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CULTURAL BASES OF PREFERENCE FOR THE VISUAL APPEARANCE OF
RESIDENTIAL ENVIRONMENTS

By

Peter G. Flachsbart* and George L. Peterson**

Introduction

The following is a presentation of results obtained from interviews of a randomly selected sample of university undergraduates who participated in an experiment to determine their preferences for the visual appearance of various residential environments. The purpose of the study is viewed as a test of E. T. Hall's¹ hypothesis that an individual's use of architectural space is dependent upon his cultural background, the major assumption being that the individual's use of architectural spaces will effect his preference for these spaces. The specific hypotheses tested are detailed later.

Problem Definition

Given an expanding population which generates an expanding need for housing, one might expect as solutions: (1) mass-produced units without regard for individual differences however defined in the population, and/or (2) housing built to an ethic which states that low cost housing should look low cost.² The premise upon which the problem is defined and the experimental work carried forth is that the welfare of society is enhanced when individual preferences are satisfied. The ostensible problem is that these preferences are themselves not always so ostensible. That is to say, for example, what are the housing preferences of the disadvantaged black minority in this country? And, are these preferences significantly different from the preferences of the white majority?

Other Work and Hypotheses

Two studies, one by Meadow,³ and the other by Lamanna,⁴ have identified differences between lower-income blacks and middle- and upper-income whites with respect to attitudes toward the neighborhood environment. Meadow found that black families were much more oriented toward qualities which make for good family living conditions (cleanliness, city services, schools). White respondents were more interested in the neighborhood because of its convenience of location to shopping and jobs. Lamanna found that "sociability factors" (such as "friendly people") were relatively more important to whites, and that "physical factors" (such as "quiet") were more important to blacks. He explained this result by hypothesizing that the black group may have had feelings of deprivation with regard to the physical values, and therefore may have inflated the importance of the value. The white group, in contrast, being accustomed to the physical values, may have taken them for granted and therefore did not value them highly. In other words, he stated that people valued most that which they had the least.

Peterson⁵ used photographs of residential neighborhoods and asked each subject to rate each photograph for each of several characteristics, such as, "spaciousness," "beauty," "greenery," "privacy," and others. Ratings were performed in terms of a categorical scale which ordinarily describes the variable in question. He proposed that preference for the visual appearance of residential neighborhoods was a function of "physical quality," "harmony with nature," and "visual variety." The "physical quality" factor was related to the perceived noisiness and expensiveness of

the neighborhood, while the "harmony with nature" factor was related to the perceived amount of greenery, privacy, open space, and naturalness. His subjects were primarily middle- and upper-income whites.

Finally, Hall⁶ states that ghetto blacks prefer small scale structures and environments which provide opportunities for group cohesiveness. Such opportunities, he claims, are alleys to be paved, yards to be kept up, and houses to decorate. Suburban whites he claims put more emphasis on privacy.

From this brief review of prior work are based the following working hypotheses:

1. That lower-income blacks prefer environments that have cleanliness, quietness, small scale, and structures which provide possibilities for group cohesiveness;
2. That middle- and upper-income whites prefer environments that have ease of access to employment, schools, and shopping; privacy; physical quality; harmony with nature; and visual variety.

Methodology

The sample consisted of 109 undergraduates with non-foreign home residences, randomly selected from two area schools: Northwestern University and the National College of Education. In actuality, two sampling procedures were executed--one for black students and one for white students--because the black student populations are a small minority at each school. Since the student body is also heavily biased toward students from wealthy suburbs of large northern cities, the sample was further stratified into five categories of home residence. The categories were: southern small city, southern large city, non-southern small city, non-southern large city/suburb, and non-southern large city/inner. Those states considered southern were: Oklahoma, Texas, Louisiana, Arkansas, Mississippi, Alabama, Georgia, Florida, North Carolina, South Carolina, Kentucky, Tennessee, West Virginia, and Virginia. The cut-off between small city and large city was 250,000 population.

