the department, and using the index each of the categories can be situated according to the socio-residential statuses of housing in the Seine-Saint-Denis (Table 3).

The hierarchical division into three categories provides an accurate representation of the residential population of the Seine-Saint-Denis. A good correspondence is observed between the value of the index of categories and the index of their component housing types (Table 3). The distances between the extreme positions are considerable. For the lowest-status housing the index value is 0.14; for the highest-status housing it is

<sup>(1)</sup> This index in fact measures the difference between the proportion of households belonging to the higher social categories and those belonging to the vulnerable categories for a given housing type. It presents the advantage of simplicity and has affinities with the now classic index of dissimilarity developed by North-American researchers in the 1950s (Duncan and Duncan, 1955). It differs, however, in that it does not vary between 0 and 1. It would have been possible to use the index of dissimilarity to calculate the indices of socio-residential status, but it suffers the drawback of not specifying the population categories which represent the minority or the majority in the given area (the variation between two population groups is presented as an absolute value). This obstacle could easily have been overcome by using an index varying between +1 and -1. But in this case, a weighting by the total value of the index for the department would no longer be possible. We considered this weighting to be important since at a later stage it would allow comparisons to be made between areas, by eliminating the structural effects of the characteristics of the population as a whole on the occupants of each housing type (Lévy and Haumont, 2001; Lévy, 2002). Further, this weighting procedure introduces an additional indication concerning the difference between the social specialization of individual housing types and the total population of the department. For these different reasons, we preferred to calculate the socioresidential index by the proposed formula, while being clear about its shortcomings, notably the fact that there is no upper limit and that its limits would even be non-existent in the (very unlikely) case that there were no unemployed and no foreigners among the occupants of a given housing type.

3.4, equivalent to a ratio of 1 to 24 between the extremes. This gap is reduced when the housing units are grouped into socio-residential categories but remains nevertheless marked: it is 1 to 6 between the housing categories of low socio-residential status (0.4) and high socio-residential status (2.3).

Table 2.— Indices of socio-residential status for the 31 housing types in the Seine-Saint-Denis

Housing type (1)	Proportion of senior mana- gerial and intellectual professions (%)	Proportion of intermediate professions (%)	Proportion of foreigners (%)	Proportion of unemployed (%)	Crude index	Weighted index
	[a]	[b]	[c]	[d]	[e] = [a+b]/[c+d]	[f]=[e]/[1,3]
1	17.0	25.1	17.3	7.0	1.7	1.3
2	3.5	16.8	16.7	13.3	0.7	0.5
3	3.3	18.6	11.2	11.6	1.0	0.7
4	4.0	15.7	20.5	10.8	0.6	0.5
5	5.2	10.7	42.4	12.2	0.3	0.2
6	7.8	26.1	7.9	8.4	2.1	1.6
7	8.8	22.7	15.9	7.9	1.3	1.0
8	3.5	14.9	16.3	13.3	0.6	0.5
9	9.1	21.4	9.1	9.1	1.7	1.3
10	14.5	25.3	9.5	5.7	2.6	2.0
11	34.6	21.0	10.5	3.4	4.0	3.1
12	15.4	27.0	8.6	5.2	3.0	2.3
13	27.9	23.6	10.0	4.2	3.6	2.8
14	14.6	25.6	13.9	3.8	2.3	1.7
15	24.0	26.3	15.1	3.1	2.8	2.1
16	10.4	17.8	10.1	11.2	1.3	1.0
17	11.7	18.3	18.5	10.2	1.0	0.8
18	15.4	21.2	15.5	7.0	1.6	1.2
19	9.7	21.7	18.4	8.4	1.2	0.9
20	16.5	21.5	20.9	6.7	1.4	1.1
21	15.6	28.3	7.6	5.7	3.3	2.5
22	21.3	29.0	9.7	5.0	3.4	2.6
23	26.5	30.5	9.4	3.5	4.4	3.4
24	7.1	16.9	20.2	11.6	0.8	0.6
25	6.0	17.9	31.1	13.5	0.5	0.4
26	12.1	22.8	22.0	8.3	1.2	0.9
27	9.3	25.7	15.4	8.8	1.4	1.1
28	11.7	24.4	18.2	8.0	1.4	1.1
29	12.9	29.3	11.9	8.0	2.1	1.6
30	18.3	24.7	15.0	6.5	2.0	1.5
31	2.3	9.3	43.9	18.0	0.2	0.1
Total for S	eine-Saint-Der	nis				
	11.8	21.6	17.1	8.5	1.3	1.0

 $<sup>^{(1)}</sup>$  The numbers refer to the housing types defined in Table 1. *Source*: author's computations based on data from the 1990 Census.

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Weighted index of Weighted index of 31 housing types 3 housing categories socio-residential status socio-residential status 2. Public housing with amenities, built before 1949 0.5 4. Public rented housing with amenities, built between 1949 and 1974. 3 or 4 rooms 0.5 5. Public rented housing with amenities, built between 1949 and 1974, 5 rooms or more 0.2 Housing of low socio-0.48. Public rented housing without amenities 0.5 residential status 24. Owner-occupied multifamily housing without amenities 0.6 25. Private rented multifamily housing with amenities, built before 1949, 1 or 2 rooms 0.4 31. Private rented multifamily housing without amenities 0.1 1. Owner-occupation with subsidy 1.3 3. Public rented housing with amenities, built between 1949 and 1974, 1 or 2 rooms 0.77. Public rented housing with amenities, built after 1974, 3 rooms or more 1.0 9. Owner-occupied single-family housing with amenities, built before 1949, 1 or 2 rooms 1.3 16. Owner-occupied single-family housing without amenities 1.0 17. Private rented single-family housing built before 1949 0.8 18. Private rented single-family housing built after 1949 1.2 Housing of intermediate 1.0 19. Owner-occupied multifamily housing with amenities, built before 1949, socio-residential status 1 or 2 rooms 0.920. Owner-occupied multifamily housing with amenities, built before 1949, 3 rooms or more 1.1 26. Private rented multifamily housing with amenities, built before 1949, 3 rooms or more 0.927. Private rented multifamily housing with amenities, built between 1949 and 1974, 1 or 2 rooms 1.1 28. Private rented multifamily housing with amenities, built between 1949 and 1974, 3 rooms or more 1.1

