

Residential Modification as a Mode of Self-Expression

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Abstract. Residents of university-owned married student housing were surveyed regarding their interest and activity in making changes to the exterior of their townhouse apartments. Of the five domains of self-expression that emerged, two related directly to making changes: one for the individual, the other as an expression of one's self for others to notice. Two other domains related to social concerns: one, child oriented, the other related to adult interaction patterns. The need for contact with nature and the outdoors was expressed in an independent Gardening dimension. The physical layout of the housing complex had pervasive relationships to these dimensions: apartments facing the woods were judged far more desirable and enjoyed greater amounts of modification than those facing more public spaces which were, ironically, in greater need of privacy-enhancing changes. Several design criteria emerge from these results. Furthermore, regardless of how well housing areas are designed and landscaped, the residents themselves appreciate opportunities to modify their environment to suit their varying needs and interests.

Knowledge about how physical aspects of housing contribute to an attitude of satisfaction should aid the designer in better meeting the needs of people for whom he is planning environments. The construction of medium and high density, low rise housing is steadily increasing, and promises to be more prevalent as economic conditions make the single family dwelling out of reach for larger numbers of the population. Cartoons in the "New Yorker" have poked fun at the featureless tract housing and the hapless husbands forever getting lost in a maze of sameness. Lack of individuality and variation is even more apparent in high density housing complexes where units or modules are repeated time and again.

The right to do as one pleases with one's home is a traditional privilege of home owners. Fencing in the back yard, lining the drive with evergreens, painting the shutters a different color, or adding a recreation room have always been the owner's prerogative. For the tenant the situation is quite different. Without the alternatives open to him by ownership, he is greatly limited in the extent of changes he can make to his dwelling.

Some of the university-owned student housing complexes in Ann Arbor provide an interesting contradiction to this traditional situation of the tenant. Here the residents are allowed considerable latitude in what is permissible in terms of modifying one's dwelling. A large percentage of the residents have taken this opportunity, and even gone far beyond, in making changes to both the interior and exterior of their apartments. The purpose of the study described here was to gain an understanding for the reasons for these modifications, particularly the changes made to the exteriors of these rented homes. If it can be shown that such changes express a demonstrable source of

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satisfaction for the tenants, then perhaps physical settings can be planned to accommodate people's desires.

The initial phases of the study involved observation of changes that were being made and informal discussions about them. Subsequently, a structured questionnaire was used and a sample of residents at a particular housing complex were asked about their perception of the regulations, about their social activities, the changes they had made, and the importance they placed on a variety of psychological/personal factors relating to housing. It was anticipated that certain physical characteristics of the complex -- site arrangement, for example -- would interact with the changes that were made. It was also expected that families with young children would express needs for changes reflecting the specific needs of their children.

