

# The Hidden Dimension

EDWARD T. HALL



ANCHOR BOOKS

A DIVISION OF RANDOM HOUSE, INC.

NEW YORK

K1-3.123

ANCHOR BOOKS EDITIONS, 1969, 1990

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*Library of Congress Cataloging-in-Publication Data*  
Hall, Edward Twitchell, 1914-

The hidden dimension / Edward T. Hall.

p. cm.

Reprint. Originally published: Garden City,

N.Y.: Doubleday, 1966.

Includes bibliographical references.

1. Spatial behavior. 2. Personal space.

3. Architecture—Psychological aspects.

4. City planning—Psychological aspects.

I. Title.

BF469.H3 1990 90-34870

304.2'3—dc20 CIP

ISBN 0-385-08476-5

UB SALZBURG



+DM60536908

www.anchorbooks.com

Printed in the United States of America

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## AUTHOR'S PREFACE

Generally speaking, two types of books interest the serious reader: those that are content oriented—designed to convey a particular body of knowledge—and those that deal with structure—the way in which events are organized. It is doubtful if an author has any control over which of these two types of books he or she writes, though it is desirable to be aware of the difference. The same applies to the reader whose satisfaction depends largely on unstated expectations. Today, when all of us are overwhelmed with data from many sources, it is easy to understand why people feel that they are losing touch, even in their own field. In spite of television, or possibly because of it, people feel a loss of relatedness to the world at large. Information overload increases the need for organizing frames of reference to integrate the mass of rapidly changing information. *The Hidden Dimension* attempts to provide such an organizing frame for space as a system of communication, and for the spatial aspects of architecture and city planning.

Books of this type, since they are independent of disciplinary lines, are not limited to a particular audience or field. This lack of disciplinary orientation will disappoint readers searching for pat answers and those who wish to find everything classified in terms of content and profession. However, since space relates to everything, it is inevitable that this book would cross disciplinary lines.

In writing about my research on people's use of space—the space that they maintain among themselves and their fellows, and that they build around themselves in their cities, their homes, and their offices—my purpose is to bring to

# I

## CULTURE AS COMMUNICATION

The central theme of this book is social and personal space and man's perception of it. Proxemics is the term I have coined for the interrelated observations and theories of man's use of space as a specialized elaboration of culture.

The concepts developed here did not originate with me. Over fifty-three years ago, Franz Boas laid the foundation of the view which I hold that communication constitutes the core of culture and indeed of life itself. In the twenty years that followed, Boas and two other anthropologists, Edward Sapir and Leonard Bloomfield, speakers of the Indo-European languages, were confronted with the radically different languages of the American Indians and the Eskimos. The conflict between these two different language systems produced a revolution concerning the nature of language itself. Before this time, European scholars had taken Indo-European languages as the models for *all* languages. Boas and his followers discovered in effect that each language family is a law unto itself, a closed system, whose patterns the linguist must reveal and describe. It was necessary for the linguistic scientist to consciously avoid the trap of projecting the hidden rules of his own language on to the language being studied.

In the 1930s Benjamin Lee Whorf, a full-time chemist and engineer but an amateur in the field of linguistics, began studying with Sapir. Whorf's papers based on his work with the Hopi and Shawnee Indians had revolutionary implications for the relation of language to both thought and perception. Language, he said, is more than just a medium for expressing thought. It is, in fact, *a major element in the formation of thought*. Furthermore, to use a figure from our own day, man's very perception of the world about him is programmed by

the language he speaks, just as a computer is programmed. Like the computer, man's mind will register and structure external reality only in accordance with the program. Since two languages often program the same class of events quite differently, no belief or philosophical system should be considered apart from language.

Only in recent years, and to just a handful of people, have the implications of Whorf's thinking become apparent. Difficult to grasp, they became somewhat frightening when given careful thought. They strike at the root of the doctrine of "free will," because they indicate that all men are captives of the language they speak as long as they take their language for granted.

