

SOME IMPLICATIONS OF SOCIAL CHANGE FOR HOUSING DESIGN¹

Deniz KANDİYOTİ

Received February 14, 1977.

There has been a great deal of controversy about the impact of physical planning on the lives and behavior of people, in which social scientists have taken an increasingly active part². As a result, greater user-orientedness and interdisciplinary input into the design process have gained widespread acceptability in the industrialized West. In developing countries the controversy is further complicated by the additional factors of rapid social change and extremely limited resources which curtail the appropriateness of design solutions drastically. It is therefore no accident that one type of response to housing problems in developing countries has been to respect and support spontaneous developments. Thus, Turner has cogently argued that self-selecting occupant-builder communities of the squatter settlement type are both economically and socially most feasible because, among other things, they have the ability to develop with the rhythm of social and economic change, eventually turning into "self-improving suburbs".³ In contrast, official housing policies and projects which telescope the development process by providing minimum modern standards in a non-progressive fashion often do violence to user needs and resources. While the merits of this argument are clear, the weight to be assigned to self-help versus public subsidy remains a debatable issue which raises problems of resource allocation at a broader societal level.⁴ Furthermore, the tenability of this proposition is closely linked to the level of development of the society in question. In Turkey where there is a steady growth of stably employed urbanites in the modern sector of the economy, it is not only the so-called marginal urbanites who are excluded from the official housing market, but also tax-paying blue-collar workers among others, whose social security deductions are in part meant to accrue to them in the form of housing credits. Lack of organizational resources has by and large made them unable to activate the necessary bureaucratic mechanisms to obtain these funds⁵ and a continued reliance on self-help procedures, at considerable personal and social cost, has so far been the rule. There is therefore an increasing awareness of the need for projects that will help channel public housing funds to their intended recipients, namely low-income urbanites.

Such a project, which will be briefly described, was undertaken by the Municipality of Izmit, an industrial town adjacent to Istanbul, which with its three million population is Turkey's largest metropolis. As a social scientist working with a team

1. My thanks are due to the Municipality of Izmit and the Mayor for their active support of the study. I am also greatly indebted to Birleşmiş Mimarlar, the group of architects and planners with whom it was my privilege to co-operate throughout the project.

2. M. BROADY, *Social Theory in Architectural Design, People and Building*, ed. R. Gutman, New York: Basic Books, 1972; H. GANS, *Planning and Social Life, Journal of the American Institute of Planners*, May 1961; *People and Plans*, Middlesex: Penguin Books Ltd., 1972; C. C. COOPER, *Eastern Hill Village: Some Social Implications of Design*, New York: Free Press, 1975; R. GUTMAN, *The Questions Architects Ask, People and Buildings*, ed. R. Gutman, New York: Basic Books, 1972; J. ZEISEL, *Sociology and Architectural Design*, New York: Russel Sage Foundation, 1975.

3. J. F. C. TURNER, *Housing by People*, London: Marion Boyars Publishers Ltd., 1976; *Barriers and Channels for Housing Development in Modernizing Countries, Peasants in Cities*, ed. W. Mangin, Boston: Houghton Mifflin Co., 1970, p. 5.

4. H. HARMS, *Limitations of Self-Help*, *Architectural Design*, v. 46, April 1976.

5. Housing credit is made available through the Social Security Organization to applicants who from their own housing. Co-operatives, can prove legal ownership of a site and can submit their architectural project. Given the high cost of urban land and the managerial skills necessary to found a Co-operative, housing obtained through this channel has so far had a clearly middle-class bias. Typically, the credit extended by the Social Security is able to cover only part of the costs, applicants having to supplement the remainder through their own savings.

of architects and planners, I was given the task of analyzing current use patterns of space in İzmit households, as well as the users' socio-economic background characteristics. This analysis was part of a search for the distinguishing features of potential users' life-styles which were meant to serve as a guide to the design of a planned environment. It did not take long to realize that current patterns could be of only limited value in planning for a population in a rapid process of urban assimilation. Which patterns were merely mechanical adjustments to present material constraints and which the reflection of more resilient cultural tendencies? The more questions of this type one asked, the more sources of uncertainty multiplied, until it became evident that a model of user change, however unrefined, was an essential component of this analysis. The aim of this paper is to discuss the types of uncertainty user change introduces into the planning process and their design implications.

THE SETTING AND THE PROJECT

Izmit which carries Istanbul's heavy industrial overspill is 93 kms. east along a dense coastal industrial strip, and has a population of 165 000 inhabitants. According to 1973 census figures the provinces of Istanbul and Kocaeli (of which İzmit is the center) employ 41% of Turkey's industrial workforce and contain 46% of all industrial enterprises. İzmit has a rapid rate of population growth (%0.39) inflated by a high rate of in-migration. Due to the proximity of Istanbul, on which it depends for its services and the central administration of its industrial firms, it has a relatively restricted service sector. Approximately 40% of its working population is directly involved in industrial production. The present housing stock of the town is composed of a limited number of old buildings, contractor built private blocks, few Workers' Housing Co-operatives and squatter type accommodation. The ratio of squatter housing to the total stock is an estimated 30% which is relatively low compared to metropolitan centers such as Istanbul and Ankara.⁶ This is in part due to the topography of the town which is built against a steep hill with a highway separating it from the industrial plants and the highly polluted waterfront of the İzmit Gulf. High-rise, modern buildings are found along the highway and leave their place increasingly to squatter-type housing and worsening road conditions as one goes up the hill. The hill-top neighbourhoods are of rather difficult access, and there is an unplanned linear growth of squatter housing on the highway between Istanbul and İzmit, occupying expensive industrial land. Meanwhile, housing output within İzmit is slow and appeals to a very restricted middle to high income market.

