# THE ANTHROPOLOGY OF SPACE: AN ORGANIZING MODEL

Territoriality, spacing, and population control were discussed earlier in this book. *Infraculture* is the term I have applied to behavior on lower organizational levels that underlie culture. It is part of the proxemic classification system and implies a specific set of levels of relationships with other parts of the system. As the reader will remember, the term proxemics is used to define the interrelated observations and theories of man's use of space.

Chapters IV, V, and VI were devoted to the senses, the physiological base shared by all human beings, to which culture gives structure and meaning. It is this precultural sensory base to which the scientist must inevitably refer in comparing the proxemic patterns of Culture A with those of Culture B. Thus, we have already considered two proxemic manifestations. One, the infracultural, is behavioral and is rooted in man's biological past. The second, precultural, is physiological and very much in the present. The third, the microcultural level, is the one on which most proxemic observations are made. Proxemics as a manifestation of microculture has three aspects: fixed-feature, semifixed feature, and informal.

Although proper translation from level to level is ordinarily quite complex, it should be attempted by the scientist from time to time if only for the sake of perspective. Without comprehensive systems of thought which tie levels together, man develops a kind of schizoid detachment and isolation that can be very dangerous. If, for example, civilized man continues to ignore the data obtained on the infra-

cultural level about the consequences of crowding, he runs the risk of developing the equivalent of the behavioral sink, if indeed he has not already done so. The experience of James Island deer chillingly recalls the Black Death which killed off two-thirds of Europe's population in the mid-fourteenth century. Though this great human die-off was due directly to *Bacillis pestis*, the effect was undoubtedly exacerbated by lowered resistance from the stressfully crowded life in medieval towns and cities.

The methodological difficulty in translating from level to level stems from the essential indeterminacy of culture, which I discussed in The Silent Language. Cultural indeterminacy is a function of the many different levels on which cultural events occur and the fact that it is virtually impossible for an observer to examine simultaneously with equal degrees of precision something occurring on two or more widely separated analytic or behavioral levels. The reader can test this for himself by simply concentrating on the phonetic details of speech (the way sounds actually are made) and at the same time trying to talk eloquently. I do not mean simply to enunciate clearly but to think about where you place your tongue, how you hold your lips, whether your vocal chords are vibrating or not, and how you are breathing with each syllable. The indeterminacy referred to here requires additional comment. All organisms are highly dependent on redundancy; that is, information received from one system is backed up by other systems in case of failure. Man himself is also programmed by culture in a massively redundant way. If he weren't, he could not talk or interact at all; it would take too long. Whenever people talk, they supply only part of the message. The rest is filled in by the listener. Much of what is not said is taken for granted. However, cultures vary in what is left unsaid. To an American, it is superfluous to have to indicate to a shoeshine boy the color of the paste to be used. But in Japan, Americans who do not indicate this may send out brown shoes only to have them returned black! The function of the conceptual model and the classification system, therefore, is to make explicit the taken-for-granted parts of communications and to indicate relationships of the parts to each other.

What I learned from my research on the infracultural level was also very helpful in the creation of models for work on the cultural level of proxemics. Contrary to popular belief, territorial behavior for any given stage of life (such as courting or rearing the young) is quite fixed and rigid. The boundaries of the territories remain reasonably constant, as do the locations for specific activities within the territory, such as sleeping, eating, and nesting. The territory is in every sense of the word an extension of the organism, which is marked by visual, vocal, and olfactory signs. Man has created material extensions of territoriality as well as visible and invisible territorial markers. Therefore, because territoriality is relatively fixed, I have termed this type of space on the proxemic level fixed-feature space. The next section will be devoted to fixed-feature space, followed by discussions of semifixed feature and informal space.

#### FIXED-FEATURE SPACE

Fixed-feature space is one of the basic ways of organizing the activities of individuals and groups. It includes material manifestations as well as the hidden, internalized designs that govern behavior as man moves about on this earth. Buildings are one expression of fixed-feature patterns, but buildings are also grouped together in characteristic ways as well as being divided internally according to culturally determined designs. The layout of villages, towns, cities, and the intervening countryside is not haphazard but follows a plan which changes with time and culture.

Even the inside of the Western house is organized spatially. Not only are there special rooms for special functions—food preparation, eating, entertaining and socializing, rest, recuperation, and procreation—but for sanitation as well. If, as sometimes happens, either the artifacts or the activities associated with one space are transferred to another space, this fact is immediately apparent. People who "live in a mess" or a "constant state of confusion" are those who fail to classify activities and artifacts according to a uniform, consistent, or predictable spatial plan. At the opposite end of the scale is the assembly line, a precise organization of objects in time and space.

