

The Need for Space and Residential Satisfaction

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Summary

This presents the results of a study on the need for space at home, and specifically on the relative importance of space among as linked to overall living conditions. The sample of households interviewed (73 relatively young couples, with at least one child living in the parental home) was composed of families who were fairly well, well, or even very well, housed. They lived either in the inner city area of Paris or the inner or outer suburbs of the Paris Region. Type of housing and occupancy status varied.

Statistical processing of the data obtained (corpus of semi-directive interviews and satisfaction scales) confirms the existence of a norm of requirements as regards living space, but also shows that this norm is modulated by the importance of everyday values linked to the "agreeable" aspects of the surrounding environment, notably in so far as the human factor (the neighbourhood) and the natural factor (green spaces), are concerned. Thus it seems that, for part of the population under study, a shift from functional to more complex needs has taken place, concerning appropriation and affective investment in living conditions perceived as a whole.

Résumé

Cet article présente les résultats d'une étude concernant le besoin d'espace dans l'habitat et, plus particulièrement, l'importance relative de ce besoin par rapport à d'autres aspects du bien-être associé aux conditions de vie dans leur ensemble. L'échantillon de ménages interviewés (73 couples relativement jeunes, ayant chacun au moins un enfant vivant avec eux) est composé de familles assez bien, bien ou même très bien logées. Elles vivent soit dans le centre de Paris, soit dans des banlieues proches ou lointaines de la région parisienne. Le type de logement et la profession des interviewés varient.

Le traitement statistique des données récoltées (composées du texte des interviews semi-directives et des résultats d'échelles de satisfaction) confirme qu'il existe une perception normative des exigences posées à l'espace résidentiel et que cette norme est modulée par l'importance des valeurs quotidiennes associées aux aspects "agréables" de l'environnement proche, en ce qui concerne en particulier l'élément humain (le voisinage) et des aspects naturels (espaces verts). Ces résultats nous permettent de suggérer qu'au niveau des conditions de vie, et pour une partie de la population étudiée, des

besoins de base de type fonctionnel ont perdu de leur importance par rapport à des besoins plus complexes, liés à une appropriation et à un investissement affectif des conditions existentielles perçues en tant que tout.

1. Introduction*

The interaction between Man and his environment shows itself in a specific way where his relationship to his dwelling is concerned. Experience of the environment, through the transactional relationships that the individual establishes with his surroundings in order to adapt to them, is global. It is thus the whole set of stimuli in all their complexity that must be studied if we wish to understand the influence of the environment on Man's behaviour and on the strategies he adopts to slip into the "spaces of interstitial freedom" (Moles, 1976). In this global approach, domestic space must thus be treated as a "complex psychological object involving both social and spatial characteristics" (Noschis, 1987). Since individuals experience the environment globally (Lévy-Leboyer, 1980), the dwelling, which may be considered as a highly personalized space, temporarily appropriated by a household, must be considered in relation to the spaces near it and according to their social valorisation and the affective investment that each person attaches to them. Hall's work (1971), and that of Moles and of Rohmer (1978, 1985) demonstrates the functions and the value of this progressive and hierarchised structuration of space, "material of life".

Moreover, inasmuch as affective patterns (Piaget, 1978) contribute to the adaptation of individuals to different surroundings and give them a feeling of emotional security, confidence, familiarity and continuity in relation to the way in which they experience their living conditions, the symbolic character attributed to the dwelling as against a purely functional and practical attitude is primordial (Lawrence & Noschis, 1984). Hence the importance of the presence in the living environment of the individual, of those material bases which constitute the symbols of his affective patterns. It would thus seem that those who attach great symbolic value to their dwelling, and who make a considerable affective investment in it, are more vulnerable when faced with constraints which disturb those affective patterns relative to their living environment than those who only bestow a functional value on their principal residence and invest in other spaces (second home, family house).

The concept of "Place Identity" (Proshansky, 1974) is a good description of the attachment shown by someone for a given place, a personal variable which takes into account inter-individual differences as to the nature of the expectations and importance that each person gives to their main home. Different research (Korosec-Serfaty, 1979, 1985; Haumont, 1966) has shown, in fact, that the dwelling represents a symbolic type of space, a home base, an anchorage point, the favoured means for the family unit to appropriate space. These remarks on the importance that individuals attach to this base in the hierarchy of personal values, must however be qualified in view of the inter-individual differences that have been observed in this respect. Two categories of person have thus been observed (Lévy-Leboyer, 1977). On the one hand, there are those who choose a living environment first and then seek professional and social integration and on the other, those who give priority to socio-professional integration

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and prefer to leave the choice of living environment, which for them represents a simple instrument for achieving goals defined elsewhere, without being of interest in itself, until later.