6. R.KELES, *Urbanization in Turkey*, New York: Ford Foundation, 1972.

In this context, the Municipality of İzmit has initiated a settlement project over a total of 741 hectares of expropriated land on the eastern and western flanks of the town, with a target output of 30 000 dwelling units and related community services to cater for the needs of low-income town-dwellers. The Municipality has taken the role of initiator by providing cheap, expropriated land, helping to obtain the social security housing credit to which 60% of İzmit households are entitled and organizing the design and implementation phases of the project. One of the major contributions of the Municipality, aside from obtaining expropriated land, is to go through the bureaucratic procedure required for the foundation of Housing



Fig. 1 A view from Izmit



Fig. 2 Izmit houses

Co-operatives without which credits cannot be obtained. At this point, the feasibility phase of the project which started in September 1974 is completed and the foundation of the co-operatives is under way. There is a wide variety of planning issues relating to the project, the discussion of which would be beyond the scope of this paper. Our aim, already stated, is to focus rather specifically on a discussion of the problems faced when planning for a population in a rapid process of urban assimilation.

DATA COLLECTION

In order to evaluate current socio-economic and housing standards in Izmit and its coastal strip, a social survey was carried out in October 1974, based on two independent samples. The first was a general household survey of all neighbourhoods

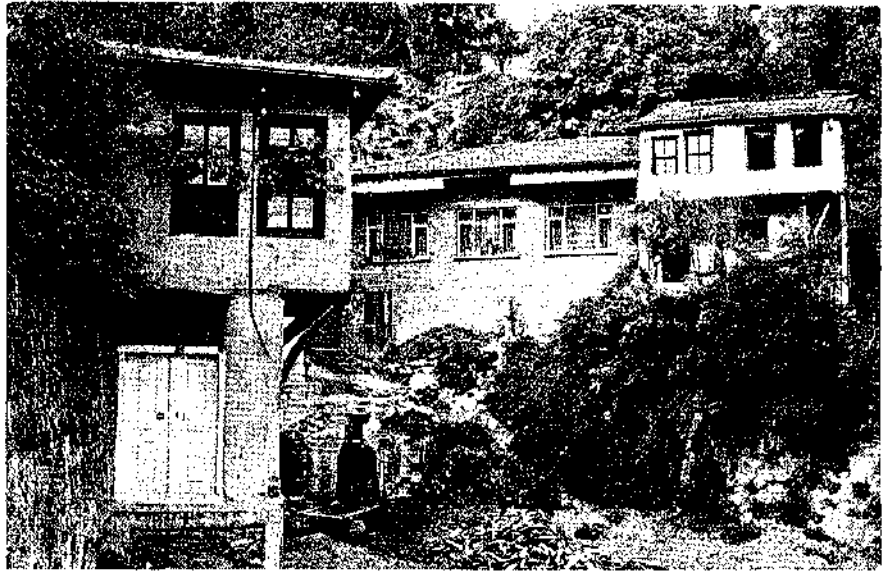


Fig. 3 İzmit houses

within municipal boundaries selected through cluster sampling from a frame of household lists prepared for the 1975 population census. 1000 households were thus selected and a net return of 987 questionnaires was achieved. In addition to a 30 minute interview, the questionnaire involved a Home Observation Schedule where interviewers, mainly architecture students, noted salient features of the housing environment and drew a rough plan of the home visited. The second survey was carried out in industrial firms employing over 100 workers extending from the limit of the İstanbul metropolitan zone to the eastern flank of the İzmit industrial zone, thus adequately covering the industrial strip extending outside municipal boundaries. 500 cases were sampled from a frame covering all firms employing over 100 workers and a net return of 456 cases was obtained. The questionnaire used was the same for both samples, excepting the fact that the Home Observation Schedule could not be administered in workplace interviews. The analysis of the data revealed some interesting uniformities regarding the use of household space among İzmit inhabitants. These uniformities and the socio economic constraints which lend them support need to be discussed in some detail.

CURRENT USE PATTERNS OF HOUSEHOLD SPACE

7. The legal status of the land on which a house is built has ceased to be a strict guide for definition. In older squatter neighborhoods it is possible to find adjacent houses with a totally different legal standing and adjacent neighborhoods with very different levels of public service. Therefore the whole concept of squatter neighborhood is getting harder to define.

Three types of tenure were distinguished among the surveyed households namely, rented accommodation, self-built (*gecekondu*) dwellings and regular owner-occupied accommodation. Given the legal and other difficulties of classifying low-income housing into strictly squatter and other types⁷ the criterion adopted here was to distinguish the dwellings owned and built by the occupants themselves from those rented or bought through other agencies. This distinction is a useful one since it relates directly to the degree of autonomy users had in planning their home, albeit within restricted means. This autonomy is assumed to be maximal in the case of self-built housing. For this reason, and the fact that low-income urbanites are best represented in this category, self-built housing will receive primary attention and serve as our model for prospective users. Numerically, a substantial portion



Fig. 4 Izmit houses

of Izmit dwellings are in this category. 34% of both household and industrial samples live in self-built housing, as against 47% and 51% respectively in the renter category and the smallest percentage in regular owner-occupied accommodation.