During each interview, the subject was shown twelve pairs of projected slides (one on his left and the other on his right separated by a couple inches) picturing different types of housing and neighborhoods. A reproduction of the twenty-four slides is given in Figure A. He was not told where the photographs had been taken. As each pair was shown, the subject was asked to choose which of the two he preferred and to explain his choice. The explanation was to be stated in physical terms of what he had observed in the slides. The subject was asked to modify each response to the extent that he either liked (+) or disliked (-) the characteristic he mentioned. In no case did the interviewer ask any leading questions which might have imposed his own values. Owing to the racial situation at the two schools, as elsewhere in the nation, the decision was made that black students would interview blacks and white students would interview whites to facilitate communication.

The slides used in the study had been taken in various parts of the eastern half of the nation. They were taken by both black and white photographers to allow for differences in perspective. A group of three black and six white students chose twelve slide pairs after viewing many combinations. Some pairs were selected to test the working hypotheses.

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Others were selected for developing hypotheses for future studies. In all cases pairs of slides were selected which would present a difficult choice to the viewer (i.e. not just a run-down shack vs. an expensive estate).

Slides were used instead of enlarged photographs in order to lessen distractions. The dark area around the bright, projected slide was beneficial in that it minimized outside visual interference. The subject sat approximately 100 inches from the screen and the projector was arranged such that the viewer's angle of vision was approximately

Results

In tabulating results each characteristic mentioned by the subject appeared as a code word, attached with a (+) or (-). Since the same code word might have slightly different meanings from slide pair to slide pair, no tabulations of code words were made across slide pairs. The assumption was made, however, that for a given slide pair a code word held a constant meaning for all subjects. Therefore, the reasons were tabulated per slide pair rather than aggregated. To determine what similar-



FIGURE A
Black-and-White Reproduction of the Twenty-Four
Color Slides used in the Study

18 degrees in an attempt to maximize the subject's involvement with the slides.

To interpret the responses used by the subjects to describe the slides, a word-coding system was devised. The keywords (nouns and adjectives) of the responses were looked up in the index of Roget's Thesaurus of Words and Phrases. The generic word referred to in the Thesaurus was then used as a code word. This coding system resulted in similar reasons having the same code word. Each code word was then labeled as being either positive or negative, depending upon whether the subject liked or disliked, respectively, that particular characteristic that he mentioned.

ities and differences existed in the population as defined by race and income (white students from families with incomes above \$10,000 and black students from families with incomes below \$10,000) a Chi Squared Contingency Test was made.

Slide Pair #1: comparison between mixed land-use (left slide) and residential (right slide) neighborhoods. Black students from lower-income families and white students from middle- and upper-income families agreed in their choice. They significantly chose the residential neighborhood. While the reasons they gave differed the two groups agreed to the extent that they liked the right slide because of its residential character, and

disliked the mixed land-use neighborhood because of its stores and the fire escapes on the buildings' facades. The white students particularly were more sensitive to the vegetation of the residential neighborhood, finding this characteristic a positive one. For black students there was a tendency to remark negatively about the crowded conditions of the mixed land-use neighborhood.

Slide Pair #2: comparison between contiguous, multicolored brownstones (left slide) and uniformly grey, detached, two-family flats (right slide). For this pair neither slide was clearly preferred by either group. However, there was a significant tendency for the white students to react more negatively than the black students to the uniform appearance of the right slide.

Slide Pair #3: comparison between two 221(d)(3) projects: the left slide a cohesive, uniform design and the right slide a design of variegated shapes and colors. Both groups significantly chose the right slide. For the black students there were no dominating reasons for this choice. The white students on the other hand commented favorably about the visual variety of the right slide, significantly more so than did black students.