Furthermore, in the hierarchy of needs related to housing, we can distinguish on the one hand between what one might call minimum conditions of physical comfort (shelter, heating, light), and on the other, conditions of socially defined comfort linked to the practices and characteristic cultural models of the different social categories. As several researchers have observed (Guerrand, 1976; Noschis, 1983; Antipas, Jaccoud, 1988) needs as regards the living environment can be seen to be constantly evolving, a consequence of the ceaseless stream of new ways of satisfying these needs and constantly rising thresholds of tolerance to pollution linked to the living environment. Living behaviour, that is to say individual emotional, normative and behavioural reactions to the living environment have been influenced by the historical evolution of general living conditions involving being uprooted from a certain region, job or residence, which have usually allowed those concerned to pass from a mere subsistence economy, under threat to a greater or lesser degree, to an economy where survival is guaranteed. The resulting relative security in material conditions has allowed a shift into the field of consumption of the "unrealistic" desires for social promotion of a section of the population (Lugassy, 1987).

Moreover, the results of studies on the evaluation of housing conditions have shown that judgements made by the inhabitants themselves on their housing are based on an overall assessment of their housing situation, in which the dwelling itself and the spaces of varying dimensions which lie around the main home and which are seen by those concerned as being available for appropriation are indissociably linked. A housing situation is therefore a whole in which the dwelling itself plays a dominant role, and where the elements that make up the living environment are both many and of an extremely varied nature (Lévy-Leboyer, 1977; Pitrou, Bergoff, Dupuy, Lavigne, 1970).

It has been observed that an assessment of housing is not limited to the living space and its arrangement, but also includes outside space, as well as neighbourhood relationships (Fried, Gleicher, 1972). Those aspects of the living environment which the inhabitants themselves value may thus play a modulating role as far as the degree of satisfaction they feel with regard to their housing is concerned, because in their eyes, housing is not limited to its objective aspect of "available and structured space".

The research, the results of which are presented here, tried, in order to take into account the previous remarks, to take into consideration the overall housing situation, as well as the values attached to space as it is actually experienced.

2. Aims of the Research

This research sets out to analyse the need for space in the dwelling, the factors determining this, as well as the way in which space within the dwelling is evaluated both by those who are satisfied with the available space and those who express the need for extra space.

We have seen that the judgements made by the inhabitants on their situation with regard to living space is not strictly limited to the space available. The analysis presented here thus tries to pin-point the relative importance of the need for space amongst the different dimensions of "well-being" linked to the housing situation. If

the environment, in this case the living environment, is experienced globally by those concerned, we may put forward the hypothesis that specific aspects of this play a modulating role in the degree of satisfaction the inhabitants feel with the living space available to them at a given period in their residential history.

The results of research on housing and theoretical models of the psychology of the environment allow a certain number of variables likely to explain observable differences in the need for space within the main home to be pin-pointed. Research (Bernard, 1989; Perrinjaquet, Amphoux, Bassand, 1986) focused on use of living space, points out that the evolution of life styles should make itself felt, in one way or another, in living behaviour, and thus should affect the need for space.

We have thus been led to adopt three types of variables which explain the need for space within the dwelling:

- 1 characteristics of the environment specific to housing, both inside and outside the dwelling;
- 2 the socio-demographic characteristics of the residents;
- 3 psychological factors linked to the inhabitants' past housing situation.

Furthermore, the variable to be explained, that is to say the need for space expressed by the residents concerning their main home, has been considered with respect to:

- a) needs and expectations as regards living space;
- b) the degree of satisfaction felt by households with their present main home and living environment;
- c) how the available space is actually lived in, described as it is used, and the implied affective attachment.

3. Organisation of the Survey

3.1. Methods of Investigation

The choice of investigation techniques was made so as to take into account the qualitative nature of this research. This led us to choose a technique known as "indirect", the semi-directive interview, which allowed us to highlight the variables at work and to detect existing links between them. Recourse to this cumbersome investigation technique is justified for the study of "complex variables, that can only be understood through the development of an extended argument" (Chauchat, 1985). In order to clarify the importance of the need for space amongst the other dimensions of "well-being" and to enable them to be compared, these variables have been made operational. Four-point satisfaction scales concerning the current situation with regard to housing conditions, from the point of view of space in the dwelling and of "living environment", completed the investigation. The subjects were thus invited to justify their satisfaction or dissatisfaction with the following elements, considered to be part of "well-being" as regards housing conditions: the lay-out of the dwelling, the view, light, sound insulation in the dwelling, the district, the facilities, means of transport, the neighbourhood. Moreover, the grid-questionnaire used for the semi-directive interviews was drawn up around the following major topics:

- past experience as regards housing
- available space outside the dwelling
- the "investment" concerning the present dwelling
- use of available living space
- any lack of space that might be felt
- comparison with an ideal situation ("to have twice the present amount of space available").

3.2. *Sample*

The sample under study was composed of 73 households. They were all among the households previously questioned by INSEE (French National Institute of Economic and Statistical Information) in 1988, in the course of its survey on housing conditions. The families who made up our sample had agreed to participate once again in this type of research. The wide INSEE sample was representative of the French population, whilst ours was targeted from the point of view of socio-demographic variables and housing conditions. It respected, in fact, the following criteria:

- couples with at least one child living in the parental home;
- a monthly income of about 15 000 francs;
- residing in inner city Paris or in the Paris Region (inner and outer suburbs).