The thesis of this book and of *The Silent Language*, which preceded it, is that the principles laid down by Whorf and his fellow linguists in relation to language apply to the rest of human behavior as well—in fact, to all culture. It has long been believed that experience is what all men share, that it is always possible somehow to bypass language and culture and to refer back to experience in order to reach another human being. This implicit (and often explicit) belief concerning man's relation to experience was based on the assumptions that, when two human beings are subject to the same "experience," virtually the same data are being fed to the two central nervous systems and that the two brains record similarly.

Proxemic research casts serious doubt on the validity of this assumption, particularly when the cultures are different. Chapters X and XI describe how people from different cultures not only speak different languages but, what is possibly more important, *inhabit different sensory worlds*. Selective screening of sensory data admits some things while filtering out others, so that *experience as it is perceived* through one set of culturally patterned sensory screens is quite different from experience perceived through another. The architectural and urban environments that people create are expressions of this filtering-screening process. In fact, from these man-altered environments, it is possible to learn how different peoples use their senses. Experience, therefore, cannot be counted on as a stable point of reference, because it occurs in a setting that has been molded by man.

The role of the senses in this context is described in Chapters IV through VII. This discussion was included to give the reader some of the basic data on the apparatus man uses in building his perceptual world. Describing the senses in this way is analogous to descriptions of the vocal apparatus as a basis for understanding speech processes.

An examination of how the senses are used by different peoples, as they interact with their living and non-living environment, provides concrete data on some of the differences between, for example, Arabs and Americans. Here at the very source of the interaction it is possible to detect significant variations in what is attended and what is screened out.

My research of the past five years demonstrates that Americans and Arabs live in different sensory worlds much of the time and do not use the same senses even to establish most of the distances maintained during conversations. As we shall see later, Arabs make more use of olfaction and touch than Americans. They interpret their sensory data differently and combine them in different ways. Apparently, even the Arab's experience of the body in its relation to the ego is different from our own. American women who have married Arabs in this country and who have known only the learned American side of their personality have often observed that their husbands assume different personalities when they return to their homelands where they are again immersed in Arab communication and are captives of Arab perceptions. They become in every sense of the word quite different people.

In spite of the fact that cultural systems pattern behavior in radically different ways, they are deeply rooted in biology and physiology. Man is an organism with a wonderful and extraordinary past. He is distinguished from the other animals by virtue of the fact that he has elaborated what I have termed *extensions* of his organism. By developing his extensions, man has been able to improve or specialize various functions. The computer is an extension of part of the brain, the telephone extends the voice, the wheel extends the legs and feet. Language extends experience in time and space while writing extends language. Man has elaborated his extensions to such a degree that we are apt to forget that his humanness is rooted in his animal nature. The anthropologist Weston La Barre

has pointed out that man has shifted evolution from his body to his extensions and in so doing has tremendously accelerated the evolutionary process.

Thus any attempt to observe, record, and analyze proxemic systems, which are parts of modern cultures, must take into account the behavioral systems on which they are based as expressed by earlier life forms. Chapters II and III of this book should help to provide both a foundation and a perspective to be used in considering the more complex human elaborations of space behavior in animals. Much of the thinking and interpretation of data that went into this book has been influenced by the tremendous strides made in recent years by ethologists, the scientists who study animal behavior and the relation of organisms to their environment.

In light of what is known of ethology, it may be profitable in the long run if man is viewed as an organism that has elaborated and specialized his extensions to such a degree that they have taken over, and are rapidly replacing, nature. In other words, man has created a new dimension, the cultural dimension, of which proxemics is only a part. The relationship between man and the cultural dimension is one in which both *man and his environment participate in molding each other*. Man is now in the position of actually creating the total world in which he lives, what the ethologists refer to as his biotope. In creating this world he is actually determining *what kind of an organism* he will be. This is a frightening thought in view of how very little is known about man. It also means that, in a very deep sense, our cities are creating different types of people in their slums, mental hospitals, prisons, and suburbs. These subtle interactions make the problems of urban renewal and the integration of minorities into the dominant culture more difficult than is often anticipated. Similarly, our lack of full understanding of the relation of peoples *and* their biotope is compounding the process of technical development of the so-called underdeveloped nations of the world.