Slide Pair #4: comparison between an urban slum (left slide) and a rural shack (right slide). Both student groups significantly chose the rural scene. The two groups agreed in commenting negatively about the crowdedness of the urban slum and positively about the greenery of the rural scene. In particular, the white students were significantly more sensitive than the black students to the dirt and litter of the urban scene, reacting negatively to this characteristic. Members from both groups commented about the quietness and privacy which seemingly existed in the rural scene. However, not enough people commented to warrant concluding that these characteristics were important for the entire group. ⁷

Slide Pair #5: comparison between a futuristic, multi-story structure--Habitat--(left slide) and a modern, cohesively designed, multistory apartment building (right slide). The two groups differed significantly in their choice. White students chose the left slide, while the black students were divided between the two. No clear reasons emerged to explain this discrepancy in preference. There was a tendency for the black group to react negatively to the height of the modern apartment building.

Slide Pair #6: comparison between a large, old house (left slide) and a small, new house (right slide), both in the suburbs and in good condition. For this slide pair the two groups differed significantly in their choice. Lower-income blacks chose the ranch style house depicted in the right slide. Middle- and upper-income white students found the older home a slight favorite. The white group also disliked the sameness of the ranch style home, while the black group disliked the large size of the older home.

Slide Pair #7: comparison between two uniform-looking structures: a two-story project (left slide) and a multi-story project (right slide). Both student groups significantly chose the left slide. The black group, significantly more so than the white group, reacted negatively to the height of the structure in the right slide. For the white student group no dominant reasons emerged from a mix of reactions.

Slide Pair #8: comparison between contiguous, urban houses of various shapes and colors (left slide) and some very identical looking homes in a suburb (right slide). For this pair the two groups differed sharply in their choice. The white group significantly chose the left slide; while

the black group significantly chose the right slide. In their reasons both groups reacted negatively to the uniform appearance of the suburban homes. Black students chose these homes nevertheless because of the greater amount of space afforded by the front lawns. The white student group chose the left slide because of its visual variety and its vegetation, which existed in the form of a couple trees and some climbing ivy on the facades of several homes. No lawn existed in this scene as the homes fronted an alley.

Slide Pair #9: comparison between two low-cost structures: the left slide depicted private homes which looked somewhat rundown, and the right slide showed a public housing project the houses of which looked like uniform, military barracks. Neither slide was clearly preferred by either group. Both groups agreed to the extent that they disliked the deterioration present in the left slide and the uniformity of the public housing. The white students particularly reacted favorably to the vegetation surrounding the private homes.

Slide Pair #10: comparison between a rural shack (left slide) and an urban residential street where the houses are in disrepair (right slide). For this pair the two groups differed significantly in their choice. For whites the left was a slight favorite, while blacks significantly chose the right. Both groups agreed in commenting negatively on the deterioration evident in the rural shack. The white group particularly was sensitive to the deterioration evident in both slides in the form of cracked and chipped paint. In addition, they commented favorably regarding the vegetation present in the rural scene.

Slide Pair #11: comparison between two residential homes: the right a two-story, southern colonial mansion and the left a single-story house also with a southern colonial motif. For both groups the left slide was a significant choice, the reason being the enormous amount of vegetation which surrounded the house. In addition, there was a tendency for the black students to react negatively to the large size and the upper class, mansion appearance of the right slide.

Slide Pair #12: comparison between contiguous, urban brownstones (left slide) and detached urban homes (right slide). Both groups agreed in significantly choosing the detached urban homes. They agreed to the extent that they liked the vegetation that existed there. They also agreed in disliking the parking meters which were standing on the sidewalk in front of the urban brownstones. Black students particularly perceived a certain degree of crowdedness in the contiguous nature of the brownstones.

Evaluation and Interpretation

In summary one finds that both white and black students valued positively such things as vegetation, spaciousness, and physical variety. Both groups valued negatively the converse of these characteristics. That is to say they did not like slides which depicted little or no vegetation, crowdedness, and physical uniformity. In addition, they both valued negatively deterioration, fire escapes, and parking meters.

The second hypothesis was that middle- and upper-income whites prefer environments that have ease of access to employment, schools, and shopping; privacy; physical quality; harmony with nature; and visual variety. For the latter three characteristics the results indicate that this hypothesis was too narrow. Not only do whites, but lower-income blacks also value these qualities. Hence, Peterson's findings, which were based on a sample of affluent whites, also apply to lower-income blacks. Regarding the ease of

access and privacy characteristics of the hypothesis, no conclusions can be made, because the data are insufficient to test these characteristics.