However, both households living in houses and in flat blocks, and both owners and tenants were included in the sample.

What were the housing conditions of the sample thus chosen? A very small proportion of the households (12.50%) had very little space available (less than 71 m²). At the other end of the scale 46% of them had living space of more than 100 m². As for the surface area available per person, 43% of the households only had space of between 17 and 21m², whilst 34% had space of more than 27m² per family member. On the whole, a relatively young population was involved (the average age of the father was 38), from a relatively high socio-professional category (executives, the intellectual and intermediate professions for two thirds of the number). The couples were "traditional", living in Paris itself and in the Paris Region, with at least one child living in the parental home and who could be considered to be fairly well, well or even very well, housed.

It should be pointed out that only women were questioned on the subject of the couple's situation. This methodological choice is justified inasmuch as previous research has observed that women are more concerned than men by the space in question, probably because they carry out more tasks there and of a more varied nature (Tognoli, 1980, 1982).

3.3. *Data Processing*

An individual's housing situation bears witness to his social position and relates back to the proximity of the individual's social identity and his dwelling. Assessment of a housing situation is formulated just as much in terms of the past as in projections into the future and aspirations in this domain. We thus considered the present situation

with regard to housing as the frame of reference within which the subjects interviewed assessed their housing situation. Admittedly, this frame of reference was artificially restricted to that of the housing conditions being experienced at the time of the survey, but the relationships that subjects establish with their housing conditions always include a temporal dimension. An evaluation is never formulated in the absolute, but is relative to the frames of reference specific to each individual. As far as housing conditions are concerned, these encompass aspects such as: the individual's spatial past, the various places he has lived in during his life, his personal experiences of living space, and also, his aspirations as regards housing.

The frame of reference within which the "present housing situation" has been evaluated, is relatively homogeneous throughout the sample. Almost all the subjects (with the exception of 6 households) had previously had either a more unfavourable, or an equivalent situation to the one they were experiencing at the time of the survey. Other aspects bear witness to the homogeneity of the sample as far as the frames of reference are concerned. Since the subjects are relatively homogeneous as regards age, they are thus at the same stage of the "life-cycle", and as a result have relatively similar needs as regards living space. The sample is similarly homogeneous from the point of view of family situation - they all live in couples, with at least one child to support. The subjects' incomes, which might be expected to play a role as far as their aspirations are concerned, are similar, since they are all from a similar section of the population.

The method used (the semi-directive interview) enabled the subjects to personalize their answers to the topics raised during the interview. Their originality emerged in the arguments and criteria that they evoked to sum up their living conditions. Despite this diversity of expression, we systematised and formalised the data we collected, applying lateral thematic analysis to the contents of the set of interviews, and their coding. Consequently, we have two types of satisfaction indicators at our disposal. The first, was collected with the help of a four-point satisfaction scale enabling the subjects to state their degree of satisfaction concerning their housing conditions and the second, by means of the criteria used by the subjects to assess their housing situation. Moreover, we possess data, for the whole of the sample, concerning the satisfaction of the subjects with regard to the living environment in which their dwelling is situated. All the data is dependent on the sensitivity of each of the subjects towards their living environment and reflects the transactional relationships they establish with their overall living environment.

In order to highlight the relative importance of the need for living space with regard to other aspects of residential well-being, we embarked upon two successive correspondences analyses. These analyses matched the objective elements we possess concerning the size of the dwelling with assessments by those interviewed concerning size and their living environment. More precisely, indices representing the subjects' objective situation concerning the size and number of rooms in their dwellings, such as living space per person (m²/person and rooms/person) were included in the analysis as explanatory variables.

In addition to this, objective variables relating to the housing situation and the socio-demographic situation of the households were also included in the analysis as explanatory variables. Variables adopted thus concern: income, (income per person), the socio-professional category of the reference person (the husband), the regularity of the wife's professional activity, the age of the adults and children, the type of housing

(flat block/private house), occupancy status (tenant/owner), the site of the dwelling (inner city Paris, its inner and outer suburbs and the Paris Region), available space outside the main home (weekend family house and/or second home).

These analyses allowed us not only to demonstrate the importance of the size of the available living space ("objective" variable) as a factor in the degree of satisfaction of the subjects ("subjective" variable), but also the importance that other elements in the overall housing situation come to have. What is more, the components of the living environment proved to be modulatory variables of satisfaction with living space: the relationship of the inhabitant to the dwelling space and to his living environment thus give rise to a series of compensatory strategies, concerning elements of the overall housing situation that are to a greater or lesser degree, agreeable or desirable.

3.4. Results

Two correspondences analyses were carried out, one after the other. The aim of the first was to segment the population interviewed according to available space and satisfaction concerning that space. The aim of the second was to identify the characteristics of the sub-groups defined in the first analysis.