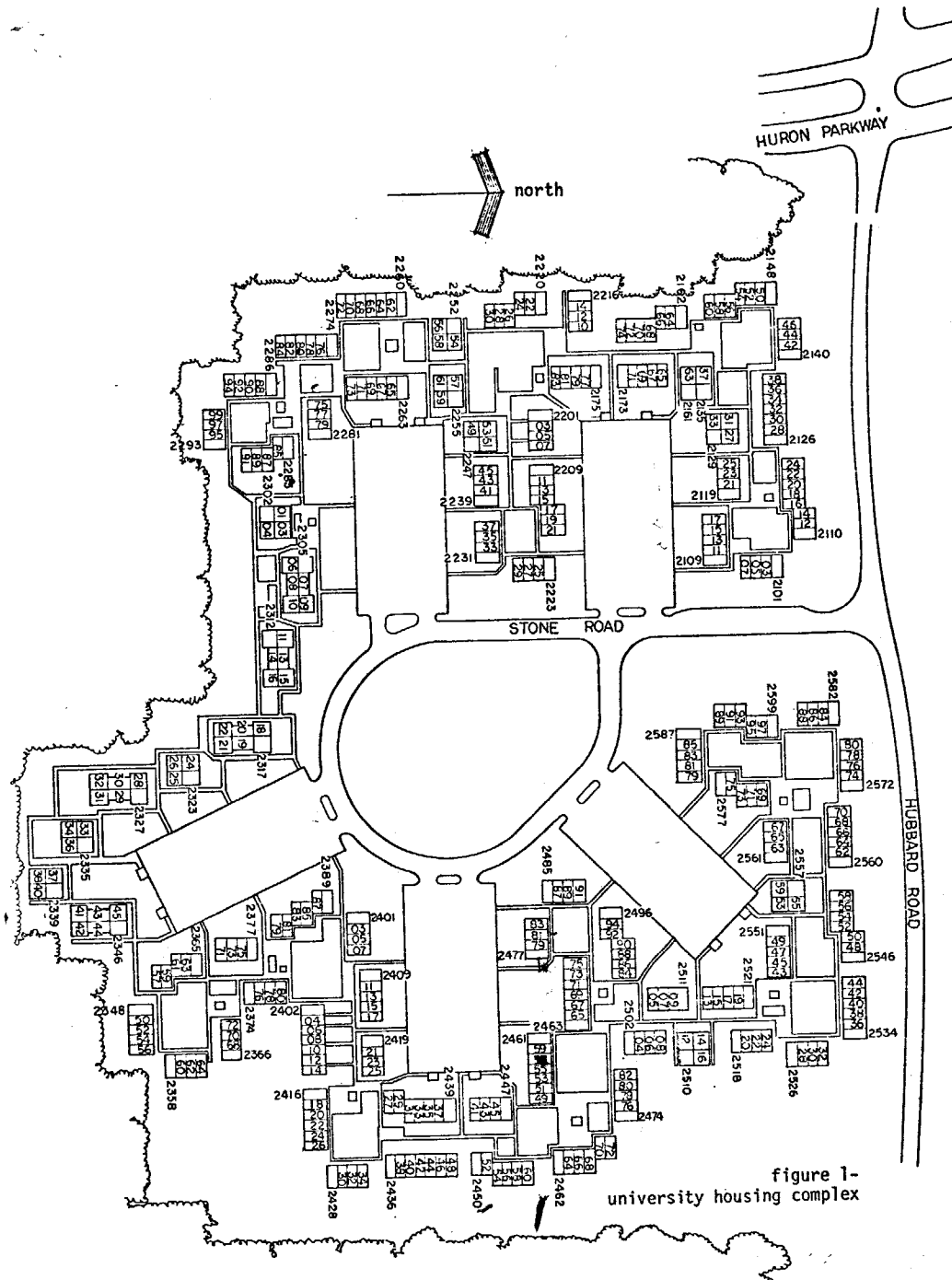
Setting and sample

The setting for the study was a university-owned housing complex which opened for occupancy in the summer of 1972 and has about 400 dwelling units. The majority of the apartments are two level townhouses with unfinished basements. The predominant apartment type is a two bedroom unit occurring in five- and seven-unit rows; three bedroom units are available at the ends. The complex is served by a central loop road with parking lots radiating from it. The housing units then wind around and between these lots following a principal walking path which is roughly concentric with the road. The entire complex is surrounded by woods on three sides and a city street on the north. Figure 1 shows the site arrangement.

Thirty-six married couples, both husbands and wives, completed the questionnaire. Their ages ranged between 21 and 40 years with over 80% between 21 and 30. Three of the couples were childless, and eight had two or more children. At least one spouse of each couple was enrolled at the University of Michigan, and the majority of these were graduate students. In summary, the sample consisted of student families with young children.