TABLE 3. – HOUSING TYPES, HOUSING CATEGORIES AND THEIR INDICES OF SOCIO-RESIDENTIAL STATUS IN THE SEINE-SAINT-DENIS

31 housing types	Weighted index of socio-residential status	3 housing categories	Weighted index of socio-residential status		
6. Public rented housing with amenities, built after 1974, 1 or 2 rooms	1.6				
10. Owner-occupied single-family with amenities, built before 1949, 3 or 4 rooms	2.0				
11. Owner-occupied single-family housing with amenities, built before 1949, 5 rooms or more	3.1				
12. Owner-occupied single-family housing with amenities, built between 1949 and 1974, 1 to 4 rooms	2.3				
13. Owner-occupied single-family housing with amenities, built between 1949 and 1974, 5 rooms or more	2.8				
14. Owner-occupied single-family housing with amenities, built after 1974, 1 to 4 rooms	1.7	Housing of high socio-	2.3		
15. Owner-occupied single-family housing with amenities, built after 1974, 5 rooms or more	2.1	residential status			
21. Owner-occupied multifamily housing with amenities, built between 1949 and 1974, 1 or 2 rooms	2.5				
22. Owner-occupied multifamily housing with amenities, built between 1949 and 1974, 3 rooms or more	2.6				
23. Owner-occupied multifamily housing with amenities, built after 1974	3.4				
29. Private rented multifamily housing with amenities, built after 1974, 1 or 2 rooms	1.6				
30. Private rented multifamily housing with amenities, built after 1974, 3 rooms or more	1.5				
Source: author's computations based on data from the 1990 Census.					

Furthermore, the housing categories include housing types with very different physical characteristics. Depending on its date of construction or the number of rooms, public-sector housing houses either low-income households (types 2, 4, 5 and 8) or households belonging to the upper categories (type 6). The housing stock occupied by owner-occupants is split between housing with low (type 24), intermediate (types 1, 9, 16, 19 and 20) and high socio-residential status (types 10 to 15 and 21 to 23). The same pattern is observed for private rented housing. This fragmentation confirms that in order to study the impact of housing on population, one cannot a priori compare classifications that are based on occupancy status, size of units or modes of housing finance. These classifications give only an incomplete picture of the logics governing the distribution of households across the housing stock and of the relationships between the characteristics of housing and those of households.

# 2. The local impact: social markers and residential areas

Some types of housing are more sought after than others, and so too are some locations. As a result, the spatially specific social markers can attract or on the contrary repulse certain population categories, thus causing local modifications in the socio-residential status of dwellings. Do the housing categories possess the same socio-residential status throughout the Seine-Saint-Denis or does the residential distribution of households adapt to localized housing microstructures?

We tested the spatial stability of the socio-residential hierarchy by calculating the index of the socio-residential status of housing categories at the commune level. To do this, for each of the forty communes in the Seine-Saint-Denis, the proportion of household reference persons in managerial or intermediate professions was divided by the proportion of reference persons who are foreigners and/or unemployed, among the occupants of each of the three housing categories. The value for each commune was then divided by that for the department as a whole. A hierarchical cluster analysis was used to group together the communes with the closest index values for each of the three categories. Three residential areas were thus obtained, each corresponding to a specific structure of population.

The high-value residential area corresponds to the communes for which the values of the housing category index are higher than those of the department, which denotes an attraction for upper-level social categories and a repulsion for low-income households.

The intermediate residential area groups together the communes where the index value is close to the average for the department, which means that there is no social marker influencing the type of occupancy of the housing categories. The low-value residential area comprises the communes where the housing category index is lower than that for the department as a whole; this means that the social markers attract low-income households and repulse upper-level categories.

Figure 2 shows the average indices of socio-residential status for the communes which make up each residential area. It reveals the existence of social markers which can have a considerable influence on the presence of upper or lower-level social categories among the occupants of the different housing categories. With this methodological framework, we can compare what is comparable, i.e. groups of housing units of similar status but located in different areas. Four points are worth noting.

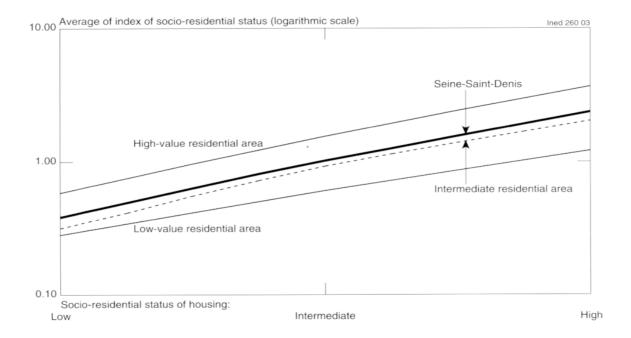


Figure 2.— Average indices of socio-residential status for the residential areas of Seine-Saint-Denis

First, the method enables us to compare the internal hierarchical organization—as it were the "socio-residential pyramid"—of each area. Figure 2 perfectly illustrates the stability of this organization. Each type of residential area has a hierarchical organization which matches that of the department as a whole, and the position of each housing category is identical in each hierarchy of communes. In other words, the social markers of the communes are not necessarily incompatible with the existence of a hierarchy common to all the communes in the department.

Second, the values of the indices can be used to measure the impact of these social markers on the spatial positions of the housing categories. This makes it possible to situate the positions of a given housing category

subject to social markers that vary with the location of the dwellings. These positions reveal the spatial variation in the status of each housing category. For example, considering the position of the housing category of low socio-residential status and taking as an index of reference the average value for the department, the social marker of the low-value area reduces this index by -0.10; the social marker of the intermediate area also reduces the index, by -0.06, whereas that of the high-value area increases the average index for this category by +0.19. These disparities can be treated as measures of the impact of the social marker of each of these areas on the socio-residential position of the lowest-status housing category.

However, and this is the third point, the social marker of an area does not impact on the different housing categories in the same way. Our method can also be used to evaluate these differential effects, as for instance when measuring the distance between the low-status housing category and the high-status category in each residential area. In the Seine-Saint-Denis, the difference between the index values is 0.92 in the lowvalue area, 1.70 in the intermediate area and 3.06 in the high-value area (for a difference of 1.96 at the department level). The social marker has a double impact: it influences the differences within a single housing category located in different areas, and the differences between different housing categories located in the same area. In the Seine-Saint-Denis, the impact of the social marker on the differences between housing categories is proportional to the value associated with the residential area. Continuing on this line of thought, we can also note that the social marker has a larger impact on high-status housing categories (from the low-value area to the high-value area, the deviations from the average for the department are respectively -1.14, -0.33, +1.29) than on low-status housing (respectively -0.1, -0.06 and +0.19). The result is that location produces a smaller socio-residential distance between the occupants of low-status housing categories than between occupants of high-status housing categories.