What happens when people of different cultures meet and become involved? In *The Silent Language* I suggested that communication occurs simultaneously on different levels of consciousness, ranging from full awareness to out-of-aware-

ness. Recently it has become necessary to expand this view. When people communicate they do much more than just toss the conversational ball back and forth. My own studies as well as those of others reveal a series of delicately controlled, culturally conditioned servomechanisms that keeps life on an even keel, much like the automatic pilot on the airplane. All of us are sensitive to subtle changes in the demeanor of the other person as he responds to what we are saying or doing. In most situations people will at first unconsciously and later consciously avoid escalation of what I have termed the adumbrative or foreshadowing part of a communication from the barely perceptible signs of annoyance to open hostility. In the animal world, if the adumbrative process is short-circuited or bypassed, vicious fighting is apt to occur. In humans in the international-intercultural sphere of life many difficulties can be traced to failure to read adumbrations correctly. In such instances, by the time people discover what is going on, they are so deeply involved that they can't back out.

The following chapters include many instances of the thwarting of communication primarily because neither of the parties was aware that each inhabits a different perceptual world. Each was also interpreting the other's spoken words in a context that included both behavior and setting, with a result that positive reinforcement of friendly overtures was often random or even absent.

Indeed, it is now believed by ethologists such as Konrad Lorenz that aggression is a necessary ingredient of life; without it, life as we know it would probably not be possible. Normally, aggression leads to proper spacing of animals, lest they become so numerous as to destroy their environment and themselves along with it. When crowding becomes too great after population buildups, interactions intensify, leading to greater and greater stress. As psychological and emotional stress builds up and tempers wear thin, subtle but powerful changes occur in the chemistry of the body. Births drop while deaths progressively increase until a state known as population collapse occurs. Such cycles of buildup and collapse are now generally recognized as normal for the warm-blooded vertebrates and possibly for all life. Contrary to popular belief, the food supply is only indirectly involved in these cycles,

as demonstrated by John Christian and V. C. Wynne-Edwards.

As man developed culture he domesticated himself and in the process created a whole new series of worlds, each different from the other. Each world has its own set of sensory inputs, so that what crowds people of one culture does not necessarily crowd another. Similarly, an act that releases aggression and would therefore be stressful to one people may be neutral to the next. Nevertheless, it is fairly obvious that the American Negroes and people of Spanish culture who are flocking to our cities are being very seriously stressed. Not only are they in a setting that does not fit them, but they have passed the limits of their own tolerance to stress. The United States is faced with the fact that two of its creative and sensitive peoples are in the process of being destroyed and like Samson could bring down the structure that houses us all. Thus it must be impressed upon architects, city planners, and builders that if this country is to avoid catastrophe, we must begin seeing man as an interlocutor with his environment, an environment which these same planners, architects, and builders are now creating with little reference to man's proxemic needs.

To those of us who produce the income and pay the taxes which support government, I say that whatever the cost of rebuilding our cities, this cost will have to be met if America is to survive. Most important, the rebuilding of our cities must be based upon research which leads to an understanding of man's needs and a knowledge of the many sensory worlds of the different groups of people who inhabit American cities.

The chapters that follow are intended to convey a basic message about the nature of man and his relationship to his environment. The message is this:

There is a great need to revise and broaden our view of the human situation, a need to be both more comprehensive and more realistic, not only about others, but about ourselves as well. It is essential that we learn to read the silent communications as easily as the printed and spoken ones. Only by doing so can we also reach other people, both inside and outside our national boundaries, as we are increasingly required to do.

## II

### DISTANCE REGULATION IN ANIMALS

Comparative studies of animals help to show how man's space requirements are influenced by his environment. In animals we can observe the direction, the rate, and the extent of changes in behavior that follow changes in space available to them as we can never hope to do in men. For one thing, by using animals it is possible to accelerate time, since animal generations are relatively short. A scientist can, in forty years, observe four hundred forty generations of mice, while he has in the same span of time seen only two generations of his own kind. And, of course, he can be more detached about the fate of animals.