One should note that those characteristics which were either positively or negatively valued have only relative importance and not absolute importance. Those characteristics which were not depicted in these slides, e.g. the presence of a body of water, were never mentioned by the subjects because the stimulus was not in the slide. However, the absence of the stimulus does not make the characteristic less important than those characteristics which were present. Hence, those characteristics which were mentioned have only relative importance; relative in the sense that the importance of the characteristic to groups of subjects, selected on the basis of preordained characteristics, can be compared.

For example, on the issues of visual variety and spaciousness, there was some difference vis-a-vis black students to whites. When spaciousness was not an issue, but variety was (i.e. variety vs. uniformity in physical appearance), both blacks and whites reacted negatively to uniformity (i.e. Slide Pair #9). And when variety was not an issue, but spaciousness was (i.e. spaciousness vs. crowdedness), then both groups decried crowdedness (i.e. Slide Pair #4). However, when both variety and spaciousness were the issues and the two were pitted against each other as alternatives, then blacks chose spaciousness over variety, whereas whites chose variety over spaciousness (i.e. Slide Pair #8).

One might explain this result as Lamanna did. The individual is most sensitive to that of which he is deprived, thereby causing him to inflate its value. Lower-income blacks may be sensitive to crowded conditions. One notes that as a group they valued spacious conditions much more so than the white students (i.e. Slide Pairs #1, 8, 12). The whites, the majority from suburbs took spacious conditions for granted, but were, in fact, sensitive to uniform environments, indicating perhaps that their homes were of the "ticky-tacky" variety (i.e. Slide Pairs #2, 3, 6).

The first working hypothesis concerning lower-income blacks was confirmed only to the extent that black students objected to tall and big structures (i.e. Slide Pairs #5, 6, 7, 11). Such a finding would tend to support Hall's contention that blacks prefer small scale structures. The data was insufficient to test whether blacks prefer environments which offer

possibilities for improvement, quietness, and cleanliness. In all probability the slides do not contain the stimuli which would arouse responses from the subjects regarding these characteristics.

There are a few results which are extraneous to the hypotheses and which do not fit any known theory. One is that black students objected to environments which make overt displays of wealth, ostentation, and nobility (i.e. Slide Pair #11). A close look at Slide Pair #11 shows that what the black students really objected to was a southern colonial mansion, a symbol of obvious negative connotations. A second result is that blacks had a tendency to object to old buildings (i.e. Slide Pair #6). A third is that while both groups reacted positively to vegetation, the white group reacted such more often (i.e. Slide Pairs #1, 8, 9, 10). Finally, both groups preferred residential areas to neighborhoods with mixed land-use (i.e. Slide Pair #1).

Notes

- (1) Edward T. Hall, The Hidden Dimension (Garden City: Doubleday and Co., Inc., 1966).
- (2) Albert Mayer, "Public Housing Architecture," The Journal of Housing, XIX, viii (October 15, 1962) pp. 446-456.
- (3) Kathryn P. Meadow, "Negro-White Differences Among Newcomers to a Transitional Urban Area," The Journal of Intergroup Relations, III (November, 1966) pp. 320-330.
- (4) Richard A. Lamanna, "Value Consensus Among Urban Residents," Journal of the American Institute of Planners, XXX (November, 1966) pp. 317-323.
- (5) George L. Peterson, "A Model of Preference: Quantitative Analysis of the Perception of the Visual Appearance of Residential Neighborhoods," Journal of Regional Science, (1967) pp. 19-31.
- (6) Edward T. Hall, "Environmental Communication," paper presented at the 135th meeting of the American Association for the Advancement of Science, (1968) p. 2.
- (7) If $33\frac{1}{3}$ % of either group had commented on a particular characteristic, then that characteristic was deemed important for the entire group. This figure was arbitrarily selected.