Last, the index value enables us to determine the direction of residential itineraries affecting both the socio-residential status of the dwelling and the social marker of the commune. A move from a low-status dwelling to one of intermediate status, for example, does not necessarily represent a rise in residential status. For the Seine-Saint-Denis, this is the case in particular for intermediate-status housing in high-value areas (index = 1.55), which has a higher position than high-status housing in low-value areas (index = 1.20) (Figure 2). The direction of residential trajectories can also be determined for moves made within a single housing category but situated in a different area. Thus a household which moves from a low-status unit in a low-value area (index = 0.28) to similar housing in a high-value area (index = 0.57), raises its residential status.

But while the value of the method for the comparative analysis of housing and population in different spatial contexts is clear, at this stage of the undertaking we have no information about how the structure of the housing stock at the level of the commune contributes to the production of social markers and residential areas.

### 3. Housing zones and local effects

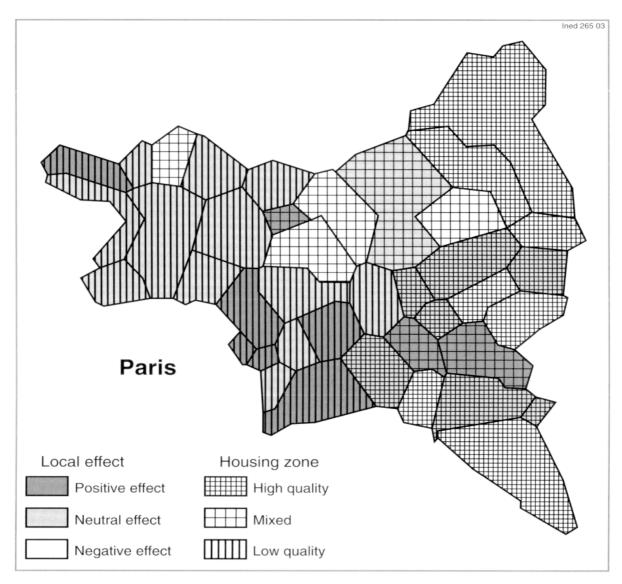
The housing categories are not evenly distributed between the different communes of the Seine-Saint-Denis. Depending on the composition of the housing stocks as proportions of each of the three categories, the dominant characteristics of the housing structures of the communes can be determined and three housing zones identified:

- —the high-quality housing zones correspond to the communes in which dwellings belonging to the housing category with high socioresidential status are concentrated while housing of low socio-residential status is rare:
- —the *low-quality housing zones* are the communes in which the construction of housing of low socio-residential status has been concentrated historically, causing the housing with high socio-residential status to be built in other parts of the department;
- —the *mixed housing zones* correspond to the communes possessing similar proportions of dwellings from all three housing categories.

The geographical distribution of the structure of the housing stock in the communes of the Seine-Saint-Denis is presented in Map 1. The low-quality housing zones account for nearly half the communes of the department, the mixed housing zones represent one in five communes and the high-quality zones one in three. Simplifying somewhat, the housing stock structure in the Seine-Saint-Denis follows an east/west dividing line: to the east are the high-quality housing zones, characterized by small developments of single-family houses and good-quality older buildings; to the west are the low-quality zones, associated with the massive construction of public-sector housing and with pre-war working-class housing now in a run-down state.

The dominant characteristics of a housing zone can be expected to influence the occupancy pattern of the entire housing stock of the area, including the most marginal housing categories. If this is the case, the existence of a high proportion of dwellings with high socio-residential status will confer a high social marker on the population of the commune and enhance its attractiveness. Conversely, the concentration of housing units with low socio-residential status stigmatizes the area and discourages the arrival of higher social categories, even in the most valued sections of the stock. In all these situations, a high-quality housing zone is synonymous with high-value residential area, a mixed housing zone corresponds to an

intermediate residential area, and a low-quality housing zone means a low-value residential area. The conclusion then is that the population of the sector sustains no local effect or that the local effect is neutral.



Map 1.— Housing zones and local effects in communes of the Seine-Saint-Denis, by residential areas

However, the relationships between housing zones and residential areas are not always so straightforward. Population is not systematically in conformity with what could be inferred from the housing stock structure and the hierarchy of socio-residential statuses. We all know instances of traditional working-class neighbourhoods now attracting the middle classes, or of former upper-class neighbourhoods that have gone down in the world. In these cases, the social markers are explained by the action of local effects. The latter are defined as the impact on the population of fac-

tors external to the structure of the housing stock (for instance, whether a neighbourhood or a commune has a central or peripheral location, or the quality of infrastructure or geographical situation which make attractive neighbourhoods easily accessible). They enable us to identify the value-determining mechanisms which influence the population of the communes.

The local effects are determined by measuring the deviation between the position expected on the basis of socio-residential status (defined by the commune's membership of a given housing zone) and the actual position (defined by the commune's location in a given residential area). The comparison between the characteristics of the residential area and those of the housing zone to which the commune belongs enables us to identify, in addition to the neutral effect presented above, two types of local effect (Table 4). If social markers are observed with a higher value than what is expected given the composition of the housing stock, as for instance when a commune forms a low-quality housing zone but a high-value residential area, then the commune can be said to benefit from a positive local effect. If on the contrary lower value social markers are observed than is expected from the housing stock composition, as when a commune is a mixed housing zone but a low-value residential area, then it is said to experience a negative local effect.

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TABLE 4. – DETERMINATION OF THE LOCAL EFFECTS

Map 1 situates these local effects in the department. It shows that the structure of the housing stock has an undeniable influence on spatial population forms. Half the communes are not subject to local effects, which means that their social marker derives from the composition of the housing stock. For the remaining half, however, factors other than housing structure are what account for the social markers observed in the population: one in four communes is subject to a negative local effect and one in five to a positive local effect. By definition, these effects are attributable not to housing type but to social structures, historical factors or the different levels of services available in each commune. Beyond these local specificities, however, we observe the impact of geographical situation on the value associated with the population in the Seine-Saint-Denis: of the nine communes with a positive local effect, four are adjacent to Paris.

These classifications have provided us with four types of indicators: socio-residential statuses, which indicate the position of dwellings and

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their inhabitants in the residential environment; housing zones, which characterize the composition of the housing stock by the status of the dwellings; residential areas, which identify the impact of social markers on the population patterns of the commune; and local effects, which pertain to the high or low value ascribed to the population, depending on the geographical situation of the commune (Table 5).

Attention must now focus on understanding how the socioresidential status of dwellings, the structure of the housing stock, the social markers and local effects are taken into account by households when making their residential choices. A second objective is to evaluate to what extent the trade-offs that result contribute to the formation of the population patterning whose different forms we have discussed above.