In soliciting participants, an effort was made to sample residents as a function of the location of their apartment. About half the couples lived in an "end apartment," while the other half lived in a "middle apartment." The view from the apartment was also considered in the sampling procedure, with about one-third of the units facing the road, one-third facing a parking lot, and one-third facing the woods. While the selection of participants was not made on a truly random basis, it was also not approached in a systematic fashion. An appointment was made when the husband and wife could complete the questionnaire at the same time, at their convenience. About a third of the interviews were conducted by one of us (RKM), a resident of the housing complex, and the remaining interviews were done by an assistant who does not live in these units. The interviews were all held early in the summer of 1973; generally, the couples had lived in their apartments for several months by then.

While there is of course a sense in which a husband and wife are not independent "units" with respect to some of the issues covered in this study, they are treated here as 72 people, and not 36 couples. Each person completed a



separate questionnaire, independently of the other. Not infrequently, responses one spouse made were surprising to the other one -- and quite generally their views were notably different. This is not unreasonable. It is quite a different place to one who spends most of the time there, especially in the presence of young children, than for the person who is away many hours a day. Neighbors too play a different role depending on how much time one is at home, the ages of children, etc.

The questionnaire

The investigation began informally with a pictorial survey of the extent of type of modification being done, and with many conversations around the kitchen box and in living rooms of friends about the modifications in their neighborhoods. As the residents offered their explanations about why people choose to change the appearance of their apartment, or choose not to modify it, some factors were repeatedly mentioned. These became the major areas to be tapped by the questionnaire, which included the following themes:

- Administrative limitations - attitudes towards the role of the University's regulations in inhibiting or encouraging the residents to modify their homes. How were these regulations being interpreted, and did the residents think of their changes as excessive or within the bounds of the rules?

- Physical conditions - satisfaction with the arrangement of buildings, the placement of parking lots, and the layout of the walking paths.

- Social interaction - role of neighbors in influencing the decision to make changes, and social patterns of visiting.

- Manipulation - items dealing with the kinds of and degree of changes that had been made.

- Psychological factors - included questions related to privacy, desirability of making changes, and self expression through the effectance of changes.

The questionnaire was about 5 pages in length and generally took about 45 minutes to complete. Except for some background questions at the end, the format called for a response on a 5-point scale with both ends labeled. Some of these were phrased in terms of frequency (seldom...often), some in terms of importance (unimportant...very important), some in terms of adequacy (poor...excellent), and so on. Most of the questions had a common stem followed by three or more items, each of which called for a response. For example, one question read: "How important are the following to your doing things to the exterior of your apartment?" Among the ten items for this question were the following: "like to see things grow," "looking for diversion," "want to make things neat and orderly," etc.

Dimensions of self expression

Those portions of the questionnaire dealing with social interaction, manipulation, and psychological factors were subjected to two different dimensional analyses. These two methods are the Guttman-Lingoes Smallest Space Analysis III, a nonmetric factor analysis (Lingoes, 1972) and ICLUST, a hierarchical cluster analysis (Kulik, Revelle and Kulik, 1970). As Kaplan (1972; 1974) has noted, the use of two procedures with the same set of data permits the

researcher to gain a more complete understanding of the results. Because both methods do not yield identical results the dimensions underlying the questionnaire data are not rigidly specifiable. Rather a flexible approach was adopted, whereby some of the dimensions were composed according to factor loadings from SSA-III, while others were defined in terms of ICLUST output. (The rationale for this procedure and related comments dealing with a strategy for dimensional analyses is included as an appendix to this paper.)

While the questionnaire was constructed with respect to kinds of information that might explain people's modifying their environment, the purpose of the dimensional analyses is to find groupings of variables based on common response patterns. In fact, these procedures yielded five dimensions and these did not completely match the a priori expectations. Each of the dimensions is listed in Table 1. Included there are the items which comprise the dimension, as well as the alpha coefficient of internal consistency. A brief verbal description of each dimension is provided here:

-Manipulation and change - A person scoring high on this dimension would be someone who is impatient with leaving things unchanged. Such a person has an interest in visual attributes of his living environment. Planning and anticipating changes will occur for the sake of variety. Manipulation is seen as something done to enhance one's home and make it more desirable, without necessarily making it attractive to others.