Actually the present internal layout of the house, which Americans and Europeans take for granted, is quite recent. As Philippe Ariès points out in *Centuries of Childhood*, rooms had no fixed functions in European houses until the eighteenth century. Members of the family had no privacy as we know it today. There were no spaces that were sacred or specialized. Strangers came and went at will,

while beds and tables were set up and taken down according to the moods and appetites of the occupants. Children dressed and were treated as small adults. It is no wonder that the concept of childhood and its associated concept, the nuclear family, had to await the specialization of rooms according to function and the separation of rooms from each other. In the eighteenth century, the house altered its form. In French, *chambre* was distinguished from *salle*. In English, the function of a room was indicated by its name—bedroom, living room, dining room. Rooms were arranged to open into a corridor or hall, like houses into a street. No longer did the occupants pass through one room into another. Relieved of the Grand Central Station atmosphere and protected by new spaces, the family pattern began to stabilize and was expressed further in the form of the house.

Goffman's Presentation of Self in Everyday Life is a detailed, sensitive record of observations on the relationship of the façade that people present to the world and the self they hide behind it. The use of the term façade is in itself revealing. It signifies recognition of levels to be penetrated and hints at the functions performed by architectural features which provide screens behind which to retire from time to time. The strain of keeping up a façade can be great. Architecture can and does take over this burden for people. It can also provide a refuge where the individual can "let his hair down" and be himself.

The fact that so few businessmen have offices in their homes cannot be solely explained on the basis of convention and top management's uneasiness when executives are not visibly present. I have observed that many men have two or more distinct personalities, one for business and one for the home. The separation of office and home in these instances helps to keep the two often incompatible personalities from conflicting and may even serve to stabilize an idealized version of each which conforms to the projected image of both architecture and setting.

The relationship of fixed-feature space to personality as well as to culture is nowhere more apparent than in the kitchen. When micropatterns interfere as they do in the kitchen, it is more than just annoying to the women I interviewed. My wife, who has struggled for years with kitchens of all types, comments on male design in this way: "If any of the men who designed this kitchen had ever worked in it, they wouldn't have done it this way." The lack of congruence

between the design elements, female stature and body build (women are not usually tall enough to reach things), and the activities to be performed, while not obvious at first, is often beyond belief. The size, the shape, the arrangement, and the placing in the house all communicate to the women of the house how much or how little the architect and designer knew about fixed-feature details.

Man's feeling about being properly oriented in space runs deep. Such knowledge is ultimately linked to survival and sanity. To be disoriented in space is to be psychotic. The difference between acting with reflex speed and having to stop to think in an emergency may mean the difference between life and death—a rule which applies equally to the driver negotiating freeway traffic and the rodent dodging predators. Lewis Mumford observes that the uniform grid pattern of our cities "makes strangers as much at home as the oldest inhabitants." Americans who have become dependent on this pattern are often frustrated by anything different. It is difficult for them to feel at home in European capitals that don't conform to this simple plan. Those who travel and live abroad frequently get lost. An interesting feature of these complaints reveals the relationship of the layout to the person. Almost without exception, the newcomer uses words and tones associated with a personal affront, as though the town held something against him. It is no wonder that people brought up on either the French radiating star or the Roman grid have difficulty in a place like Japan where the entire fixed-feature pattern is basically and radically different. In fact, if one were to set out to design two systems in contrasts, it is hard to see how one could do better. The European systems stress the lines, which they name; the Japanese treat the intersecting points technically and forget about the lines. In Japan, the intersections but not the streets are named. Houses instead of being related in space are related in time and numbered in the order in which they are built. The Japanese pattern emphasizes hierarchies that grow around centers; the American plan finds its ultimate development in the sameness of suburbia, because one number along a line is the same as any other. In a Japanese neighborhood, the first house built is a constant reminder to the residents of house \$20 that \$1 was there first.

Some aspects of fixed-feature space are not visible until one observes human behavior. For example, although the separate dining room is fast vanishing from American houses, the line separating

the dining area from the rest of the living room is quite real. The invisible boundary which separates one yard from another in suburbia is also a fixed-feature of American culture or at least some of its subcultures.