# II. The logics of residential choice and local population patterns

To analyse the residential decisions of households and their implications for population patterns, we drew on the results of a survey conducted among households who moved to a dwelling in the Seine-Saint-Denis in 1994. The survey sample was obtained by random sampling of all the dwellings for which a new electricity account had been opened. The survey was carried out in 1995 on 1,568 households, corresponding to one in 32 moving households in 1994. The households were asked about their social and demographic characteristics, place of residence, present and past housing conditions. The data collected were analysed with three aims in view: first, to establish the households' residential itineraries; second, to reveal their locational choices, their scope for action and the constraints weighing upon their decisions; and third, to relate the residential logics of households to the trends in local population, based on observation of current residential itineraries.

For studying households' residential histories, the foregoing examination of housing and population patterns has equipped us with three typologies. The first concerns the socio-residential statuses of housing categories: high (High), intermediate (Int.) or low (Low). The second classifies the communes on the basis of the local housing structure: high-quality housing zone (H), mixed (M) or low-quality housing zone (L). The third typology relates to social markers and shows the local effect on population: positive (+), neutral (=) or negative (-). In all, residential mobility was observed for twelve housing groups taking into account residential status, the housing structure in the communes and local effects (Table 6).

TABLE 5. – SYNTHETIC PRESENTATION OF THE INDICATORS USED

Name	Definition	Computation method	Classification
Housing categories (socio-residential statuses)	This indicator describes the relationship between housing and occupant, defined as the symbolic links between the characteristics of the housing unit and the position of its occupant in global or local society. The socio-residential status of the housing unit is thus identified through the relations between the physical characteristics of the housing stock and the characteristics of its occupants.	The categories are established by a hierarchical cluster analysis of the 31 housing types, based on the social characteristics of the reference persons of the resident households.  The ordering is given by an index of socio-residential status which measures the difference between the proportion of households with high social status and households with low social status among the occupants of each housing category.	Three housing categories:  - High socio-residential status;  - Intermediate socio-residential status;  - Low socio-residential status.
Housing zones	The housing zones correspond to the impact of the composition of the housing stock on the perception of the social markers of residential areas. These can reflect, for example, the presence in a neighbourhood or city of prestige housing, conferring a "chic" image on the area, or by contrast the presence of old or run-down public housing which gives the area a "working-class" image.	The zones are formed by a hierarchical cluster analysis of the 40 communes of the department based on the proportion of housing in each commune from each of the three housing categories.	Three housing zones:  - High-quality;  - Mixed;  - Low-quality.
Residential areas	The residential areas represent the real social markers of a defined space (neighbourhood or city) which can modify the socio-residential status of housing units by influencing in one or other direction the occupancy characteristics of the housing units. This is the case in particular when a traditionally working class area is heavily gentrified, or when an area gradually abandoned by the middle class loses its value.	Computation of the indices of socio-residential status of the three housing categories in each of the 40 communes of the department. These are grouped into three classes via a hierarchical cluster analysis on the combinations of the values of the indices for each commune.	Three residential areas:  - High-value;  - Intermediate value;  - Low-value.
Local effects	These designate the social markers that do not relate directly to the composition of the housing stock. These effects usually relate to geographic location, such as a position in the centre or on the periphery of a neighbourhood or commune, or to the quality of local infrastructure.	For each commune, we measured the difference between the perception of the social markers of the areas (housing zones) and the real social markers (residential areas). They are identified through comparison between housing zone and residential area.	Three local effects:  - Positive;  - Neutral;  - Negative.

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Housing zones	Housing categories	Housing groups
Minad on high soulite have in	High socio-residential status	M&H=/High
Mixed or high-quality housing zones without local effect	Intermediate socio-residential status	M&H=/Int.
	Low socio-residential status	M&H=/Low
Mixed or high-quality housing	High socio-residential status	M&H-/High
zones subject to a negative local	Intermediate socio-residential status	M&H–/Int.
effect	Low socio-residential status	M&H-/Low
I ove quality housing some without	High socio-residential status	L=/High
Low-quality housing zones without local effect	Intermediate socio-residential status	L=/Int.
	Low socio-residential status	L=/Low
Low quality housing gones subject	High socio-residential status	L+/High
Low-quality housing zones subject to a positive local effect	Intermediate socio-residential status	L+/Int.

Low socio-residential status

L+/Low

TABLE 6. – THE TWELVE HOUSING GROUPS

## 1. The direction of residential mobility

In 1995, 10% of the households resident in the Seine-Saint-Denis had moved into their dwelling during the past year. Households who had moved in from another department represented a little over one third of new resident households. The gentrification occurring in some parts of this department that is experiencing serious economic difficulties can only stem from the arrival of well-off households not previously resident in the Seine-Saint-Denis. These are very unevenly distributed between the various housing zones that make up each of the residential areas.

Table 7 shows that the communes where low-quality housing dominates represent the strategic zone for the renewal of the population in the Seine-Saint-Denis. When these communes are experiencing gentrification (L+), they attract households from outside the department (42% of households who moved in that year); when the communes remain poor (L =), the renewal of households depends on residential mobility within the Seine-Saint-Denis (72% of households who moved in that year). In the zones where mixed or high-quality housing dominates, the incoming households from outside the department represent about three in ten, without there being any strong variations according to the social markers of the communes.

Regardless of the housing zone, the residential mobility of households who do not leave the Seine-Saint-Denis is usually short-range. Among the households who moved within the department, 63% had stayed in the same commune.



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Table 8 shows that among the moving households who stayed within the Seine-Saint-Denis, very few moved to a new residential area or a new housing zone. These circular mobility patterns are revealing of the sociospatial cleavages in the department.

TABLE 8. – CIRCULAR MOBILITY RATE AMONG MOVES FROM WITHIN THE SEINE-SAINT-DENIS, BY RESIDENTIAL AREA AND HOUSING ZONE (%)

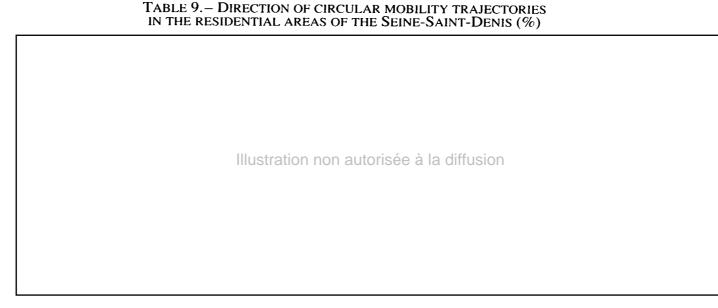
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The highest rates of circular mobility are found in the communes with low-value social markers and in the poor communes that are being gentrified (L+) (respectively 85% and 79%). This means that internal mobility within a residential area or a housing zone increases as the gap between communes widens due to the gentrification of the population in some areas. On one hand, the most affluent communes experience gentrification thanks to the arrival of households from elsewhere (Table 7). These communes retain their well-off households, even when these move to another dwelling, at the same time as they become less accessible to households from other communes, especially the least affluent. On the other

hand, the communes inhabited by the least well-off households have a repulsive effect: they are no longer able to renew their population or to attract other categories of households. Local residential mobility involves the poorer elements of the population in these communes, i.e. those who cannot afford to move to areas with higher social markers. They have no option but to move within the poorest communes of the department (Table 8). The processes at work in circular mobility are thus as much about "aggregation", consolidating the better-off households in the communes that are being gentrified, as they are about segregation, forcing poorer households to remain in the communes which are failing to modernize.