-Impression - While there is some similarity between this dimension and the previous one (a correlation of .63 between them suggests that they deal with overlapping issues), they have a major distinction. High scorers on the "manipulation and change" dimension appear to be interested in changing their home for their own satisfaction, while high scorers on this dimension have a principal concern for the impression their modifications have on others. They think of the changes they make as communicating information about themselves. When modifications take on this kind of significance in portraying the life style and value system of the resident, the manipulation becomes more self-conscious and studied.

-Children - A high score on this dimension indicates a strong concern for the needs of one's children. Evaluation of the living spaces of the complex is tempered by considerations of children. Social involvement with neighbors, as well as changes planned for the home are influenced by the age, number and unique requirements of children.

-Social interaction - Activity and involvement with others is the characteristic of residents scoring high on this dimension. They form friendships with people living close by and seek out those with common interests. High scorers on this dimension indicate a concern for social spaces for adults in the planning of the complex. They often build patios and add lawn furniture in an apparent effort to accommodate their own social activities. The fact that both this dimension and the previous ones have a social component is reflected in the correlation of .46 between them.

-Gardening - This dimension indicates high activity in flower and vegetable planting; working outdoors and pleasure at seeing things grow are all important to residents with high scores on this dimension. Scores on this dimension correlated .49 with the Social interaction dimension, suggesting that the interest in gardening had a social component.

With the few exceptions noted, these five dimensions are independent of each other. Even in the cases where correlations (greater than .40) were found,

Table 1

Description of Six Dimensions

Manipulation and Change (alpha = .76)

Importance of the appearance of one's home in planning changes
Importance of homeyness as a characteristic of one's home
Frequency of boredom with one's home
Like to rearrange furnishings
Like to think about making changes
Have difficult accepting given living conditions
Making things beautiful is an incentive to modifying my home
Being creative is a reason for making changes

Impression (alpha = .73)

My apartment should have a unique appearance
I am concerned with the impression my apartment makes on others
The appearance of my apartment should reflect my lifestyle
Impression on others is an important consideration in making changes
Making things neat is important

Children (alpha = .76)

Children playing together was a factor in becoming friends
Overall evaluation as a place to raise children
Needs of children are an important consideration in planning changes
In warm weather my children play outside, but within sight
Adequacy of the housing in terms of play spaces for children
Being with my children is a reason for working at outside improvements

Social interaction (alpha = .48)

Living close to my neighbors was important in becoming acquainted
Common interests helped form friendships
Adequacy of the complex is providing social spaces for adults
Consult with neighbors for advice when planning changes
How often do you notice changes made by others
Added lawn furniture to my yard
Have built patios

Gardening (alpha = .75)

Like seeing things grow
Being outside is enjoyable
Have planted flowers
Have planted shrubs

they account for only a small amount of common variance. This suggests that for different residents these various modes of self-expression are of varying degrees of importance. By assigning each resident a score on each of the dimensions (equal weighting of the items comprising the dimension), one can determine some of the factors that relate to these differences. The results described in the next portion of the paper are based on analyses of variance where the dimension scores are used as dependent variables. (Only relationships significant at $p \leq .05$ are included in this discussion.)

Overall satisfaction

The question dealing with general satisfaction with the housing complex was found to be related to two dimensions: Social interaction and Children. It is possible that satisfaction with family and group involvement is least dependent on the physical site characteristics. On the other hand, approval of the appearance and architectural character of the housing complex was also greatest for those residents scoring high on these more social dimensions. Whether the physical characteristics were in fact more suitable for social and familial interaction patterns or whether people who tend to be more easily satisfied are also more social -- the present data cannot reveal.

Housing regulations

While the university policy is not as restrictive as is common in rental housing, there are nonetheless regulations about permitted modifications. The question dealing with the residents' perception of the restrictiveness of these rules indicated that some groups found them more bothersome. In particular, it was the residents who tended to score highest on three of the dimensions: Manipulation and Change, Gardening, and Impression who expressed strongest unhappiness about the regulations. Viewed in conjunction with the "general satisfaction" results above, it would seem that the more socially oriented self-expressions require fewer changes of a physical sort and the rules thus impose fewer barriers. For those people who enjoy making changes, either as expressions of their selves to others or for more intrinsic reasons, the regulations are more evident and limiting.