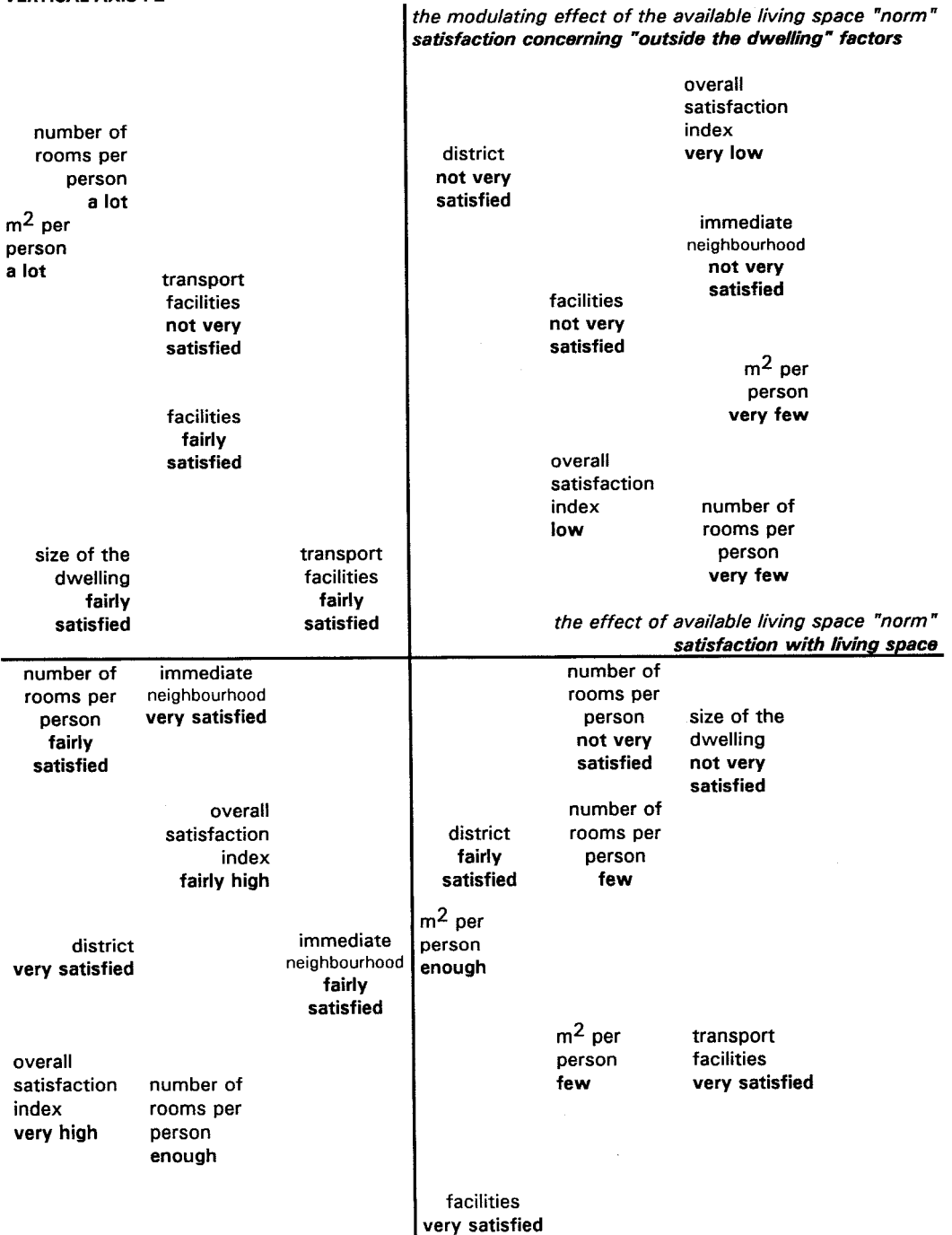
The first analysis enabled the definition of five axes explaining 49% of the total inertia of the elements under consideration to be identified. The first two axes relate to our problem. On the first axis (16% of the total inertia), variables relative to the situation as regards available living space, both the objective variables (the surface area and the number of rooms available per person) and the subjective variables (satisfaction concerning this space) are projected in order of priority. This axis, represented in Graph 1, opposes those who are "satisfied" and those who are "dissatisfied" with the space at their disposal, and may be considered as corresponding to a "norm" relative to space in the dwelling (see following page).

In other words, this means that the satisfaction felt by subjects with a given living space depends firstly on the size of the space, and in particular the available space per member of household (m²/person, rooms/person). On the other hand, the variables relative to the social condition of the households (socio-professional category of the reference person, income, wife's professional activity, age of the adults and children) and to the housing conditions (type of dwelling, occupancy status, living space available "outside the dwelling", length of residence) bear no relation to the satisfaction felt concerning living space (none of the chi-square are significant for all the intersections in question).