To get a clearer understanding of these moves, we examined how households moved from one housing category to another within the same residential area (80% of internal mobility in the Seine-Saint-Denis). We differentiated between neutral mobility (moving to a housing category with the same socio-residential status as the previous one), upwards or ascending mobility (moving to a housing category of higher socio-residential status than the previous category) and downwards mobility (moving to a housing category of lower socio-residential status than the previous category).

Table 9 shows that 47% of households who are mobile within the same residential area make a neutral move, and 24% a downwards move. Overall, then, more than seven mobile households in ten do not move to higher-status housing.



Neutral mobility, which accounts for the majority of circular moves in the department, involves all housing categories and all residential areas. The intensity of these moves tends nevertheless to increase in line with the value associated with the commune. They represent 40% of the moves

within the low-value residential area and 55% of those within the high-value residential area. However, these two types of moves do not have the same meaning, since the housing categories in which neutral mobility occurs vary depending on the social marker of the communes. The higher the value of the residential area in which the move occurs, the higher the social status of the housing category. Thus in the low-value residential area, 46% of the neutral mobility occurs in the low-status housing category and 11% in the high-status housing category; conversely, in the high-value residential area, 42% of the neutral mobility occurs in the high-status housing category and barely 13% in the low-status housing category. Neutral trajectories thus reflect a tendency to remain in the high-status housing stock when they occur in high-value residential areas and a tendency to remain in low-value housing when they occur in communes with the lowest-status social markers.

Mobility to higher-status housing represents 29% of moves occurring within the Seine-Saint-Denis; it is more frequent in intermediate residential areas and rarer in high-value residential areas. The downward trajectories represent slightly fewer than one in four moves within the department. They occur in all the residential areas but are especially frequent in the low-value areas (30%). These downward moves accentuate the residential marginalization of low-income mobile households.

Overall, 80% of households who move within the Seine-Saint-Denis do so within the same residential area, and of these, seven in ten make a neutral or downward move. These data clearly illustrate the predominance of a "compartmentalized" mobility involving households who, unable to rise in the social scale, strive to maintain their residential status, and whose moves are motivated by life cycle events rather than by attempts to improve their residential status.

A dominant pattern of horizontal, even downwards, residential moves (moves to a housing type of the same category and located in a zone of the same quality), is thus seen to coexist with a pattern of upwards mobility (improvement of status by a change of zone or a change of housing category or both together). These observations suggest that residential mobility within the department has a strategic role for understanding the spatio-temporal dimensions of population processes. To what extent do mobility patterns within the department help us understand how the residential logics of households contribute to the construction of hierarchies of housing types and of the social markers of communes? In return, how do these hierarchies determine the residential moves of social groups and what is their role in the construction and spatially differentiated evolution of the local population?

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#### 2. The economic channels of mobility

These questions were addressed by observing the residential mobility of two key categories in the population of the Seine-Saint-Denis: young and affluent households and low-income households of working age. The former are households whose reference person is under 30 and where annual income per consumption unit is equal to or exceeds the fourth income quintile. These households accounted for 18% of new moves into the department in 1994 and 46% of the mobile households in this age group. The second category are low-income households with a reference person aged between 30 and 49 and whose annual income per consumption unit is below the second income quintile. This group represents 23% of the mobile households of the department and 44% of mobile households in this age group. Both categories thus represent slightly over four in ten mobile households. In addition to their role in residential moves, these two groups offer the advantage for analysis of being situated at opposite ends of the social hierarchy. Their residential logics are sufficiently contrasted to illustrate the impact both of their own mobility and that of the groups situated between these two extremes.

Figure 3 presents the characteristics of households entering a housing category in each of the zones of the Seine-Saint-Denis in 1994. To determine the profile of mobile households, the proportion of affluent households whose reference person is under 30 (on the abscissa) was plotted against the proportion of "poor" households whose reference person is aged between 30 and 49 (on the ordinate). On the basis of the average proportions from these two population groups among new arrivals into a dwelling in Seine-Saint-Denis, four boxes are obtained allowing us to visualize which housing type attracts affluent households (young and aged 30-49 affluent), which attracts mainly low-income households (young and aged 30-49 poor), and last, the housing which attracts a broad spectrum of the population with varied income levels (mixed).

The results obtained in this way come as little surprise in that the housing categories appear highly specialized by the income of incoming households. In other words, depending on the income of mobile households, the paths of residential mobility do not concern the same housing categories and are rigidly compartmentalized. This reflects the existence of three economic channels of residential mobility. One is specific to low-income households and includes mainly low-status housing (Low) in all the communes, and is situated in the box young and aged 30-49 poor in Figure 3; the second receives mainly well-off households and includes housing of high residential status in all the zones (High), and is situated in the box young and aged 30-49 affluent; and the third is situated between the other two, in the middle of the diagram, and includes most of the intermediate categories (Int.) and concerns households of disparate economic condition, ranging from the most affluent to the poorest.

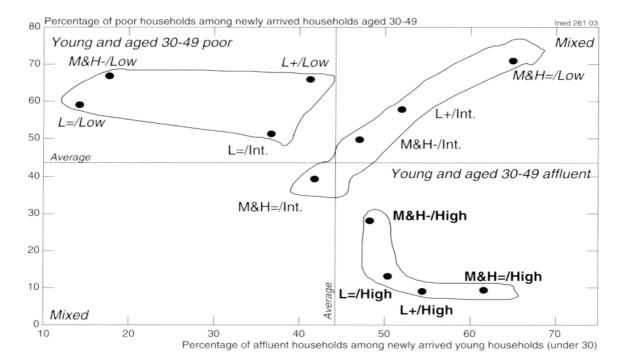


Figure 3.— Characteristics of households moving into the housing categories of each housing zone of the Seine-Saint-Denis in 1994

Reading: In the Seine-Saint-Denis, in low-status housing located in the mixed or high-quality housing zone subject to a negative local effect (M&H–/Low), among the households which moved into a dwelling in 1994 and whose reference person was under 30, 20% had a high income, and among the households whose reference person was aged between 30 and 49, 67% had a low income.