The occupational mix of self-built housing in Izmit neighbourhoods is as follows : 43.8% industrial workers, 20,3% small traders and artisans, 16.9% itinerant job holders, 15.8% petty white collar employees and 2.5% small-shop producers. The larger proportion of industrial workers is a function of their overall predominance in the Izmit context. Together with the industrial sample which is composed of production workers only, the self-built housing category very roughly reflects the living conditions of blue-collar workers who are owner occupiers.

Self-built dwellings have an average area of 55 m², varying between 40-80 m², generally made of cement brick. There is some evidence of progressive building since 30% of households report having made additions to the original structure, although many are of a minor nature, like building a shed. Densities are highest in self-built housing and lowest in rented accommodation. This is due to the fact that length of urban residence is systematically related both to owner-occupancy and to larger family sizes so that renters regardless of income, are generally newcomers with smaller families....

(Household sample)			
Number of rooms	%	People/room	Average number of people per household
1	2.1	3.50	3.50
2	18.7	2.28	4.56
3	48.9	1.70	5.11
4	22.1	1.32	5.29
5	4.2	1.18	5.81
6	3.9	1.28	7.73

(Industrial Sample)			
Number of rooms	%	People/room	Average number of people per household
1	2	5.30	5.30
2	22.4	2.36	4.73
3	48.7	1.70	5.10
4	20.4	1.44	5.77
5	3.9	1.23	6.16
6	2.6	1.45	8.75

Table 1. Densities for self-built housing.

8. C. ALEXANDER, et al., note the presence of the family-room in low-income the privacy gradient of the home since it is used by the inner circle of relatives and intimate friends whereas more formal visitors are entertained in the better furnished part called the "sala". (Houses Generated by Patterns, Berkeley: Center for Environmental Structure, University of California, 1969.)

A pervasive characteristic of the houses visited is the multi-functional living-room which serves as a focal point for all the family's activities. This is where meals are eaten, where the stove is set up in the winter, where women mend and iron, where children do their homework and where some sleep at night. This central family room is also typical of rural architecture in Turkey and possibly of low-income housing in a more general way.⁸ As many as 65% of households report that their family room is being used to sleep in, which is not surprising given room densities. Apart from shortage of space, part of the tendency to concentrate a lot of different activities in this room lies in the fact that stoves are only means of heating, and that only one stove is kept running all the time. The stove itself, fed with wood or coal, serves various functions such as warming water or a meal or drying small laundry items, aside from just heating. Another frequently noted feature, is an area referred to as the guest-room (konuk odası). Its presence was reported in 61% of households although it is difficult to assess the extent to which this room is actually closed to the everyday usage of household members. In any case, 92% of respondents mentioned a separate guest-room as a desirable feature when questioned on their plan preferences. The guest-room is where the "better" furniture, generally acquired upon marriage, and other valued belongings of the household are placed and where day and overnight visitors are put up. Some guest-rooms have a fancy bed adorned with cushions alongside the more usual armchair and sofa set. As many as 71% of respondents report that they have out-of-

town guests rather frequently, aside from routine visitors. However, 49% of those who say they never or very rarely entertain also possess a guest-room. It, therefore, seems that there are factors other than the actual volume of visiting reinforcing the existence of such a room. Several house-holds mentioned to keep a clean spot in a house heated with coal or wood and where the common room is relatively unkempt. There is also the need to better furniture from everyday wear and tear and from children. Low purchasing power does not permit the renewal of such furniture easily, so that a rather traditional existence of eating on a floor-table, which is just a flat round board, and sitting on low couches may persist in the living-room despite the existence of "modern" furniture in the guest-room. Certain consumption items vested with social prestige may thus be acquired but remain relatively divorced from the daily existence of users. The extra room also provides the opportunity of age and sex segregation in visiting, so that the men may be entertained separately while the women and children sit in the living-room and the hostess goes in and out with refreshments or food. However, this pattern takes place with relatively large groups of visitors or more formal visits and not, for instance, during after dinner visiting among close neighbors or kin. This type of night visiting is relatively frequent although men often spend their leisure time outside the home, generally in the coffee-house among male friends.

In contrast to the salient usages of the living-room and the guest-room, the permanence of sleeping arrangements and their constancy in space is a secondary matter. Married couples have top priority as regards sleeping privacy and generally possess a stable bed. Nonetheless, up to 37% of children share their parents' bedroom. There are very rarely as many fixed beds as the number of people living in a household. Couches used both to sit and sleep on, and mattresses which are spread out at night and rolled up during the day contribute to the fluidity of sleeping arrangements. Rolled up bedding is generally kept in the corner of the room and a neatly covered up, thus clearing up considerable day living space while creating a minor storage problem. Shortage of space is undoubtedly the most important factor bringing about this pattern. However, the fluidity of household compositions and multi-functionality of the family are further contributory attributes, which require separate attention.