It would thus seem, that within this population, a scale concerning the requirements for available living space per person within the main home has been established, a scale shared by the majority of subjects, and which constitutes a point of reference upon which to base their assessment of their dwelling. As a result, a significant link between the available space per person and the degree of satisfaction felt by households can be observed. There are, however, some not insignificant exceptions to this general link. In order to highlight these better, given the relatively small number of subjects in our sample, we have grouped the modalities (from 2 to 4) concerning available space and the satisfaction of the subjects as regards this space. The results of this grouping appear in Table 1.

Graph 1

HORIZONTAL AXIS : 1
VERTICAL AXIS : 2



An examination of this table allows us to observe that despite the general link (chi-square = 8,006; significance level $p < .001$) between satisfaction and available space, there exists a relatively small fringe of people (23 subjects) for whom the degree of satisfaction with the size of their dwelling does not correspond to the amount of actual space available in their main home. Two types of sub-groups can thus be identified within the population interviewed, according to the available and the degree of satisfaction:

- "coherent" sub-groups:
 - not much space/dissatisfied
 - a lot of space/satisfied
- "atypical" sub-groups:
 - not much space/satisfied
 - a lot of space/dissatisfied.

Groups	group characteristics		average surface living area/ person	Number	%
	available space	satisfaction			
1 - LS	little space	satisfied	18.93 m²	11	15.28%
2 - NLS	little space	dissatisfied	18.74 m²	25	34.72%
3 - LTS	a lot of space	satisfied	28.23 m²	24	33.33%
4 - NLTS	a lot of space	dissatisfied	33.09 m²	12	16.67%
TOTAL				72*	100%

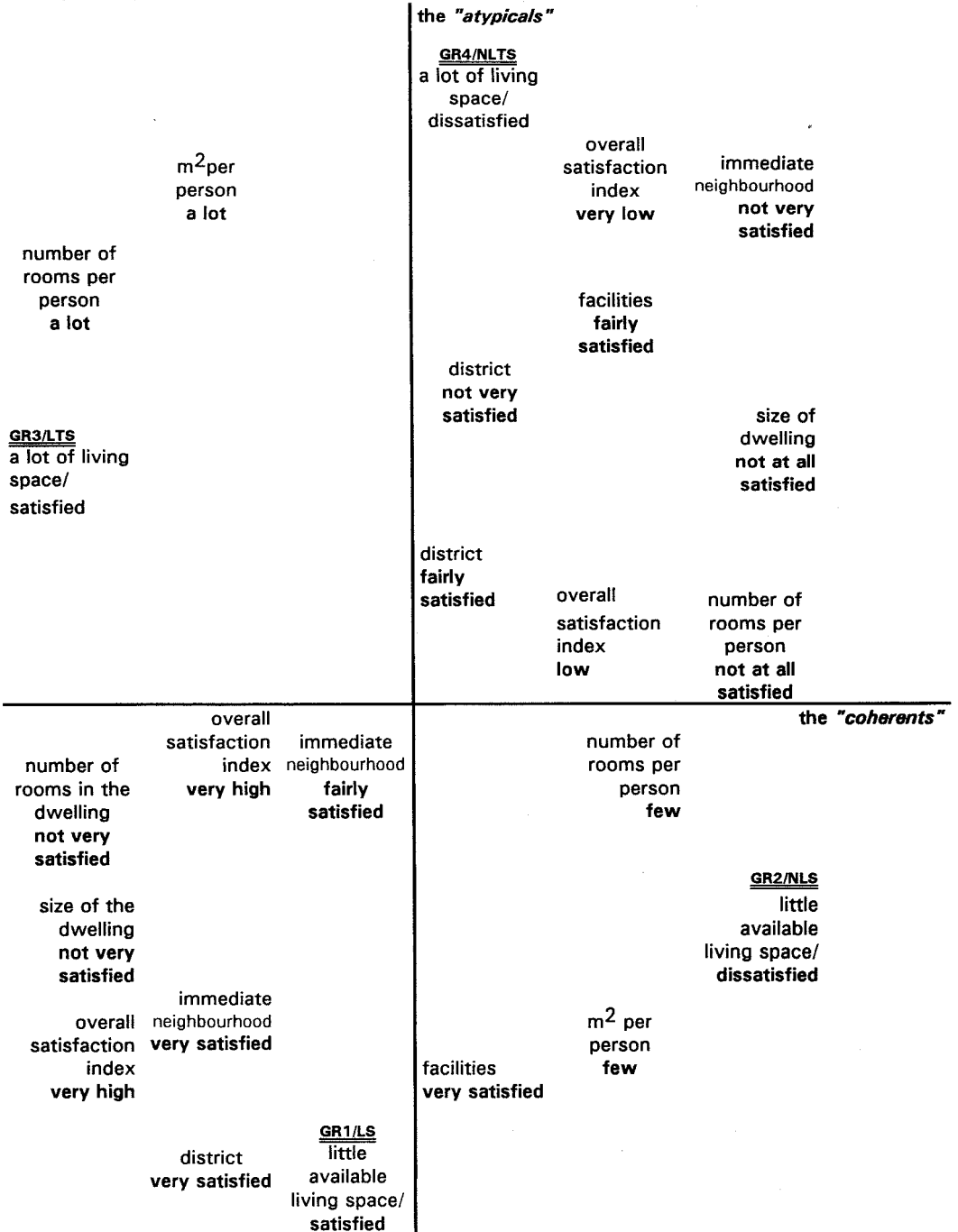
* no data on "surface living area" for one family