Social influences - neighborhood

Residents of the complex often commented on the variation in appearance of localities within the complex. Some areas seemed to have more flower gardens; the clutter of children's toys were more evident in some others. Based on the numbering scheme of the units (roughly corresponding to the distribution around major courts), a "neighborhood" index was developed to check out these hunches. It was found that high scorers on the Gardening dimension were more prevalent in some of the neighborhoods. While it is observable that certain areas have placed more effort on planting and landscaping, it is encouraging that the responses to the Gardening dimension corroborate these observations.

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Site arrangement

While apartments were assigned on an arbitrary, if not perfectly random basis, certain locations within the complex were highly favored in comparison with others. The view from one's apartment seems to make a pervasive difference.

Units facing parking lots, play courts, or fronting on busy walks were considered less desirable and were less likely to be modified. It was the apartments whose glass doors faced the woods that were judged most desirable, especially if one were interested in making modifications. While these opinions are in themselves not surprising, their relation to the issue of modification is revealing. The residents whose apartments in fact did face the woods (whether in an end or middle unit) scored dramatically higher on both Social Interaction and Gardening. It was these apartments, and those which had partially enclosed yards due to a setback in a row of apartments, that were most likely to have some form of exterior modification.

Gardening was the most common type of modification attempted by the residents. The Gardening dimension was related to the issue of location, and gardens appeared with greater frequency on the sides of buildings which are away from public view. Many other modifications involved attempts at increasing privacy. The residents whose units permitted the greatest degree of privacy, the ones facing the woods, were the ones who supplemented their advantage. Data from the questionnaire seem to indicate that frequently the loss of privacy due to apartment location or orientation constrained residents from modifying their living environment. This is to say that those residents whose privacy was most compromised due to proximity of neighbors, walks, or visual accessibility were less likely to attempt changes, when their situation would have most benefited from some modifications.

Discussion

A major finding of this study was the importance residents placed on the possibility of modifying their living environment. This was supported both by the dimensions themselves and by the relationships between various indices and the dimensions. Reasons for making changes to one's dwelling have been found to go far beyond expeditious or practical solutions to immediate problems such as controlling children or having a place to sit. The dimensions themselves help explain the feelings and preferences involved in the opportunities to make changes in the residence.

Modification for the sake of variety and change was an anticipated outcome of this study. The obtained dimensions shed additional light on this finding. Two separable incentives were found which prompt residents to modify their living space and which may be distinguished in terms of altering things for self satisfaction, or making changes that are directed at others. The Modification and change dimension seems more self-directed; the Impression dimension, by contrast, indicates that changes may also be made explicitly to be noticed by others. Because of the person's self image and the desire to portray it, he plans and executes modifications that he believes tell something about himself, his life style, or that he simply values order and "neatness."

Two dimensions emerged which deal with social variables, one having to do with the fostering of children, and the other with the activities of adults. The two dimensions suggest different requirements and concerns. In the case of children it is a requirement of safe play spaces, or situations for family activity. For adults the concern is with places for social contact, and perhaps for creating them when they are not readily available.

The Gardening dimension demonstrates a concern for natural elements in the environment, and the pleasure taken in outdoor, gardening activity. Frequently participants spoke of their gardens in terms of their liking beautiful flowers, and the importance of teaching their children about how things grow. Incidentally, gardens of some form, however limited or expansive, were the most prevalent type of modification evident in the housing complex. Gardens were often the prelude to more ambitious changes being attempted, as well as a source of many satisfactions in themselves (Kaplan, 1973).