The highest incidence in household composition goes to the nuclear household (66% respectively for household and industrial samples) sheltering a married couple and their unmarried children. 16% and 21% of households in either sample have additions to the nuclear unit in the form of unmarried siblings of either partner, a widowed parent or any other single kin in any combination thereof. These may be referred to as transient extended households. 11% and 12% of households in the two samples respectively shelter two married couples or more, whether this be a father and his married son or two married brothers with their unmarried children. These are patrilineally extended households. There are a small number of fragmented households created by the splitting of the conjugal unit through death, migration and very rarely divorce.

The household compositions described are by no means static. Thus, a nuclear household may transform itself into a transient extended group upon the death of a parent or the arrival of a relative into town. Likewise, a patrilineally extended household may easily split into its different nuclear units if

friction occurs in the families or suitable separate accommodation is found. The transient extended household is less fragile since it provides shelter for aged parents in widowhood, for siblings who have come to study in that locality or kin in search of employment. There is widespread attitudinal acceptance of this role of the household since 57% of the household sample and 61% of the industrial sample gave unqualified acquiescence to harboring such kin. In contrast, attitudes towards keeping fully extended families together are quite unfavorable. 69% of respondents were against married sons remaining in the paternal household. Yet, many newly weds go through a period of extendedness, however, short-lived, before setting up their own nuclear household. This type of joint living is a matter of economic convenience and mitigates the cost of urban living by pooling together more earnings and sharing expenditure, most importantly, housing, an interesting finding is that for first-generation migrants, which constitute 66% of the household and 79% of the industrial sample, length of urban residence is positively related to the formation of non-nuclear household. The longer their period of residence in Izmit the greater the likelihood that they will be living in extended household. This may be a temporary phenomenon in the urban transition process whereby the more established a nuclear unit becomes, the greater its attractiveness to non-urban kin. Since changes in household composition take place within a restricted space, they are necessarily accompanied by flexibility in living and especially sleeping patterns. It is rare indeed that self-built housing is modified to suit the current needs of users, progressive building notwithstanding. The adjustment of users to new spatial constraints is almost always the case. Typically, in the housing environment described here, it is space for children that gets sacrificed first. Only 30% have a separate room to sleep in, 82% do their homework in a crowded living-room and all play out in the street. Space for children is an obviously low priority and only 14% of respondents who were not happy with the amount of room they had, complained they needed more for their children. In more than one respect, households closely conform to descriptions of the adult-centered family encountered in Western working-class sub-cultures.⁹

9. H. GANS, *The Urban Villagers*, New York: Free Press, 1962.

Outdoor space, whether in the form of a small garden or front-door area or a yard, is put to multiple uses which help to alleviate indoor congestion. Storage of heating fuel, laundering and drying clothes, children's play, more rarely, keeping animals and sitting out are the most readily observable uses of these areas which are crowded but not necessarily unkempt. There are no areas requiring collective maintenance and space is very rarely shared with neighbors so that there is no habit of common responsibility.

10. The scale has a coefficient of reproducibility of .95 and a coefficient of scalability of .79.

Amenities within households are of variable equality. They form a Guttman scale pattern¹⁰ ranging from the possession of a shower (35%) as the rarest item, through having running water in the house (68%), having a bathroom (82%) and having a separate kitchen (86%). The kitchen is generally a small room or partitioned area containing little else than a gas-ring and some open shelves for pots and pans. There is no sink in households where water is obtained from the communal tap. The bathroom may vary from a completely unequipped space to a room with a wash basin and water heating facilities. 97% of households have separate toilets, but only 13% are Western style, the rest

being of the traditional Turkish type.

As a rule, savings go to the purchase of major household appliances such as refrigerators or televisions rather than improvements in housing quality which requires both a greater capital outlay and in some instances the co-operation of extra domestic agencies such as the Municipality for the provision of public services. The consumer durables possessed also follow a Guttman scale pattern¹¹ and are shown in Table 2 in decreasing order of rarity :

11. The coefficients of reproducibility are .91 and .89 for the two examples respectively.

	Household Yes %	Sample No %	Industrial Yes %	Sample No %
Car	6	94	3	97
Oven	29	71	25	75
Washing machine	30	70	26	74
Television	37	63	32	68
Refrigerator	57	43	58	42
Living-room set (sofa and armchairs)	57	43	60	40
Rug	71	29	65	35
Radio	88	12	87	13

Table 2. The consumer durables possessed.

There is nonetheless a high overall correlation (.46, sig. < .001) between the possession of consumer durables and housing quality as defined previously by the level of amenities, which suggests that the purchase of consumer goods is keeping pace at least with the most minimal housing standards.

A finding which has serious implications is the relatively high level of home production of starchy foods and preserves, as well as gifts of food from places of origin, as opposed to shopping from stores. Home production of pickles, tomato-paste and hoodle-type foods is well above 50%; even crushed wheat is homemade or received from villages by 32% of households. The seasonal production of these foods requires their storage in large quantities, which adds to the already heavy storage load created by extra bedding, clothes and heating fuel. The level of home production is unrelated to income, housing quality, the possession of modern appliances or length of urban residence, except for the industrial sample where there is a significant inverse relationship. This pattern has economic advantages, indicates continuing links with places of origin but also shows that modern shopping and storage habits cannot be taken for granted for this population.