Some types of housing are not covered by this model. This is the case in particular for housing of intermediate status in stable low-quality housing zones (L=/Int.), and for low-status housing in mixed or high-quality housing zones with no local effect (M&H=/Low). In general, however, the housing zones situated at either extreme of the hierarchy of residential statuses are highly specialized, while intermediate-status housing receives households of varying income levels. As a result, dwellings of intermediate socio-residential status are more sensitive than others to the social markers of the communes in which they are located. Because of their intermediate situation between high and low residential status housing, they are likely to play a major role in establishing the mechanisms that attribute high or low value to the local population.

### 3. Current residential itineraries and family life cycle

What is the sequence of socio-residential statuses in the residential itineraries of households? Can a specific status be attributed to one or several sequences in a household's life cycle and residential history? Can a household's entire residential career take place within a single housing

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zone, or are these zones specialized in one or several sequences of a household's life cycle and residential history?

To identify the residential trajectories of households at different stages of their life cycle, the proportion of persons living alone or couples without children was plotted against that of households with a reference person under 30 moving into each of the department's housing categories in 1994 (Figure 4). The four parts of the diagram are delimited by the average proportions observed for these two groups of households among all the households having moved into a dwelling in the department. The diagram shows models of residential histories ordered by the main sequences of the life cycle: persons living alone and young couples without children corresponds to the phase of couple formation; young families and older families represents the period during which couples and their children live together; persons living alone and elderly couples without children represents the "empty nest" period, when parents are left on their own after the children have moved out.

Dwellings belonging to the same housing category (high, intermediate or low socio-residential status) but located in different zones of the department are joined up in Figure 4.

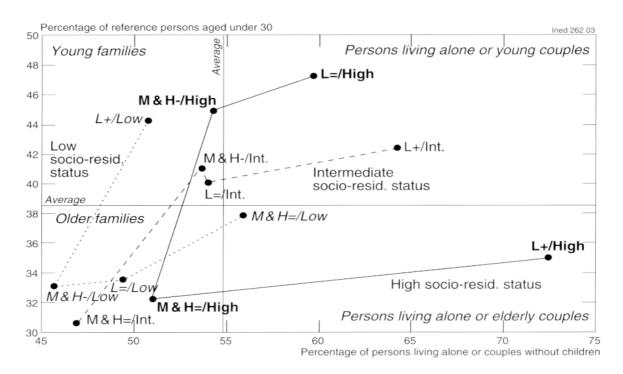


Figure 4.— Demographic characteristics of households moving into the housing categories of the Seine-Saint-Denis in 1994

Reading: In the Seine-Saint-Denis, among the households which moved in 1994 into a dwelling in the housing category of high socio-residential status situated in the low-quality housing zone with no local effect (L=/High), 47% of the reference persons were aged under 30 and 60% were persons living alone or couples without children.

Overall, the diagram shows that there is no demographic specialization of the housing categories, since none is concentrated in just one section of the diagram. This means that the same housing category can be occupied by households at different stages in their family life cycle. Consequently, it is perfectly possible to accomplish several stages of a residential itinerary, or even an entire residential itinerary, while moving between dwellings belonging to a single housing category but situated in different zones of the Seine-Saint-Denis. These moves within a single housing category represent nearly half the moves that take place in a year in the department. The characteristic of the commune of destination (high-value or low-value) then becomes an important variable among the criteria for choosing a dwelling, in that the direction of the residential itinerary is here determined by the social markers of the successive communes of residence.

The grouping of low-status housing categories shows that when the itinerary involves only this housing type, its direction runs from low-quality zones that are undergoing gentrification (L+), towards either those of unchanging low-quality (L=) or communes with mixed housing or rundown high-quality housing (M&H-). The residential trajectory is then a downwards one, since in successive phases the social markers of the communes of destination progressively decline in value. A final phase can nevertheless be in the direction of a mixed or high-quality zone without local effect (M&H=), but this concerns mainly elderly couples without children or persons living alone.

Conversely, the grouping of high-status dwellings shows that an itinerary occurring in this housing category begins either in communes at the bottom of the scale (L=) or in communes of mixed housing or run down high-quality housing (M&H-), and culminates in low-quality housing zones that have been gentrified (L+) or in communes with mixed housing or the most desirable high-value housing (M&H=). In this case, the successive social markers of the communes in which households have lived make it possible to speak of upwards residential trajectories.

In other words, although it is possible for an entire residential itinerary to take place within the same housing category in the Seine-Saint-Denis, only when this itinerary is situated in high-status housing is an upwards residential trajectory likely to occur. If this is not the case, mobile households wishing to improve their residential position have to compromise by taking account of the social marker of the commune, but also and most importantly by moving to dwellings in different housing categories.

We have seen that three quarters of moves within the department occurred between identical housing zones (Table 8). In this case, the direction of the itinerary is given by the sequence of the socio-residential statuses of the successive dwellings. Figure 4 shows that if neutral moves are excluded, the typical itinerary observed in fairly low-quality housing zones corresponds to a downwards trajectory. In the low-quality housing

zones without local effect (L=) or in the mixed or high-quality zones with a negative local effect (M&H-), the itineraries run from high-status housing to intermediate-status housing and then to low-status housing. But the most valued housing zones do not conform to this residential model. In low-quality housing zones with a positive local effect (L+), the itineraries begin in housing of low or intermediate status and end up in housing of high socio-residential status. As to zones of mixed housing or high-quality housing with stable high status (M&H=), these only receive households at the end of their residential itinerary, whether families, persons living alone or elderly couples without children.

The example of the Seine-Saint-Denis thus demonstrates that the upwards or downwards direction of the residential trajectory depends largely on the social markers of the communes of destination. In this context, the matching between a dwelling's socio-residential status and its demographic specialization is neither straightforward nor systematic. As a consequence, housing of low socio-residential status does not necessarily attract households at the beginning of their residential history, any more than high-status housing is destined to receive only households at the end of their residential history. This observation raises questions about the organization of residential mobility in the areas affected by economic crisis, at a time when social promotion in the course of a professional career can no longer be taken for granted (Courgeau and Pumain, 1993; Chauvel, 1998). In addition, the choices of households regarding their residential itineraries are based as much on socio-residential status as on social markers and local effects.

#### 4. Population renewal and residential itineraries

Including household income in the analysis revealed the existence of economic channels of mobility. Inclusion of household age and size has shown the importance of the sequence of social markers of communes for determining the direction of residential trajectories. By combining these two approaches (economic channels and direction of itineraries over the life cycle), we can now examine the question of a general organization of residential mobility in Seine-Saint-Denis.

Using Figures 3 and 4, we reconstructed the current residential itineraries of affluent households (income per consumption unit equal to or above the fourth quintile) and low-income households (income per consumption unit below the second quintile). The demographic approach was again implemented on the basis of the proportions of young and one-person households or couples without children entering each of the housing categories. Thus we again have the four stages in the life cycle of a household.

