

# SOCIAL FACTORS RELATED TO HOUSING SELECTION

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*Human considerations are often neglected for the more concrete guidelines of economy and technology in the planning and design of housing. This exploratory study defines some physical spatial uses and social interactions of the working-class and relates these uses to housing. Two instruments were used in the collection of data: 1) a housing preference interview schedule and 2) a housing game. Twenty-six couples residing in North Central Missouri made up the sample. Chi-square tests of independence with Yeates' correction factor for small samples were used in the study. Household size proved a major variable relating significantly to satisfaction with present dwelling, satisfaction with present room arrangement, anticipation of residency change within the next twelve months, monthly expenditure for rent or housing payment, second choice of type housing preferred to live in, and length of tenure in the present dwelling. Other variables which were found to be significant in some aspect of housing were stage in the family life-cycle, age, income, education, mobility, and employment.*

The human aspect of housing is of major concern and people, not technology, should be the primary consideration in the planning and use of housing resources. There are presently few guidelines, however, for those who prefer to plan housing for people rather than to im-

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pose their concept of adequate housing. The literature in the social sciences gives characteristics and descriptions of different groups of people, but little has been done to draw indicators from this literature for planning housing to fit the needs of any given group. As Constance Perin points out in *With Man In Mind: An Interdisciplinary Prospectus for Environmental Design* (1970) there is a need to plan for differences; but there is also a need to re-examine our general way of life and resultant living patterns. Housing should be designed to meet the needs of present and future living patterns.

### Objectives

The study has two objectives: 1) to obtain data about working-class families and their housing; and 2) to test the housing game "Systematic Evaluation of Architectural Requirements for Community Housing" (SEARCH), as an instrument for collection of data concerning housing preferences. SEARCH was developed by the community development group in the School of Design at North Carolina State University. The game is illustrated in Figures I, II, and III.

### Methodology

With the help of Missouri State Extension Service, a twenty-six couple sample of white, married, working class people was drawn from Boone and Randolph Counties in North Central Missouri. Considerations in identifying the sample group were income, education, and age. Families selected had incomes between 3,001 and 12,000 dollars per annum. None of the men or women involved in the study were educated beyond the secondary level. The men in the sample group had on an average attended school longer than had the women in the group. The age of the oldest child in each family was used to divide the sample into three groups, representing three stages of the family life-cycle—families with the oldest child under six, families with the oldest child between six and twelve, and families with the oldest child between thirteen and nineteen years of age. These three stages probably represent the time when the need for housing space is most acute.

The researcher interviewed the twenty-six couples to attain descriptive data about the couples and to collect responses to questions about their current housing and housing satisfactions. Next, all participants played the housing SEARCH in order to provide further information on working class housing preferences.

The housing preferences interview schedule listed twenty-four activities. Respondents were asked to indicate their frequency of participation in each activity — "never," "sometimes," or "often." For the same list of activities, the respondents were also asked with whom they participated in each activity.

The housing game SEARCH contains four separate games; the first three were used in the study. The fourth game was eliminated because the visual presentation was difficult to understand. The three games used were a highly visual method of attaining housing information. In order to test reliability of the game a test group of twelve — six men and six women — similar to the sample group, played the game twice. A paired t-test