Table 1 Classification of the subjects into four groups according to their level of satisfaction with the size of their dwelling and the available living space

The second axis that the correspondences analysis brings out partly explains the composition of these four sub-groups. The variables which contribute most heavily to this axis are objective variables relating to space and the number of rooms available per person within the main home, and subjective variables concerning aspects outside the dwelling: satisfaction with the district, the facilities, the neighbourhood and transport facilities. On the other hand, none of the variables concerning the satisfaction expressed by the subjects with the space available inside their dwellings contributes to this axis. The poles on Axis 2 oppose on one side very satisfactory living space conditions and very low levels of satisfaction with housing conditions, and on the other side high levels of satisfaction with the living environment together with relatively mediocre situations regarding available space in the main home.

Graph 2

HORIZONTAL AXIS : 1
 VERTICAL AXIS : 2



Relatively large areas of space are thus sometimes associated with a fairly low level of satisfaction with the other aspects of the living environment and conversely, poor space conditions can be accompanied by a high degree of satisfaction with the immediate environment. These aspects of the living environment concern the immediate environment in which the dwelling is situated, in particular the district, the neighbourhood, the facilities, the transport facilities, and probably constitute factors which influence the degree of satisfaction with space, in particular for those subjects we have called "atypical".

A second correspondences analysis has been made (see preceding page) by creating a variable which corresponds, for each subject, to membership of one of the four sub-groups of subjects identified by the first analysis. This second analysis allowed five axes to be identified which explain 54% of the total inertia of the variables taken in account. The study of the two first axes (see Graph 2) allows two diametrically opposed categories of subjects to be defined. The first axis opposes two sub-groups: at one extremity are the dissatisfied "coherents", who have comparatively little living space at their disposal and who are dissatisfied and at the other extreme, the satisfied "coherents" who have relatively large amounts of space at their disposal and are happy.

On the second axis, the two "atypical" sub-groups are projected at opposite poles, those who enjoy a relatively large amount of space, but are dissatisfied with their situation, and those, on the other hand, who are content with a relatively small amount of space in their main home. The other variables which contribute to this axis are objective variables which describe the situation of subjects concerning available space per person and subjective variables which express the degree of satisfaction felt by subjects with the size of their dwelling, as well as with certain elements of the living environment, the district, the neighbourhood and the facilities.

These three variables modulate the "norm" effect as regards satisfaction with living space. In other words, we can judge that these aspects of the living environment characterise the sub-groups of the sample under study, who have either found compensation for the relatively restricted space in their main home or, on the other hand, are not satisfied with a comparatively generous amount of space because other elements in their living environment are disagreeable to them. This analysis is confirmed by the statistically significant links which can be observed between the fact that the subjects belong to one of the four sub-groups and the degree of satisfaction felt with these three components of their living environment. The "outside the dwelling" aspects which modulate the effect of the norm relating to the need for space in the main home are as follows:

- certain physical aspects of the district:
 - green spaces: that is to say, the density of green space compared with the buildings, chi-square = 8.66; significance level $p < .03$
 - green spaces which are accessible on a daily basis: parks and/or public or private gardens which are easily accessible and perceived by the subjects as open to appropriation, chi-square = 8.34; significance level $p < .05$

- certain social aspects of the district and neighbourhood:
 - the presence of human contacts and/or integration into networks of family solidarity, friends, associations, chi-square = 8.25; significance level $p < .05$
- the quality and nature of human contacts with the neighbourhood:
 - in the case of satisfaction: discretion or conviviality,
 - in the case of dissatisfaction: too many or not enough contacts, or undesirable contacts, chi-square = 8.42; significance level $p < .05$
 - the affective relationship the subject has with his dwelling, that is to say, his emotional investment which is conveyed by the fact that he would be sorry to move, chi-square = 8.78; significance level $< .03$.

We may thus consider that a link exists between those components of the living environment which the subjects themselves value and their degree of satisfaction with the size of their dwellings. Need and satisfaction concerning space in the dwelling are not only related to the available space, but are also dependent on certain qualities of the living environment.

Moreover, the site of the dwellings, in one of the three zones covered by the survey (inner-city Paris, and the inner and outer suburbs of the Paris Region) plays a role in modulating the "norm" effect as regards living space. There is a significant statistical link (chi-square = 17.99; significance level $p < .01$) between the subjects' membership of one of the sub-groups identified in the sample and the place, in one of the three zones mentioned above, where their main home is situated. The inner suburbs seem to provide compensations where living space is comparatively restricted. The reverse is sometimes true of the outer suburbs, that is to say, even considerable living space fails to give the inhabitants satisfaction. Paris, on the other hand, is the centre par excellence for the "coherents". Although it may not provide compensations for restricted space, neither does it constitute a living environment likely to give rise to dissatisfaction in those who have a relatively large amount of space at their disposal. We may thus put forward the idea that a link exists between the site of the main home and the incidence of modulating factors on the need for living space.