Architects traditionally are preoccupied with the visual patterns of structures—what one sees. They are almost totally unaware of the fact that people carry around with them internalizations of fixed-feature space learned early in life. It isn't only the Arab who feels depressed unless he has enough space but many Americans as well. As one of my subjects said: "I can put up with almost anything as long as I have large rooms and high ceilings. You see, I was raised in an old house in Brooklyn and I have never been able to accustom myself to anything different." Fortunately, there are a few architects who take the time to discover the internalized fixed-feature needs of their clients. However, the *individual* client is not my primary concern. The problem facing us today in designing and rebuilding our cities is understanding the needs of large numbers of people. We are building huge apartment houses and mammoth office buildings with no understanding of the needs of the occupants.

The important point about fixed-feature space is that it is the mold into which a great deal of behavior is cast. It was this feature of space that the late Sir Winston Churchill referred to when he said: "We shape our buildings and they shape us." During the debate on restoring the House of Commons after the war, Churchill feared that departure from the intimate spatial pattern of the House, where opponents face each other across a narrow aisle, would seriously alter the patterns of government. He may not have been the first to put his finger on the influence of fixed-feature space, but its effects have never been so succinctly stated.

One of the many basic differences between cultures is that they extend different anatomical and behavioral features of the human organism. Whenever there is cross-cultural borrowing, the borrowed items have to be adapted. Otherwise, the new and the old do not match, and in some instances, the two patterns are completely contradictory. For example, Japan has had problems integrating the automobile into a culture in which the lines between points (highways) receive less attention than the points. Hence, Tokyo is famous for producing some of the world's most impressive traffic jams. The automobile is also poorly adapted to India, where cities are physically

crowded and the society has elaborate hierarchical features. Unless Indian engineers can design roads that will separate slow pedestrians from fast-moving vehicles, the class-conscious drivers' lack of consideration for the poor will continue to breed disaster. Even Le Corbusier's great buildings at Chandigarh, capital of Punjab, had to be modified by the residents to make them habitable. The Indians walled up Corbusier's balconies, converting them into kitchens! Similarly, Arabs coming to the United States find that their own internalized fixed-feature patterns do not fit American housing. Arabs feel oppressed by it—the ceilings are too low, the rooms too small, privacy from the outside inadequate, and views non-existent.

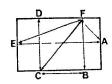
It should not be thought, however, that incongruity between internalized and externalized patterns occurs only between cultures. As our own technology explodes, air conditioning, fluorescent lighting, and soundproofing make it possible to design houses and offices without regard to traditional patterns of windows and doors. The new inventions sometimes result in great barnlike rooms where the "territory" of scores of employees in a "bull pen" is ambiguous.

### SEMIFIXED-FEATURE SPACE

Several years ago, a talented and perceptive physician named Humphry Osmond was asked to direct a large health and research center in Saskatchewan. His hospital was one of the first in which the relationship between semifixed-feature space and behavior was clearly demonstrated. Osmond had noticed that some spaces, like railway waiting rooms, tend to keep people apart. These he called sociofugal spaces. Others, such as the booths in the old-fashioned drugstore or the tables at a French sidewalk café, tend to bring people together. These he called sociopetal. The hospital of which he was in charge was replete with sociofugal spaces and had very few which might be called sociopetal. Furthermore, the custodial staff and nurses tended to prefer the former to the latter because they were easier to maintain. Chairs in the halls, which would be found in little circles after visiting hours, would soon be lined up neatly in military fashion, in rows along the walls.

One situation which attracted Osmond's attention was the newly built "model" female geriatrics ward. Everything was new and shiny, neat and clean. There was enough space, and the colors were cheerful. The only trouble was that the longer the patients stayed in the ward, the less they seemed to talk to each other. Gradually, they were becoming like the furniture, permanently and silently glued to the walls at regular intervals between the beds. In addition, they all seemed depressed.

Sensing that the space was more sociofugal than sociopetal, Osmond put a perceptive young psychologist, Robert Sommer, to work to find out as much as he could about the relationship of furniture to conversations. Looking for a natural setting which offered a number of different situations in which people could be observed in conversations, Sommer selected the hospital cafeteria, where 36 by 72-inch tables accommodated six people. As the figure below indicates, these tables provided six different distances and orientations of the bodies in relation to each other.



F-A Across the corner

C-B Side by side

C-D Across the table

E-A From one end to the other

E-F Diagonally the length of the table

C-F Diagonally across the table

Fifty observational sessions in which conversations were counted at controlled intervals revealed that: F-A (cross corner) conversations were twice as frequent as the C-B (side by side) type, which in turn were three times as frequent as those at C-D (across the table). No conversations were observed by Sommer for the other positions. In other words, corner situations with people at right angles to each other produced six times as many conversations as face-to-face situations across the 36-inch span of the table, and twice as many as the side-by-side arrangement.