The overall features of the housing environment outlined, display variations according to the demographic composition and purchasing power of households. On the whole, they exhibit more common properties than differences; a minimal amount of specialization in space with the possible exception of the guest-room, flexible sleeping arrangements, no spatial recognition of children's activities, and an intensive use of private outdoor space.

SOURCES OF UNCERTAINTY IN PLANNING : WHAT IS LIKELY TO CHANGE AND AT WHAT RATE

It has often been suggested that user needs cannot be assessed

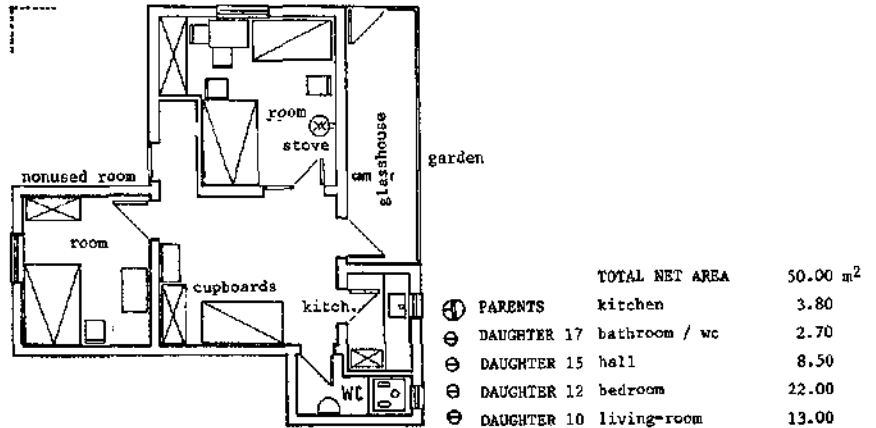


Fig. 5 A typical dwelling and household composition

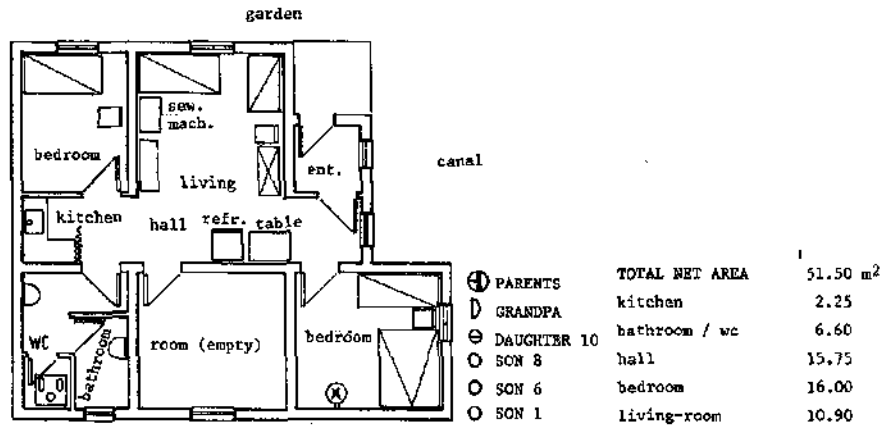


Fig. 6 A typical dwelling and household composition

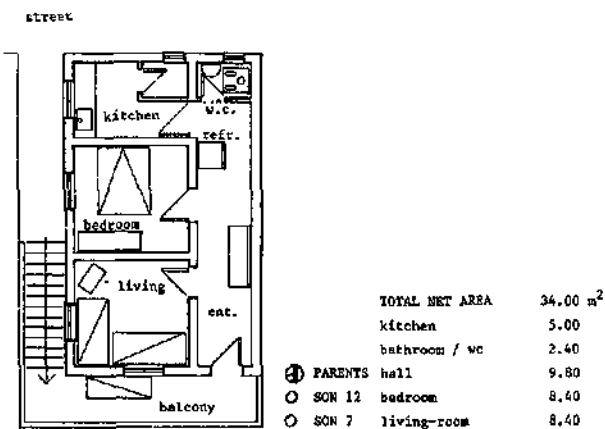


Fig. 7 A typical dwelling and household composition

12. J. ZEISEL, *Symbolic Meaning of Space and the Physical Dimension of Social Relations: A Case Study of Sociological Research as the Basis of Architectural Planning*, *Cities in Change*, eds. J. Walton and D. Carns, Boston: Allyn and Bacon, 1973.

without taking into account the latent functions of objects and spaces as well as their symbolic meaning for the user. Zeisel has pointed out that while architects define spaces and objects in terms of the manifest, utilitarian functions they serve, they often fail to take into account their social and symbolic functions.¹² Thus, he finds that windows in Eastern Harlem are not just openings to let in air and light but observation posts and communication links with the street. Likewise, the kitchen is