In addition, animals don't rationalize their behavior and thus obscure issues. In their natural state, they respond in an amazingly consistent manner so that it is possible to observe repeated and virtually identical performances. By restricting our observations to the way animals handle space, it is possible to learn an amazing amount that is translatable to human terms.

Territoriality, a basic concept in the study of animal behavior, is usually defined as behavior by which an organism characteristically lays claim to an area and defends it against members of its own species. It is a recent concept, first described by the English ornithologist H. E. Howard in his *Territory in Bird Life*, written in 1920. Howard stated the concept in some detail, though naturalists as far back as the seventeenth century had taken note of various events which Howard recognized as manifestations of territoriality.

Territoriality studies are already revising many of our basic ideas of animal life and human life as well. The expression "free as a bird" is an encapsulated form of man's conception



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.

## X

## DISTANCES IN MAN

Some thirty inches from my nose  
 The frontier of my Person goes,  
 And all the untilled air between  
 Is private *pagus* or demesne.  
 Stranger, unless with bedroom eyes  
 I beckon you to fraternize,  
 Beware of rudely crossing it:  
 I have no gun, but I can spit.

W. H. AUDEN

"Prologue:

The Birth of Architecture"

Birds and mammals not only have territories which they occupy and defend against their own kind but they have a series of uniform distances which they maintain from each other. Hediger has classified these as flight distance, critical distance, and personal and social distance. Man, too, has a uniform way of handling distance from the fellows. With very few exceptions, flight distance and critical distance have been eliminated from human reactions. Personal distance and social distance, however, are obviously still present.

How many distances do human beings have and how do we distinguish them? What is it that differentiates one distance from the other? The answer to this question was not obvious at first when I began my investigation of distances in man. Gradually, however, evidence began to accumulate indicating that the regularity of distances observed for humans is the consequence of sensory shifts—the type cited in Chapters VII and VIII.

One common source of information about the distance

separating two people is the loudness of the voice. Working with the linguistic scientist George Trager, I began by observing shifts in the voice associated with changes in distance. Since the whisper is used when people are very close, and the shout is used to span great distances, the question Trager and I posed was, How many vocal shifts are sandwiched between these two extremes? Our procedure for discovering these patterns was for Trager to stand still while I talked to him at different distances. If both of us agreed that a vocal shift had occurred, we would then measure the distance and note down a general description. The result was the eight distances described at the end of Chapter Ten in *The Silent Language*.

Further observation of human beings in social situations convinced me that these eight distances were overly complex. Four were sufficient; these I have termed intimate, personal, social, and public (each with its close and far phase). My choice of terms to describe various distances was deliberate. Not only was it influenced by Hediger's work with animals indicating the continuity between *infraculture* and culture but also by a desire to provide a clue as to the types of activities and relationships associated with each distance, thereby linking them in peoples' minds with specific inventories of relationships and activities. It should be noted at this point that *how people are feeling toward each other* at the time is a decisive factor in the distance used. Thus people who are very angry or emphatic about the point they are making will move in close, they "turn up the volume," as it were, by shouting. Similarly—as any woman knows—one of the first signs that a man is beginning to feel amorous is his move closer to her. If the woman does not feel similarly disposed she signals this by moving back.

#### THE DYNAMISM OF SPACE

In Chapter VII we saw that man's sense of space and distance is not static, that it has very little to do with the single-viewpoint linear perspective developed by the Renaissance artists and still taught in most schools of art and architecture.

Instead, man senses distance as other animals do. His perception of space is dynamic because it is related to action—what can be done in a given space—rather than what is seen by passive viewing.