FIGURE I: GROUP AND PRIVATE SPACE

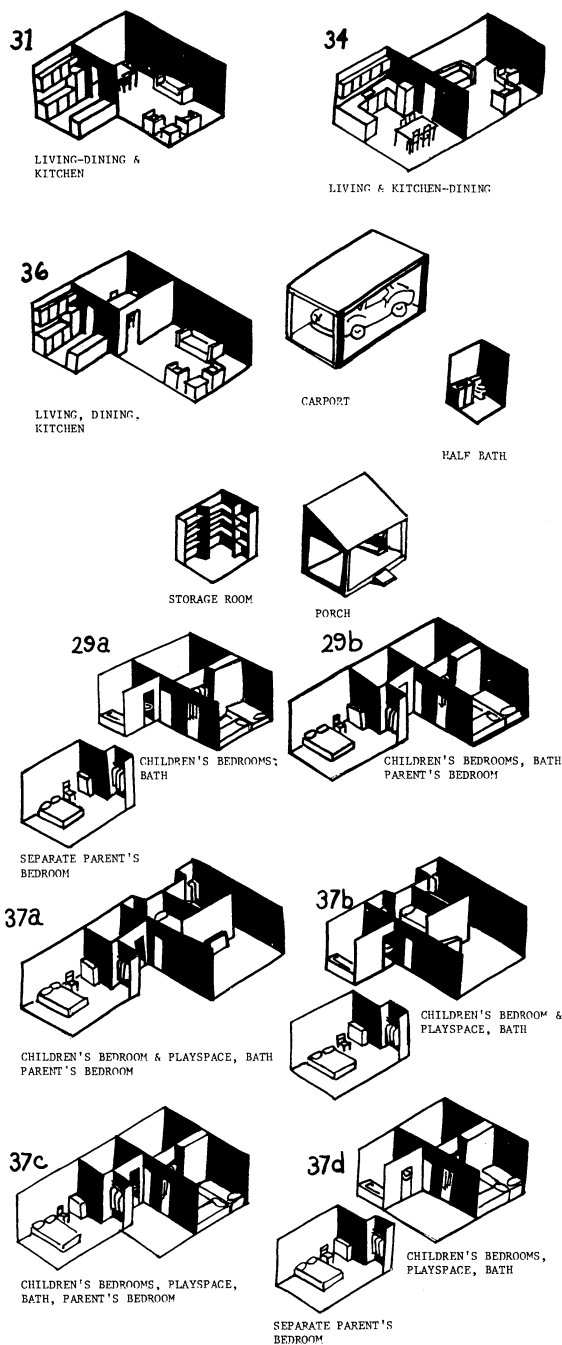
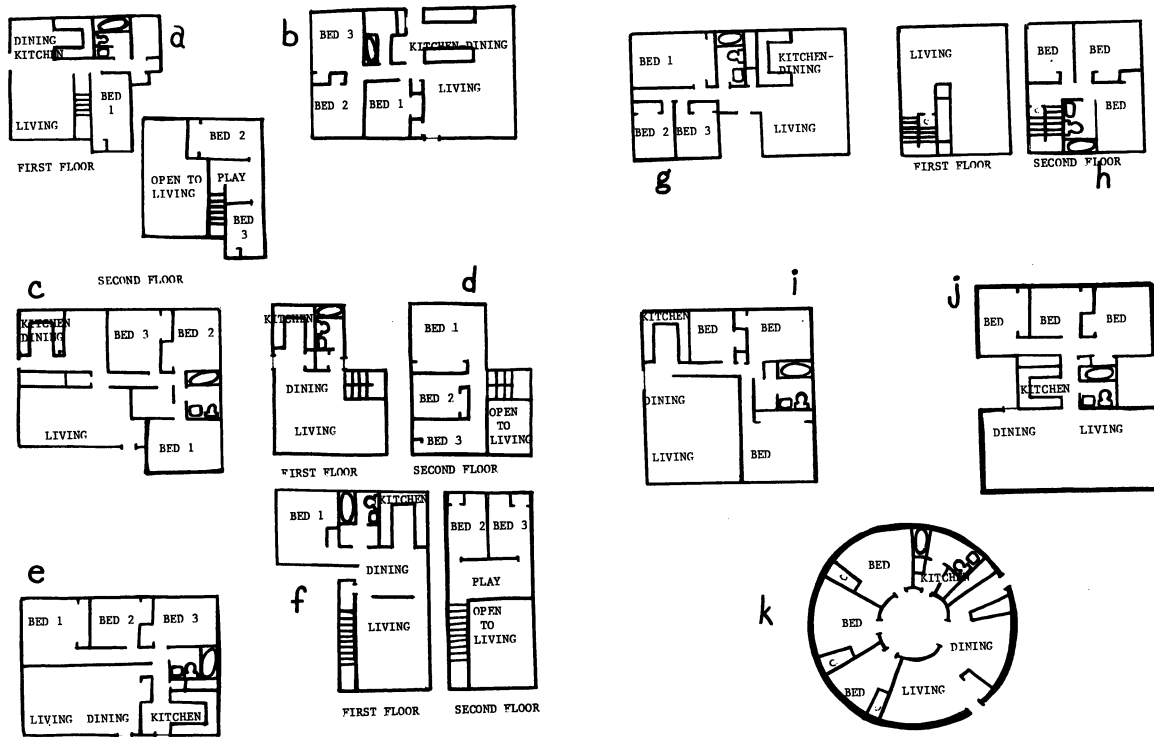


FIGURE II: FLOORPLAN VARIATIONS



was calculated for games one and two. On the basis of the t-test, games one and two were deemed reliable - the particular choices were not significantly different the first and second time the game was played. It was not possible to do a paired t-test for game three.