Contrary to what one might have expected, there is no significant statistical link between belonging to one of the sub-groups identified within the survey population and certain socio-demographic variables. There is thus no modulating effect on the need for space linked to the following variables:

- the household's income (income/person index),
- the socio-professional category of the reference person in the household (the husband)
- the wife's professional activity and its degree of regularity,
- the age of children living in the parental home,
- the age of the subjects,
- length of residence,
- type of dwelling: flat block/private house
- occupancy status: rented/owned
- space available outside the dwelling: second home or family house for the weekend.

4. Discussion

The results presented here allow us to affirm that for the group questioned the only components of the living environment that influence the degree of satisfaction with the living space and its size (space/person) are those which concern aspects linked to the immediate environment of the main home. It is above all a question of the amount of greenery in the district (density of buildings/green spaces), of appropriable and accessible green spaces, situated near the dwellings (park, garden, river bank, forest), of social relationships with the neighbours, and more precisely, the presence and quality of these contacts. The affective relationship, that is to say, attachment or indifference as regards the dwelling, seems to be another modulating factor on the "norm" effect as regards living space in the main home.

On the other hand, none of the variables linked to the dwelling itself, such as the view, amount of light, arrangement of the rooms, or sound insulation emerged as factors likely to influence satisfaction with space. We may thus consider that the calculation of a global satisfaction index which would incorporate all aspects apart from space is unjustifiable. It would not, in fact, be able to take account of the weight which certain specific aspects of the immediate environment carry, aspects which the inhabitants favour and assess in accordance with criteria and frames of reference of their own.

The range of these observations should be judged in accordance with the specific characteristics of the survey sample. It must be emphasised that all our subjects enjoy housing conditions that are at least adequate as regards the size of their dwellings. So it would seem that as soon as those conditions considered strictly necessary (living space/person, comfort within the dwelling itself and nearby facilities at a level judged correct) have been attained, other requirements as regards living environment emerge, according to a hierarchic model. In the case of our study, the aspects of the living environment which correspond to these new requirements are to be found in the sphere of the agreeable. It is not the nearby facilities nor the connection to the transport networks which influence the level of satisfaction felt by the subjects in the sample as regards their housing conditions. The inadequacies of the district, from the practical point of view, are compensated for by recourse to other behaviours: daily or weekly journeys to places not too far from the home. Such mobility presents no problems for our sample population, given its standard of living. Households thus value the pleasant character of the district, notably its green aspect, its availability for appropriation practices of the green spaces and the possibility of enlarging the living space itself, its human aspect, in the form of contacts with the neighbours. Certain subjects, on the other hand, favour living space to the detriment of a more attractive living environment. In all cases, compensations operate between the size of the dwelling and characteristics of the living environment with recourse to those key elements described above.

These observations follow the same lines as the results of Jay-Rayon's study (1985) on the subject of open air and the proximity or reappropriation of natural space-time, which highlights the specific relationships between Man and the natural or semi-natural environment as leisure space. This research even tries to define individuals' field of action in relation to their place of residence and consequently, the best sites for zones termed "open-air". Assessment, which in the past was focused on the opinion of experts, is at present being directed towards the user and space as he/she experiences it (Lynch, 1982; Bailly, 1981; Cinq Mars, Corfa, Barone, 1985; Noschis, 1987), with the aim of laying the foundations of a "geography of well-being" (Bailly, 1981),

depending on the quality of the environment appropriated or appropriable by different categories of populations.

Moreover, it should be noted that the affective relationship that the inhabitants maintain with their dwellings and the position of their anchor point during childhood or at other times, plays a not insignificant role in the emergence of different groups within the population under study. It would thus seem that the presence of an emotional relationship with the dwelling underlies the membership of the subjects to one of the four sub-groups (chi-square = 8.78; significance level $p < .03$). Moreover, a statistically significant link between the membership of the subjects to one of the four sub-groups and their attachment to a dwelling occupied during childhood (chi-square = 10.37; $p < .02$), or to a landscape that made an impression on them during this same period (chi-square = 7.09; $p < .07$). Nostalgia for the past opposed to present reality either makes more difficult or on the other hand facilitates, the appropriation of living conditions by households throughout their residential history. The existence of a point of comparison situated in childhood would seem to be linked to the differences between the four sub-groups identified in the sample. Those who are dissatisfied, however much space they have available, are more influenced than the others by their spatial past, whilst those who are satisfied (whether they have a little or a lot of space) are less so and have made a greater affective investment than the former group in their present housing.

Over and above the differences between groups, it can be said that the subjects questioned have displaced their needs as regards the basic, functional aspects towards more varied and more complex needs, which incorporate the symbolic and affective aspects linked to the appropriation of living space, the rehabilitation of the quality of life as lived on a daily basis, the surrounding environment, the neighbourhood and green spaces.