The general failure to grasp the significance of the many elements that contribute to man's sense of space may be due to two mistaken notions: (1) that for every effect there is a single and identifiable cause; and (2) that man's boundary begins and ends with his skin. If we can rid ourselves of the need for a single explanation, and if we can think of man as surrounded by a series of expanding and contracting fields which provide information of many kinds, we shall begin to see him in an entirely different light. We can then begin to learn about human behavior, including personality types. Not only are there introverts and extroverts, authoritarian and egalitarian, Apollonian and Dionysian types and all the other shades and grades of personality, but each one of us has a number of learned *situational* personalities. The simplest form of the situational personality is that associated with responses to intimate, personal, social, and public transactions. Some individuals never develop the public phase of their personalities and, therefore, cannot fill public spaces; they make very poor speakers or moderators. As many psychiatrists know, other people have trouble with the intimate and personal zones and cannot endure closeness to others.

Concepts such as these are not always easy to grasp, because most of the distance-sensing process occurs outside awareness. We sense other people as close or distant, but we cannot always put our finger on what it is that enables us to characterize them as such. So many different things are happening at once it is difficult to sort out the sources of information on which we base our reactions. Is it tone of voice or stance or distance? This sorting process can be accomplished only by careful observation over a long period of time in a wide variety of situations, making a note of each small shift in information received. For example, the presence or absence of the sensation of warmth from the body of another person marks the line between intimate and non-intimate space. The smell of freshly washed hair and the blurring of another person's features seen close up combine with the

sensation of warmth to create intimacy. By using one's self as a control and recording changing patterns of sensory input it is possible to identify structure points in the distance-sensing system. In effect, one identifies, one by one, the isolates making up the sets that constitute the intimate, personal, social, and public zones.

The following descriptions of the four distance zones have been compiled from observations and interviews with non-contact, middle-class, healthy adults, mainly natives of the northeastern seaboard of the United States. A high percentage of the subjects were men and women from business and the professions; many could be classified as intellectuals. The interviews were effectively neutral; that is, the subjects were not noticeably excited, depressed, or angry. There were no unusual environmental factors, such as extremes of temperature or noise. These descriptions represent only a first approximation. They will doubtless seem crude when more is known about proxemic observation and how people distinguish one distance from another. It should be emphasized that these generalizations are not representative of human behavior in general—or even of American behavior in general—but only of the group included in the sample. Negroes and Spanish Americans as well as persons who come from southern European cultures have very different proxemic patterns.

Each of the four distance zones described below has a near and a far phase, which will be discussed after short introductory remarks. It should be noted that the measured distances vary somewhat with differences in personality and environmental factors. For example, a high noise level or low illumination will ordinarily bring people closer together.

### INTIMATE DISTANCE

At intimate distance, the presence of the other person is unmistakable and may at times be overwhelming because of the greatly stepped-up sensory inputs. Sight (often distorted), olfaction, heat from the other person's body, sound, smell, and feel of the breath all combine to signal unmistakable involvement with another body.

#### *Intimate Distance—Close Phase*

This is the distance of love-making and wrestling, comforting and protecting. Physical contact or the high possibility of physical involvement is uppermost in the awareness of both persons. The use of their distance receptors is greatly reduced except for olfaction and sensation of radiant heat, both of which are stepped up. In the maximum contact phase, the muscles and skin communicate. Pelvis, thighs, and head can be brought into play; arms can encircle. Except at the outer limits, sharp vision is blurred. When close vision is possible within the intimate range—as with children—the image is greatly enlarged and stimulates much, if not all, of the retina. The detail that can be seen at this distance is extraordinary. This detail plus the cross-eyed pull of the eye muscles provide a visual experience that cannot be confused with any other distance. Vocalization at intimate distance plays a very minor part in the communication process, which is carried mainly by other channels. A whisper has the effect of expanding the distance. The vocalizations that do occur are largely involuntary.

#### *Intimate Distance—Far Phase*

(Distance: six to eighteen inches)

Heads, thighs, and pelvis are not easily brought into contact, but hands can reach and grasp extremities. The head is seen as enlarged in size, and its features are distorted. Ability to focus the eye easily is an important feature of this distance for Americans. The iris of the other person's eye seen at about six to nine inches is enlarged to more than life-size. Small blood vessels in the sclera are clearly perceived, pores are enlarged. Clear vision (15 degrees) includes the upper or lower portion of the face, which is perceived as enlarged. The nose is seen as over-large and may look distorted, as will other features such as lips, teeth, and tongue. Peripheral vision (30 to 180 degrees) includes the outline of head and shoulders and very often the hands.