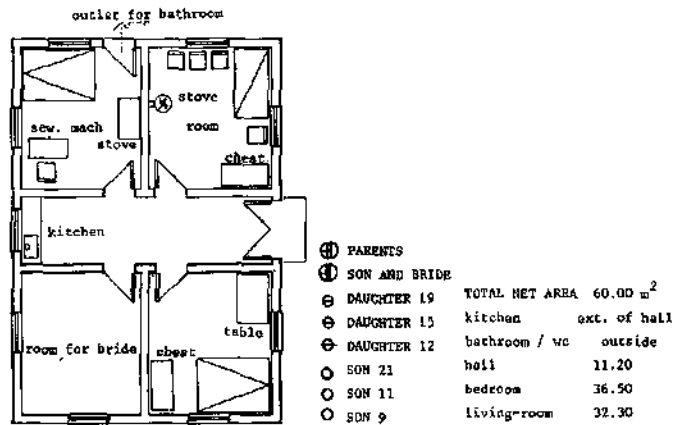


Fig. 8 A typical dwelling and household composition

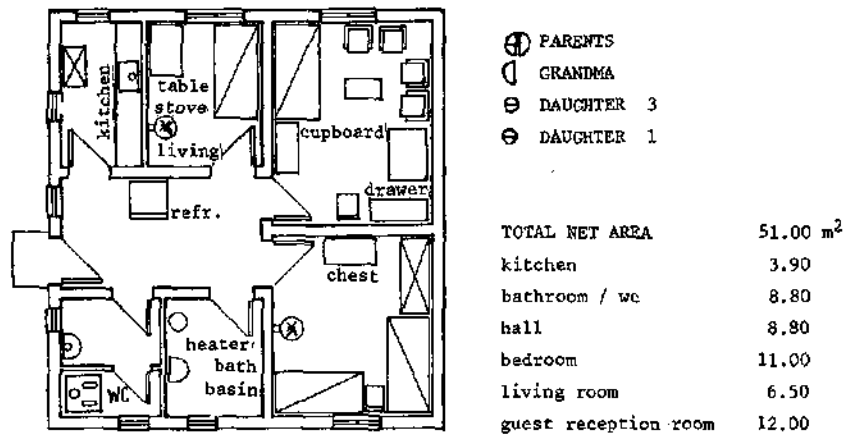


Fig. 9 A typical dwelling and household composition

where a housewife may exhibit her prowess, and an extra room allowing for age or sex segregated gatherings.

The problem however, remains of assessing the permanence of such functions and meanings, since accepting them as everlasting, fixed user attributes may be as misleading as ignoring them.

Returning to our Izmit users, it is quite apparent that different components of their life style are changing at different speeds, producing important consequences in terms of tastes and uses of space. The material culture of industrialized countries is making a rapid entrance into their lives in the form of consumer goods such as televisions, refrigerators and washing machines. Their purchasing power which permits the acquisition of such appliances however falls short of integrating them into an organized housing market. As for their family structure and life-ways, these are keeping pace with the slower process of urban assimilation.

The critical question from a design point of view is whether current patterns will exhibit differential resistance to change in a new, planned environment. If so, it is crucial to know which aspects can be easily modified and which will have more staying power.

It is, therefore, necessary to reassess current uses of household

space in terms of their probable evolution through time and in a planned environment.

It was already noted that the use of an all-purpose living area was bolstered by several factors, like lack of space and the use of a central stove as a means of heating. Under these conditions, it is practical for diverse activities such as homework, ironing, peeling vegetables, sewing, eating and sitting to take place in the same room. A question that comes to mind, is whether the provision of more space and a central heating system, foreseen in the projected housing scheme, would weaken this intensive common usage and open up areas for more specialized use. Children doing their homework in a separate, quieter room and women carrying out their household chores in a more spacious kitchen or workroom are some examples that come to mind. While the provision of more space and a central heating system may in theory encourage centrifugal tendencies, it is doubtful whether this can take place in the short-run. There is an ingrained pattern of family socializing which does not encourage the seeking of individual privacy so that for instance a child requested to study in his room away from the action, may feel penalized. Also, as a result of low purchasing power, it is not only the users' rooms that are multifunctional but their furniture as well. Typically, there is only one table available on which to eat, write, iron or sew. From a simple economic point of view, it will take some time for the ironing-board, child's desk and dinner table to appear as separate items. Therefore, providing some basic comforts such as central heating and increased space will not bring about an immediate change, but will help a transition to different usages when the users are ready for it.

The lack of specialized, fixed furnishing referred to above finds its most visible expression in both outdoor and indoor storage. The whole dwelling is taken over by disorganized storage of food clothes, and extra bedding. Households have one wardrobe at most and no kitchen storage facilities aside from a few open shelves. As a result, wardrobe tops, room corners, areas under the beds and all outdoor areas are used for one type of storage or another. The provision of built-in storage facilities at very little cost to users can go a long way in modifying the current congested pattern as regards the storage of clothes and extra bedding. Likewise, fuel storage is bound to become obsolete in a centrally heated environment. However patterns of food storage remain more problematic. Where daily or weekly shopping habits predominate, a refrigerator and kitchen cupboard can generally suffice. However, as discussed previously a considerable number of households store seasonally, in larger quantities. The durability of seasonal storage patterns is difficult to assess. The fact, that they fit in with dietary habits and have economic side benefits, lends them a greater resilience than other types of storage. If this need were catered for, its modification in the long run would probably not result in loss of space since foodstuffs will in all likelihood be replaced by an increasing volume of household detergents and other cleaning equipment.

A further noteworthy feature of current patterns was the singling out of the guest-room as a specialized area in contrast to the functional undifferentiation of the rest of the dwelling. It was argued that alongside the actual entertaining of guests, it is better furniture and other valued exhibits which give this room special status. It is difficult to assess the extent to which a guest-room actually maintains its specialized function in

crowded surroundings. If the guest-room were an indispensable area, its appearance would be independent of the number of rooms available except at the lowest extreme.