The first game required decision making in a limited choice situation. The player generally was asked to make a choice between amounts of group space and private space in the dwelling. The second game offered eleven floorplans of comparable size with varied design and arrangement; the player was asked to choose plans for four different purposes. The third game contains twelve pictures of house exteriors; players were asked to rank the pictures in order of preference. (Rules for the game appear in Appendix A.) Graph I illustrates the rankings for game three.

Chi-square tests of independence were used in statistical treatment of the data collected by the game

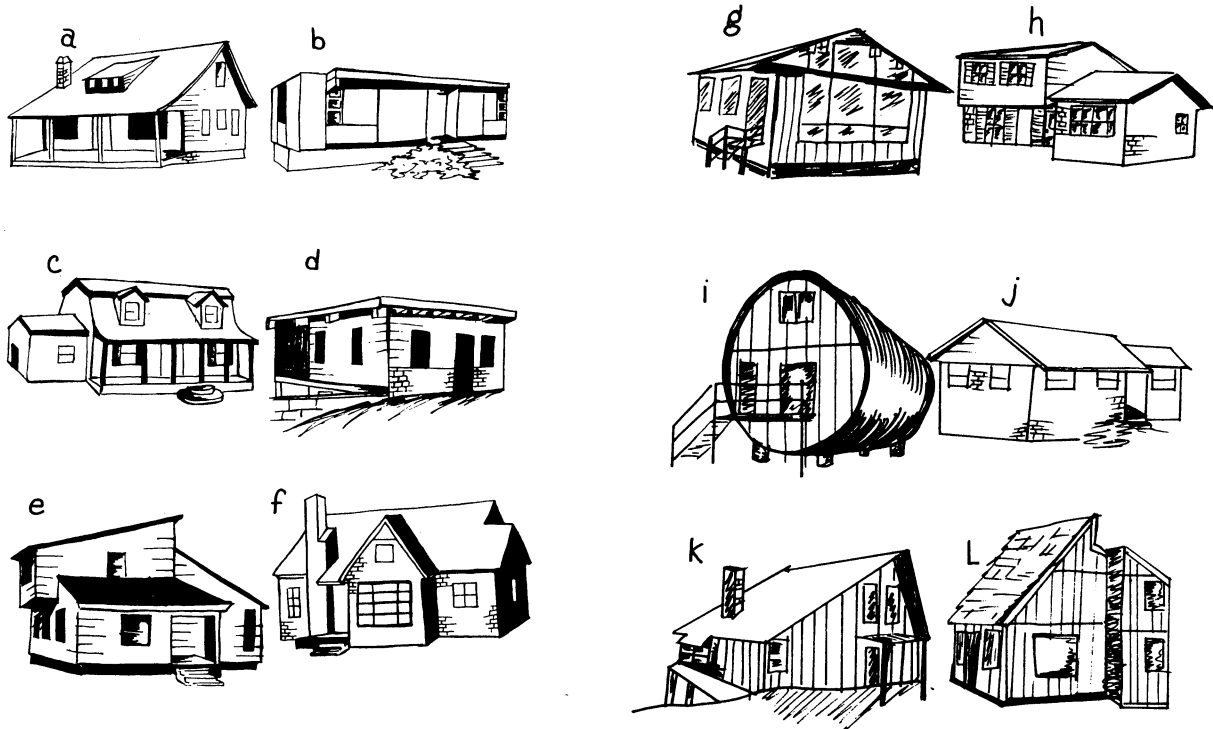
and the interview schedule. Significance was concluded at the .05 level. Yeates' correction factor for small samples was used in tabulating the data.

### Findings

#### A. Interview Schedule Responses

Household size proved a major variable in relation to housing satisfaction. Families with five or more household members were more dissatisfied with both the amount and the arrangement of space in their present dwellings than four person families. It is interesting to note that none of the families with five or more members anticipated a change in residence within the next twelve months. This may have been due to the financial strain of five or more people living on an income of twelve thousand dollars or less annually (before taxes). None of the families with five or more

FIGURE III: HOUSING EXTERIORS



household members spent over \$120 per month on housing. All of the families were nuclear families. The average number of children was two.

Stage in family life-cycle was significantly related to mobility. Families with the oldest child under six years were more mobile than families with children over six years of age. The sample varied from six families who had not moved in the past five years to one family which had moved eleven times in the past five years and anticipated another move within the year. The average number of moves for all the twenty-six families was 2.9 for a five year period.