Figures 5 and 6 present a simulation of the itineraries based on information about the characteristics of the housing zones and the households moving into them. It must be emphasized that this is merely a model constructed using data for a particular point in time. We have no way of knowing whether a household situated at one stage in the itinerary in 1994 has gone through the previous stages and will go through the subsequent stages shown in the diagrams, since these took place, or will take place, in different socio-economic contexts. Nevertheless, current residential itineraries are of interest in that they situate mobility in the present context.

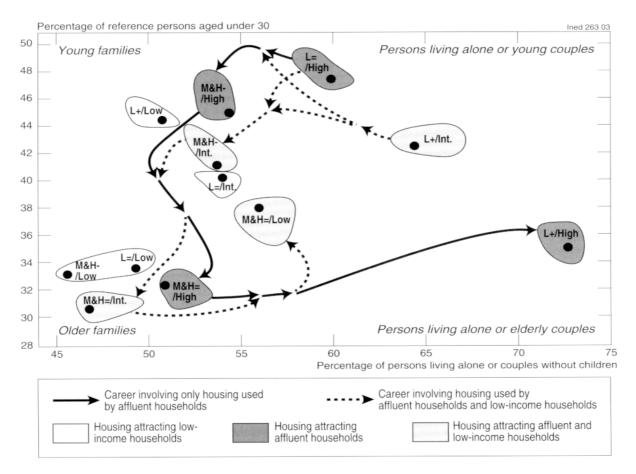


Figure 5. - Current residential career of affluent households

As regards well-off households (Figure 5), different configurations can be imagined depending on whether the households move only into housing usually associated with the most affluent households (in dark grey in Figure 5), or whether they move into housing of a more socially and economically mixed status (in light grey in Figure 5). Only the first type of itinerary can be an upwards one (solid arrows), that is, in the case where the stages involve only housing of high socio-residential status (High). This itinerary begins in the low-quality housing zone with no local effect

(L=), continues in the mixed zone or the high-quality zone with a negative local effect (M&H-) during the second stage, then in the same zone with a neutral local effect (M&H=) in the third sequence, and ends with a fourth stage in the gentrified low-quality housing zone (L+). As they move through their residential career, therefore, households gradually move into housing zones with increasingly high-value social markers, and this territorial dimension of the itinerary enables well-off households who choose to stay in the department to move up in the housing hierarchy while remaining in the sector of high-status housing.

If well-off households move into housing that attracts a population with diverse income levels (dotted arrows in Figure 5), the upwards course of the trajectory is no longer certain and will depend on the sequence of zones and housing types in the different residential phases, with the possibility, at any stage in their itinerary, of reverting to the previous level. In this sense, moving into housing that attracts a mixed population (mainly intermediate-status housing) can appear as an alternative to the ideal ascending residential history which is typical of the most affluent households of the department. The existence of such trajectories also shows that an ascending career is not necessarily linear and may include more chaotic phases (an initial downwards phase followed by upward phases, for instance).

As was the case earlier, the existence of housing that attracts population groups with diverse income levels is associated with different configurations in the organization of the residential itineraries of low-income households (Figure 6). Unlike the previous situations, however, this time it is not possible for an entire residential itinerary to take place in just one housing category, since the first residential sequence necessarily involves an intermediate-status dwelling situated in lower-class housing sectors which are undergoing gentrification (L+/Int.). Thereafter, however, the other sequences can take place exclusively in low-quality housing (solid arrows), particularly if these are restricted to dwellings for low-income households (in white in Figure 6). In this case, the residential itinerary of the low-income households takes place in zones with decreasing value: from low-quality sectors that are being gentrified (L+), to those entrenched in disadvantage (L=), or to zones of high-quality housing whose status is declining (M&H-). These are downward itineraries.

Here too, having lived in housing that attracts a population with disparate income levels (dotted lines in Figure 6) creates alternatives to the typical downward pattern of low-income households. Detailed observation nevertheless shows that having lived in such housing does not necessarily reverse the direction of a downwards trajectory, either in terms of housing status or in terms of the social marker of the zone of residence. The fact remains that for low-income households at the end of their housing history, this type of housing offers an opportunity to enter the zones of the

department where gentrification is greatest (M&H=) and to occupy housing of low or intermediate socio-residential status in these zones.

Analyses of current residential histories thus reveal a strong territorial organization of upward or downward residential trajectories within the department. Households circulating between different communes make their residential choices with reference to both the socio-residential status of the housing and the social markers of the communes. By taking into account the unequal resources of communes, these decisions lead to the creation of mobility channels compartmentalized by local housing status hierarchies and by the mechanisms of gentrification or social devaluation in operation. They contribute to the production of social markers and local effects, and hence to the transformation of the socio-territorial specializations predetermined by the local structures of the housing stock.