The results of these observations suggested a solution to the problem of gradual disengagement and withdrawal of the old people. But before anything could be done, a number of preparations had to be made. As everyone knows, people have deep personal feelings about space and furniture arrangements. Neither the staff nor the patients would put up with outsiders "messing around" with their furniture. Osmond, as director, could order anything he wanted done, but he knew the staff would quietly sabotage any arbitrary moves. So the first step was to involve them in a series of "experiments." Both Osmond and Sommer had noted that the ward patients were more often in the B-C and C-D relationships (side by side and across) than they were in the cafeteria, and they sat at much greater distances. In addition, there was no place to put anything, no place for personal belongings. The only territorial features associated with the patients were the bed and the chair. As a consequence, magazines ended up on the floor and were quickly swept up by staff members. Enough small tables so that every patient had a place would provide additional territoriality and an opportunity to keep magazines, books, and writing materials. If the tables were square, they would also help to structure relationships between patients so that there was a maximum opportunity to converse.

Once the staff had been cajoled into participating in the experiments, the small tables were moved in and the chairs arranged around them. At first, the patients resisted. They had become accustomed to the placement of "their" chairs in particular spots, and they did not take easily to being moved around by others. By now, the staff was involved to the point of keeping the new arrangement reasonably intact until it was established as an alternative rather than an annoying feature to be selectively inattended. When this point had been reached, a repeat count of conversations was made. The number of conversations had doubled, while reading had tripled, possibly because there was now a place to keep reading material. Similar restructuring of the dayroom met with the same resistances and the same ultimate increase in verbal interaction.

At this point, three things must be said. Conclusions drawn from observations made in the hospital situation just described are not universally applicable. That is, across-the-corner-at-right-angles is conducive only to: (a) conversations of certain types between (b) persons in certain relationships and (c) in very restricted cultural settings. Second, what is sociofugal in one culture may be sociopetal in another. Third, sociofugal space is not necessarily bad, nor is sociopetal space universally good. What is desirable is flexibility and con-

gruence between design and function so that there is a variety of spaces, and people can be involved or not, as the occasion and mood demand. The main point of the Canadian experiment for us is its demonstration that the structuring of semifixed features can have a profound effect on behavior and that this effect is measurable. This will come as no surprise to housewives who are constantly trying to balance the relationship of fixed-feature enclosures to arrangement of their semifixed furniture. Many have had the experience of getting a room nicely arranged, only to find that conversation was impossible if the chairs were left nicely arranged.

It should be noted that what is fixed-feature space in one culture may be semifixed in another, and vice versa. In Japan, for example, the walls are movable, opening and closing as the day's activities change. In the United States, people move from room to room or from one part of a room to another for each different activity, such as eating, sleeping, working, or socializing with relatives. In Japan, it is quite common for the person to remain in one spot while the activities change. The Chinese provide us with further opportunities to observe the diversity of human treatment of space, for they assign to the fixed-feature category certain items which Americans treat as semifixed. Apparently, a guest in a Chinese home does not move his chair except at the host's suggestion. To do so would be like going into someone else's home and moving a screen or even a partition. In this sense, the semifixed nature of furniture in American homes is merely a matter of degree and situation. Light chairs are more mobile than sofas or heavy tables. I have noted, however, that some Americans hesitate to adjust furniture in another person's house or office. Of the forty students in one of my classes, half manifested such hesitation.

Many American women know it is hard to find things in someone else's kitchen. Conversely, it can be exasperating to have kitchenware put away by well-meaning helpers who don't know where things "belong." How and where belongings are arranged and stored is a function of microcultural patterns, representative not only of large cultural groups but of the minute variations on cultures that make each individual unique. Just as variations in the quality and use of the voice make it possible to distinguish one person's voice from another, handling of materials also has a characteristic pattern that is unique.

## INFORMAL SPACE

We turn now to the category of spatial experience, which is perhaps most significant for the individual because it includes the distances maintained in encounters with others. These distances are for the most part outside awareness. I have called this category informal space because it is unstated, not because it lacks form or has no importance. Indeed, as the next chapter will show, informal spatial patterns have distinct bounds, and such deep, if unvoiced, significance that they form an essential part of the culture. To misunderstand this significance may invite disaster.