Table 3 shows the correlation between the possession of a guest room, the number of rooms available, the number of people in the household and household composition.

	(1)	(2)	(3)	(4)
Guest-room	(1)	.38 .39 xxxx	.02 .10	.00 .00
Number of rooms	(2)		.28 .19 xxxx	.25 .21 xxxx
Household size	(3)			.46 .44 xxxx
Household (composition ranked from nuclear to extended)	(4)			

Table 3. Shows the correlation between the possession of a guest room, the number of rooms available, the number of people in the household and household composition.

(Kendall's tau correlation coefficient xxxx p < .001)

N.B. The top coefficients apply to the household sample, the bottom ones to the industrial sample.

There is a significant relationship between the number of rooms available and the possession of a guest room, which becomes somewhat stronger (.41, p < .001) when household size and composition are both controlled. This suggests that this room is renounced below a certain threshold. The threshold value is estimated as three rooms. Interestingly, above the three-room level, changes in size and composition of the household have relatively little determining effect, as can be judged by the limited effect of the controls. Since the modal dwelling size is a three room one, with an average household size of 5.1, most households are at the choice point and evidently a large number decide in favour of having a guest room. There is, however a lot of reason to believe that the duality between the living area and the guest-room will gradually melt away. One of the most important determinants in fusing together daily living and entertainment is the rapid entrance of television in a non-segregated fashion, bringing together men, women and children, the old and the young. Increased purchasing power is also expected to eliminate the gap between guest-room furnishings and the rest of the house, while central heating will minimize the importance of closed doors. Nonetheless, judging from middle class homes, it is difficult to deny that the guest-room retains an obvious "social façade" value. This is evidenced by the considerable effort some households will put into maintaining this separate room in the face of congestion. The concern over keeping a more "formal" spot in the home does not appear to correspond to a privacy need, whereby more formal contacts are not allowed to penetrate into the inner family

13. G. ALEXANDER, et al., *Houses Generated by Patterns*, Berkeley: Center for Environmental Structure, University of California, 1969.

circle¹³, but rather to a tendency to put one's status on permanent exhibition. In a way, a household's respectability and standing is assessed by the number and type of exhibits in the guest-room. The extent to which low-income urbanites will emulate this middle-class pattern or whether they develop different styles remains an open question, and therefore an area of uncertainty.

14. W. MICHELSON, *Man and His Urban Environment*, Reading, Mass.: Addison-Wesley Publishing Co. Inc., 1970.

So far, current usages have been evaluated mainly as adjustments to the material constraints of the present housing environment and to restricted purchasing power. It is evident that the removal of certain material constraints, like the transition to running water in the house and to a more modern heating system, will eliminate some of the present problems immediately, such as the necessity to carry and store water and heating fuel. Likewise, higher purchasing power will permit the acquisition of more specialized furniture, which will in turn at least potentially individuate room usages. There are however further dimensions, the evolution of which may not be as rapid as adjustments to a higher level of technology or to a higher purchasing power. One of those is the pace at which household compositions will change in the direction of the already pervasive nuclear family. In industrialized societies, the only type of family change that is generally acknowledged for planning purposes is the domestic cycle of this model in developing countries, since household configuration of the nuclear family.¹⁴ There are limitations to the applicability of this model due to the domestic cycle but also to lateral expansion due to the addition of non-nuclear family kin. It may well be argued that a new housing development may give couples the opportunity to use their housing credit and split off into conjugal units, thus reinforcing the already high potential for the formation of nuclear units. This is probably quite true of the two-family or two-generation extended household which is held together rather tenuously. Even when ties are very strong living close to parents is generally preferred to living with them. However, the same logic does not apply to transient extended households since care for the aged and shelter for non-urban kin are still perceived as compelling obligations. It is unlikely that the proportion of transient extended households will ever exceed 15-20% of households which is their present level of incidence. There should, if anything, be a gradual decrease as the process of urbanization advances and secondary institutions start sharing part of the burden. It is, however, very difficult to predict the rate at which these developments will take place. In these circumstances, there is a wider margin of uncertainty so that the exactness with which housing needs are catered for is necessarily, though unwittingly, impaired.

A further area of relative uncertainty is whether the adult-centered family of the present will eventually become more oriented to children's needs. Evidence from industrialized countries suggests that adult-centeredness is a relatively permanent distinguishing feature of working-class subcultures. Whether or not a similar subcultural phenomenon occurs in Turkey it is safe to assume that child-orientation will not come about in the short run. It is enough to note that children's furniture and more sophisticated play items are relatively novel even for the wealthier middle-class. The chances of misuse of space planned specifically for children are therefore highest.

The provision of private outdoor space will retain its attractiveness for a population which has long used its yard

or front-door area as an extension of the home. However, the emphasis should remain on private space since there is no habit of common maintenance of semipublic or public space.