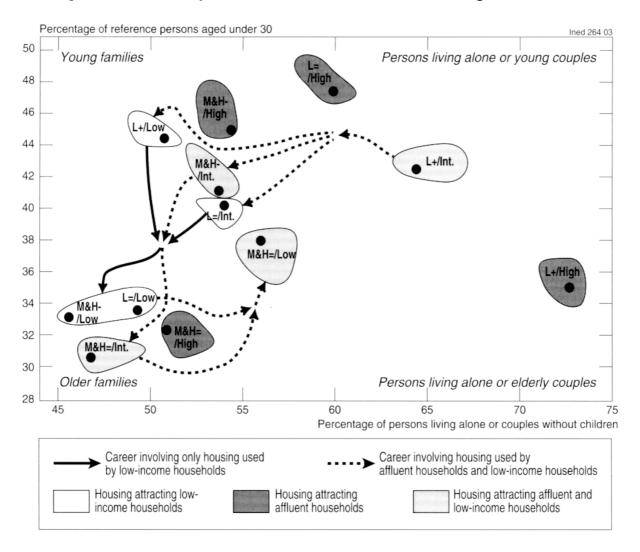


Figure 6. - Current residential career of low-income households

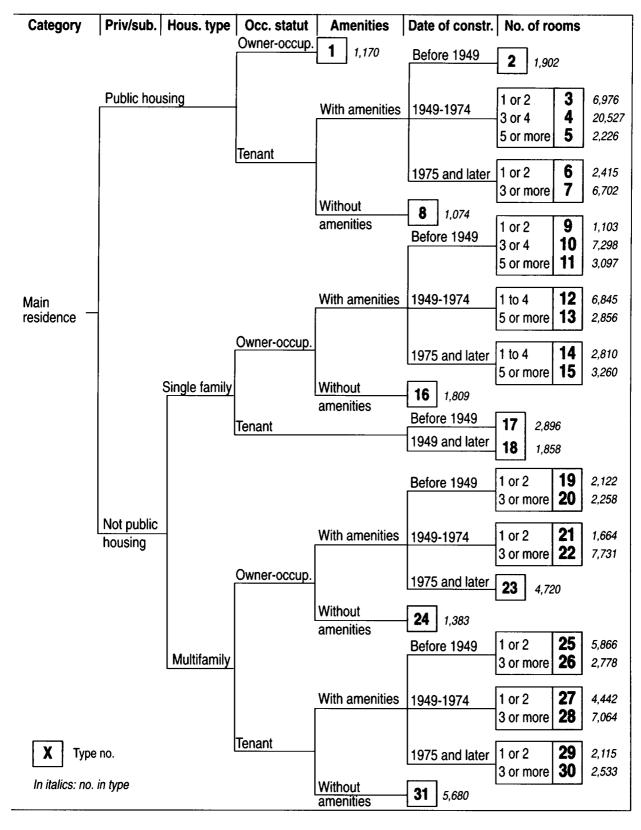
#### **Conclusion**

This research has been guided by three methodological aims. First, to relate moves to existing structures, since household residential moves always occur in the context of the already established housing stock and population patterns; second, to select or construct indices that are as salient and synthetic as possible for describing both moves and structures; and third, to model the interactions and dynamics that are judged to be important. These aims have enabled us to compare the housing and residential moves observed in the different communes of a department beset by serious economic and social problems.

The results have shown that age and family life cycle, social structures and local conditions weigh heavily on the dynamics implicated in any resolution of the present difficulties. The residential system of the Seine-Saint-Denis generates spatial inequalities: the social markers of the residential areas are strongly differentiated and only a few communes possess the local resources necessary to attract households from outside with the potential to produce a broader social mix and a renewal of the population. This change depends largely on moves into intermediate-status housing, which is the least stable in the residential hierarchy. Viewed overall, however, the majority of residential moves occur within the Seine-Saint-Denis. These moves encourage the stability or arrival of poor households in low-status housing or in low-value areas, and their displacement from the more valued sectors. The majority of mobile households make horizontal moves between communes with similar social markers and between housing categories of the same socio-residential status. Only a minority manage to improve their residential status, either by changing location or changing housing category. These dynamics reveal the role of location in both the residential choices and residential trajectories of mobile households.

These results serve to shift emphasis away from the role of housing occupancy status in achieving an upwards residential trajectory of the kind that is dominant in French society. Conversely, they show the full importance that must be given to the hierarchy of socio-residential statuses and to local effects when studying the dynamics of the population of housing stocks, as well as residential histories and the direction of housing itineraries.

APPENDIX
Dendrogram of the 31 housing types in the Seine-Saint-Denis, 1990



Source: INSEE, 1990 Census (one-quarter sample).

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## LÉVY Jean-Pierre.— Population Patterns and Household Trajectories in the Residential Milieu: the Example of the Seine-Saint-Denis

This article examines the processes underlying changes in the residential population of the Seine-Saint-Denis department (a suburban district to the north and east of Paris, containing 500,000 households) from three points of view: 1) the residential logics of different social groups, 2) the effects of the housing supply structure and 3) the effects of the social markers attributed to the different local areas.

Data from the 1990 Census are used to establish housing categories containing housing types whose residents have similar characteristics. These categories are then ranked and interpreted using an index of socio-residential status, whose spatial variations indicate the influence of the social markers of the communes on the population (residential areas). These markers can derive from the composition of their housing stock (housing zones) or from their geographical situation (local effects).

These typologies are then used to interpret the residential mobility of households who moved into a dwelling in the Seine-Saint-Denis in 1994. Data pertaining to the 1,568 surveyed households are analysed in three ways: to determine the residential trajectories of households; to shed light on the locational choices of households, and on the scope for action and constraints shaping their decision; and current residential histories are used as an indicator of change in local populations.

## LÉVY Jean-Pierre.— Peuplement et trajectoires dans l'espace résidentiel : le cas de la Seine-Saint-Denis

L'article porte sur les processus de transformation du peuplement du département de la Seine-Saint-Denis (banlieue nord et est de Paris, 500 000 ménages), du triple point de vue des logiques résidentielles des groupes sociaux, des effets de la structure de l'offre et des marquages sociaux des territoires.

À partir des données du recensement général de la population de 1990, on regroupe en classes d'habitat des types de logements dont les habitants ont des caractéristiques proches. Ces classes sont ensuite hiérarchisées et interprétées à partir d'un indice de statut sociorésidentiel, dont les variations spatiales nous permettent d'identifier l'influence des marquages sociaux des communes sur le peuplement (aires résidentielles), qu'ils relèvent des composantes de leur parc immobilier (zones d'habitat) ou de leur situation géographique (effets locaux).

Ces typologies sont ensuite utilisées pour interpréter la mobilité résidentielle des ménages entrés dans un logement de la Seine-Saint-Denis en 1994. Les données relatives aux 1 568 ménages enquêtés ont été exploitées dans une triple direction : pour cerner les trajectoires résidentielles des ménages; pour mettre à jour les choix de localisation des ménages, les marges de manœuvre et les contraintes pesant sur leur décision; en utilisant les parcours résidentiels du moment comme un indicateur des évolutions des peuplements territoriaux.

#### LÉVY Jean-Pierre. - Población y trayectorias residenciales: el ejemplo de Sena- San Denis

Este artículo analiza el proceso de transformación del poblamiento del departamento de Sena- San Denis (distrito del area metropolitana, situado al noreste de París, 500.000 hogares) desde tres perspectivas: las estrategias residenciales de diferentes grupos sociales, el impacto de la estructura de la oferta y las demarcaciones o estructura social del territorio.

A partir de los datos del censo general de población de 1990 se construyen categorías de habitat en base a tipos de vivienda cuyos residentes tienen características similares. Estas categorías son ordenadas jerárquicamente y se interpretan en base a un índice de status socioresidencial, las variaciones espaciales del cual permiten estudiar la influencia de la categoría social del municipio sobre su poblamiento (areas residenciales), tanto en lo relativo al parque inmobiliario (zonas de vivienda) como a su situación geográfica (efectos de localización).

Estas tipologías sirven de base para estudiar la movilidad residencial de los hogares que se instalaron en Sena – San Denis en 1994. La explotación de los datos relativos a los 1,568 hogares encuestados tiene tres objetivos: observar las trayectorias residenciales de los hogares, describir la selección de localización de los hogares, las opciones disponibles y las restricciones existentes a la hora de tomar una decisión. Las trayectorias residenciales se utilizan como indicador de la evolución del poblamiento territorial.