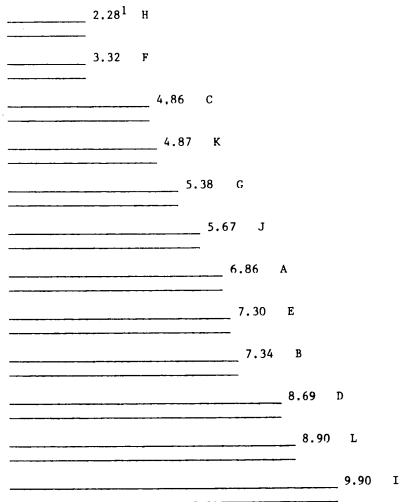
Seventeen of the twenty-six families had only one wage-earner. In three of the twenty-six families the woman filled the role of singular wage-earner. Fourteen of the twenty-six women were not employed outside the home and conformed to the pattern of the housebound homemaker with young children. These women indicated that they had little or no time alone,

yet several expressed the desire for more adult company.

For the activities listed on the interview schedule, respondents were asked to check the amount they participated in each activity — “never,” “sometimes,” or “often.” The most often listed home-centered activities were talking with the family, watching television, playing with children, talking with friends, and reading. The non-home-centered activities most often participated in were going to church, driving around in the car, fishing, visiting neighbors, and attending sports events. Home-centered activities were engaged in far more often than were non-home-centered ones. The percentage of activity time with a given group was spent as follows: Spouse and children—46 percent; spouse only—19 percent; spouse, children, and other adults—15 percent. A careful study of activities and the social interactions might provide some guidelines for housing design.

## GRAPH I

### Game III Housing Choices In Order of Preference



Graph numbers were attained by multiplying the frequency of selection times the ranking and then dividing by the sample number; thus small numbers indicate high rankings, and large numbers indicate low rankings. Formula:  $\frac{f \times r}{n}$ . Meter measure was used to maintain scale.

To identify the house associated with the letter, see Figure III.

#### B. SEARCH Housing Game Responses

It is not known how accurately the selections made in the housing game reflect the actual desires of the study group. The need to make a housing selection in a limited, forced choice situation is not, however, alien from reality. Each house pictured in the games has three bedrooms, one bath, living room, dining room or area, and kitchen. In game one the most frequent arrangement selected for the group living area was the living room and dining room together with the kitchen in another room (31). This arrangement was selected by 29 of the 52 respondents. The private area choice most often selected was the arrangement with two children's rooms adjoining the bath (29a). The parents' bedroom was located away from the children's room. Sixteen of the 52 respondents selected this arrangement. Storage was selected as the desired extra feature by 28 of the 52. Men as well as women ranked storage as a desirable feature.

From the eleven floorplans presented in game two, respondents were asked to select the plan(s) which would be best for childrearing, entertaining guests, all-round plan, and own family needs. Plan A was selected best for childbearing, plan F best for entertaining guests, plan K best all-round design, and plan C best for own family needs. The tendency of all players in game three was to "trade up" or to select housing which was larger and probably more expensive than their present dwelling. The very unconventional or unusual was ranked last by the study group. Graph I identifies the order of ranking for each exterior.

#### Implications for Further Study

Many questions are being asked in the area of housing. The field of housing research is very new. Therefore, many questions remain unanswered. Further studies concerning family living patterns, mobility, specific reasons for mobility, major criteria for selecting existing housing, the influence of family activities on space use and housing satisfactions, and family decision making in relation to housing would all provide needed information.

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feature he most wants for his house - carport, storage, half bath, porch.

#### Game II: Floor Plan Alternatives

This game describes eleven floor plan alternatives, all based upon approximately the same floor area. Each plan has three bedrooms, kitchen, bath, living, and dining spaces.

1. Players review all the plans.
2. Players select the floor plan best for child rearing.
3. Players select the floor plan best for entertaining guests.
4. Players select the floor plan best for his/her own family needs.
5. Players select the plan which has the best all-round design.
6. Players may use one floor plan as best for more than one use.

#### Game III.

Game III is a collection of photographs of the outside of several houses. Players look thru all the pictures. The player then ranks the twelve photos in order of preference. Players are asked to comment on what they liked about their first two choices; they are also asked to say what they dislike about their last two choices.

### Appendix A

#### Rules for Games

##### Game I: Household Activities

1. Possible choices are displayed in three sets. Set one includes the living-dining-kitchen arrangements. Set two includes the sleeping arrangements. Set three includes the extras.
2. Each player selects one living-dining-kitchen choice from the first set and one sleeping choice from the second set. The point value of each arrangement is displayed on the card. Letters are used to indicate different arrangements with the same point value. (The extras have no point value.). The total of the choices from the first and second sets can not exceed 68 points. Total point value must be 68 or less.
3. Each player is then asked to choose the one extra