CONCLUSION

Our discussion has probably raised more questions than it has answered and the design implications emerge only at a very crude, general level. Then again, this should not be surprising if we remind ourselves that our focus is on sources of uncertainty in planning for a population undergoing rapid social change. Ultimately, the resilience or transitoriness of current use patterns seems to depend on the types of determinants underlying them. A crude guide to the nature of these determinants can be found in the amount of choice or discretion the individual has in reaching a spatial decision. It can be assumed that the greater the individual's discretion, the more his choices will reflect deeper cultural tendencies rather than mechanical adjustments to current constraints. According to that assumption, the adjustments to no indoor running water have a different order of determination than the allocation of the guest-room function to a room which could just as easily serve another purpose. This is an obviously simplifying assumption since any spatial usage may depend upon factors at more than one level of determination, most decisions being the outcome of compromises between constraints and cultural ideals, which are themselves in a state of flux. Furthermore, the poorer the environment the harder it gets to draw the line since the lack of material resources and sheer shortage of space restrict the amount of choice or alternatives greatly. The search for universals and dependable user attributes within this context must therefore be approached warily.

After acknowledging the shortcomings of architectural determinism planners have turned to social scientists for guidance in the realm of user attributes and needs. While this change has had a welcome corrective influence, it has created a new danger, namely the reification of user attributes and their treatment as *sui generis*, irreducible properties. The correct identification of these properties and their translation into design solutions is often considered as the ultimate goal, all shortcomings following these attempts being traced to faulty or incomplete identification. The limitations of this approach are nowhere more apparent than in developing countries where the need to identify directions of change far outweighs that of the synchronic analysis of user attributes. If our discussion has been able to draw sufficient attention to this neglected aspect of planning, it will have served its purpose.

TOPLUMSAL DEĞİŞMENİN KONUT PLANLAMASINA ETKİLERİ

ÖZET

Bu yazının amacı, İzmit Belediyesince destelenen bir konut yerleşme projesi çerçevesinde, kentle hızlı bir bütünleşme sürecinde olan bir nüfusun konut planlaması sorunlarına eğilmektir. Veriler 1974'te İzmit Belediye sınırları içinde yapılmış bir hanehalkı anketi ile, Çayırova-Köseköy arasındaki sahil şeridinde 100 işçiden fazlasını çalıştıran işyerlerinden bir örneklem üzerinde yürütülmüş bir işyeri anketi aracılığıyla toplanmıştır. Sonuçlar, İzmit hanehalklarının, özellikle kendi evini kendi yapan kesimde, işlevsel farklılaşması çok düşük, yoğun mekânlarda yaşadığını göstermiştir. Bu işlev sıklığı her ne kadar yer darlığı ve nüfus yoğunluğunun kaçınılmaz bir sonucuysa da kısıtlı mekânı kullanmada belirli bir yeğleme sıralaması göze çarpmaktadır. Çocuklar için özelleşmiş mekânlar ile sabit bir yatma düzeni en vazgeçilir unsurlar durumundayken, çok işlevli oturma odası ve konuk odası daha kalıcı kullanımlar gibi görünmektedir. Bir yeni yerleşme için konut planlaması söz konusu olunca bu nüfus açısından bazı kaçınılmaz belirsizlik kaynakları ortaya çıkmaktadır. Şöyle ki, daha geniş ve farklılaşmış mekânların öngörülmesi halinde, kullanıcının yaşam düzeyi aynı ölçüde farklılaşmış bir donatıya yol açmadığı takdirde, eski kullanım tarzları fazla değişmeyecektir. Daha da önemlisi, kentle bütünleşme sürecini yansıtmaya esnek hane bileşimlerinin hangi zaman boyutları içinde değişeceği, ve evi içi yaşantıda "yetişkinliğe yönelik" tutumların ne ölçüde hakim olmaya devam edeceği de belirsizlik yaratan konulardır.

BIBLIOGRAPHY

- ALEXANDER, C. et al. *Houses Generated by Patterns*. Center for Environmental Structure, University of California, 1969.
- BROADY, M. *Social Theory in Architectural Design. People and Buildings*, ed R. Gutman, New York: Basic Books, 1972.
- COOPER, C. C. *Easter Hill Village: Some Social Implications of Design*. New York: Free Press, 1975.
- GANS, H. *Planning and Social Life. Journal of the American Institute of Planners*, May 1961.
People and Plans. Middlesex: Penguin Books Ltd., 1972.
The Urban Villagers. New York: Free Press, 1962.
- GUTMAN, R. *The Question Architects Ask. People and Buildings*, ed R. Gutman, New York: Basic Books, 1972.
- HARMS, H. *Limitations of Self Help. Architectural Design*, v.46, April 1976.
- KELEŞ, R. *Urbanization in Turkey*. New York: Ford Foundation, 1972.

MICHELSON, W. *Man and His Urban Environment*. Reading, Mass.: Addison-Wesley Publishing Co. Inc., 1970.

TURNER, J.F.C. *Housing by People*. London: Marion Boyars Publishers Ltd., 1976.
Barriers and Channels for Housing Development in Modernizing Countries. *Peasants and Cities*, ed. W. Mangin, Boston: Houghton Mifflin Co., 1970, p.5.

ZEISEL, J. Symbolic Meaning of Space and the Physical Dimension of Social Relations: A Case Study of Sociological Research as the basis of Architectural Planning. *Cities in Change*, eds. J. Walon and D. Carns, Boston: Allyn and Bacon, 1973.
Sociology and Architectural Design. New York: Russel Sage Foundation, 1975.