BIBLIOGRAPHY

- ANTIPAS, M. & JACCOUD, C. (1988), "Habitation 2000. Enquête qualitative sur les modes d'habiter. Cahier 9, Rapport de recherche N° 68" (Ecole Polytechnique Fédérale de Lausanne - Département d'Architecture-IREC).
- BAILLY, A.S. (1981), "La géographie du bien-être" (PUF, Paris).
- BERNARD, Y. (1989), "Les Français chez eux. Analyse des résultats de l'enquête INSEE, "Usage du logement"" (Laboratoire de Psychologie de l'Environnement, Université René Descartes, Paris).
- CHAUCHAT, H. (1985), "L'enquête en psycho-sociologie" (PUF, Paris).
- CINQ-MARS, I. & CORFA, S. & BARONE, S. (1985), Le paysage à re-découvrir de l'intérieur, *Loisir et Société*, 8 (1985) 1, 251-266.
- FRIED, M. & GLEICHER, P. (1972), Some sources of residential satisfaction in an urban slum, *Environment and the social sciences: Perspectives and Applications* (Wohlwill, J.-F. & Carson, D.-H., Eds.)(D.C., American Psychology Association, Washington).
- GUERRAND, R.-H. (1976), Appropriation des lieux d'habitat et couches défavorisées, *Actes de la 3ème Conférence Internationale de Psychologie de l'espace construit-Strasbourg*, Korosec-Serfaty, P., Ed.)(Institut de Psychologie Sociale, Strasbourg-France).
- HALL, E.T. (1971), "La dimension cachée" (Ed. du Seuil, Paris).
- HAUMONT, N. (1966), "Les pavillonnaires" (Centre de recherche d'urbanisme, Paris).
- JAY-RAYON, J.-C. (1985), Plein-air et proxémie ou la réappropriation de l'espace-temps naturel, *Loisir et Société*, 8 (1985) 1, 217-250.
- KOROSEC-SERFATY, P. (1979), "Une maison à soi. Déterminants psychologiques et sociaux de la maison individuelle" (Ministère de l'Équipement et du cadre de vie, Direction Régionale de l'Équipement d'Alsace, Strasbourg).

- KOROSEC-SERFATY, P. (1984), The home from attic to cellar, *Journal of Environmental Psychology*, (1984) 4, 303-322.
- LAWRENCE, R. & NOSCHIS, K. (1984), Inscrire sa vie dans son logement, *Bulletin de psychologie*, XXXVII (1984) 366, 887-896.
- LEVY-LEBOYER, C. (1980), "Psychologie et environnement" (PUF, Paris).
- LEVY-LEBOYER, C. (1977), "Etude psychologique du cadre de vie" (CNRS, Paris).
- LUGASSY, F. (1987), Evolution actuelle des relations à l'espace, Théorie bio-psycho-socio-génétique de l'espace, *Bulletin de Psychologie*, (1987) 380, 503-512.
- LYNCH, K. (1982), "Voir et planifier, L'aménagement qualitatif de l'espace" (Ed. Dunod, Paris).
- MOLES, A. (1976), "Micropsychologie et vie quotidienne" (Denœl, Paris).
- MOLES, A. & ROHMER, E. (1978), "Psychologie de l'espace" (Casterman, Paris).
- MOLES, A. & ROHMER, E. (1985), "Labyrinthes du vécu" (Librairie des Méridiens, Paris).
- NOSCHIS, K. (1983), Fonction symbolique du logement: une analyse de cas, *Information sur les sciences sociales*, 22 (1983) 3, 435-460.
- NOSCHIS, K. (1987), L'usager et sa conception de l'espace domestique dans le dialogue avec l'architecte, *Psychologie Française*, 32 (1987) 1-2, 23-29.
- PERRINJAQUET, R. & AMPHOUX, P. & BASSAND, M. (1986), "Domus 2005, Exploration prospective de l'habiter" (Ecole polytechnique Fédérale de Lausanne - Département d'Architecture, IREC).
- PIAGET, J. (1978), "La formation du symbole" (Delachaux et Niestlé, Paris et Neuchâtel).
- PITROU, A. & BERGOFF, R. & DUPUY, G. & LAVIGNE, J. (1970), "Contribution à une psychologie des comportements urbains, Un nouveau mode d'habitat, les ZUP" (Publication de Recherches Urbaines, Ministère de l'Equipement et du Logement, Paris).
- PROSHANSKY, H.M. & RIVLIN, L.G. & WINKEL, G. (1974), "An introduction to environmental psychology" (Holt, Rinehart & Winston, New York).
- TOGNOLI, J. (1980), Differences in women's and men's responses to domestic space, *Sex Roles*, (1980) 6, 933-892.
- TOGNOLI, J. (1982), The dichotomy of domestic space: Men, women, and the home, *Ventures in Research* (Frank, D. Ed.) (Greenvale, Long Island University).