Two other dimensions were anticipated but did not appear in the results. Given quite a bit of discussion about fences, crowding and privacy it was expected that both privacy and manifestations of territorial concerns would be evident in the dimensional results. Issues about defining yards, excluding others, and demarking one's belongings did not emerge as a coherent grouping. While some items relating to the adequacy of the living space with respect to privacy did group together, they were not coherent enough to form a dimension. The failure of these concerns to be reflected in dimensions is probably due in large part to the questionnaire itself. The pertinent items may not have been represented sufficiently or they may have approached the issues in the wrong way. Whether the problem is in the questionnaire or whether these are not salient concerns given this housing situation cannot be determined without further study.

Design implications

The particular modifications that were made by people living in this rental housing have important implications for the design of such housing. The overriding theme of the informal interviews and subsequently of the questionnaire data was the preference for the opportunity to personalize and individualize the dwelling. Many modifications were attempted with specific intent of achieving some objective not satisfied in the design of the buildings or layout of the grounds. The fact that the major view out of the apartment had pervasive consequences in the changes that residents initiated is of great importance.

A walk around the housing complex on a summer's afternoon will provide a view of many of the changes; some others require a bit more trespassing to see around the very barriers that were erected to prevent such snooping. One would see varieties of sun awnings and sun screens shielding unprotected glass doors against the facing afternoon sun; also visible are enclosed play spaces for toddlers whose apartments front on drives and parking lots; bricks and paving stones can be seen extending back stoops into patios with canvas chairs, charcoal grills, and picnic tables; barrels filled with flowers, gardens of many varieties are easy to spot in every conceivable location. And there are the innumerable attempts to make each of the 400 doorways distinguishable

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from all the others. Individual reaction to a need for outdoor privacy was varied. Some high woodfences were constructed to separate patios from a busy walk, and trees and shrubs were planted to interrupt views or shortcutting neighbors. In some cases intruders were kept out of sight by pulling the drapes (and installing air conditioners).

The expressed desire for the opportunities to make modifications and the necessities for changes suggest two lines of attack in terms of the role of the designer. One of these involves the active recognition of human needs and foibles in the planning of a housing project; the other suggests that some things are perhaps best left undone so residents can do them.

In the context of groups such as EDRA and the increasing number of architecture/psychology programs it is all too easy to deceive oneself into thinking that designers are familiar by now with human needs, with the importance of community, of legibility, and diversity. But the reality of much of contemporary housing development makes it evident that this would indeed be a deception. The housing complex in question in this study, like countless other examples of equally recent vintage, is neither strong on legibility nor diversity. The problem of a child recognizing which stoop is his is no different here than in many a contemporary development. Certainly the unrelieved repetition of dwellings does nothing to create a sense of place. Economic limitations must be reconsidered as the rationale for the absence of variation in distinguishable parts of a total complex. Rental housing cannot be designed with a particular client in mind. This does not mean, however, that the future residents will not share certain characteristics. The problem of finding one's way and especially finding one's own house is common to many groups and yet is not one that has found a happy solution in many situations. The results here indicate that privacy as a human concern has implications for the distribution and orientation of buildings on a site, and that errors in judgment about this concern effect the behavior of residents and their satisfaction with their homes. How traffic is routed through the complex, the location and orientation of entryways, the visual sheltering of yards, and the location of parking lots all interact to provide or destroy personal and family privacy. Recognition of the value placed on natural surroundings should temper decisions about indiscriminant paving that precludes any opportunity to relate to green, growing things.

At the same time, this study suggests that an important part of the solution to the design of rental housing is an open-ended solution. Rather than pursue the unlikely objective of providing suitable setting for each tenant, one can provide a setting which involves the family or individual in the process. Opportunities to select from an assortment of configurations should be possible, and then opportunities to mold that living space, to personalize and change it, allowing it to evolve over time, would make the occupants able to provide themselves with the kind of home they want. This suggests that some design decisions can remain undetermined, that the designer should leave some choices untaken, leaving the occupant with the opportunity -- or even the necessity -- to have a stake in the shaping of his environment.

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