Much of the physical discomfort that Americans experience

when foreigners are inappropriately inside the intimate sphere is expressed as a distortion of the visual system. One subject said, "These people get so close, you're cross-eyed. It really makes me nervous. They put their face so close it feels like they're *inside you*." At the point where sharp focus is lost, one feels the uncomfortable muscular sensation of being cross-eyed from looking at something too close. The expressions "Get your face *out of mine*" and "He shook his fist *in my face*" apparently express how many Americans perceive their body boundaries.

At six to eighteen inches the voice is used but is normally held at a very low level or even a whisper. As Martin Joos, the linguist, describes it, "An intimate utterance pointedly avoids giving the addressee information from outside of the speaker's skin. The point . . . is simply to remind (hardly 'inform') the addressee of some feeling . . . inside the speaker's skin." The heat and odor of the other person's breath may be detected, even though it is directed away from subject's face. Heat loss or gain from other person's body begins to be noticed by some subjects.

The use of intimate distance in public is not considered proper by adult, middle-class Americans even though their young may be observed intimately involved with each other in automobiles and on beaches. Crowded subways and buses may bring strangers into what would ordinarily be classed as intimate spatial relations, but subway riders have defensive devices which take the real intimacy out of intimate space in public conveyances. The basic tactic is to be as immobile as possible and, when part of the trunk or extremities touches another person, withdraw if possible. If this is not possible, the muscles in the affected areas are kept tense. For members of the non-contact group, it is taboo to relax and enjoy bodily contact with strangers! In crowded elevators the hands are kept at the side or used to steady the body by grasping a railing. The eyes are fixed on infinity and are not brought to bear on anyone for more than a passing glance.

It should be noted once more that American proxemic patterns for intimate distance are by no means universal. Even the rules governing such intimacies as touching others cannot be counted on to remain constant. Americans who have had

an opportunity for considerable social interaction with Russians report that many of the features characteristic of American intimate distance are present in Russian social distance. As we shall see in the following chapter, Middle Eastern subjects in public places do not express the outraged reaction to being touched by strangers which one encounters in American subjects.

## PERSONAL DISTANCE

"Personal distance" is the term originally used by Hediger to designate the distance consistently separating the members of non-contact species. It might be thought of as a small protective sphere or bubble that an organism maintains between itself and others.

### *Personal Distance—Close Phase*

(Distance: one and a half to two and a half feet)

The kinesthetic sense of closeness derives in part from the possibilities present in regard to what each participant can do to the other with his extremities. At this distance, one can hold or grasp the other person. Visual distortion of the other's features is no longer apparent. However, there is noticeable feedback from the muscles that control the eyes. The reader can experience this himself if he will look at an object eighteen inches to three feet away, paying particular attention to the muscles around his eyeballs. He can feel the pull of these muscles as they hold the two eyes on a single point so that the image of each eye stays in register. Pushing gently with the tip of the finger on the surface of the lower eyelid so that the eyeball is displaced will illustrate clearly the work these muscles perform in maintaining a single coherent image. A visual angle of 15 degrees takes in another person's upper or lower face, which is seen with exceptional clarity. The planes and roundness of the face are accentuated; the nose projects and the ears recede; fine hair of the face, eyelashes, and pores is clearly visible. The three-dimensional quality of objects is particularly pronounced. Objects have roundness, sub-

stance, and form unlike that perceived at any other distance. Surface textures are also very prominent and are clearly differentiated from each other. Where people stand in relation to each other signals their relationship, or how they feel toward each other, or both. A wife can stay inside the circle of her husband's close personal zone with impunity. For another woman to do so is an entirely different story.

#### *Personal Distance—Far Phase*

(Distance: two and a half to four feet)

Keeping someone at "arm's length" is one way of expressing the far phase of personal distance. It extends from a point that is just outside easy touching distance by one person to a point where two people can touch fingers if they extend both arms. This is the limit of physical domination in the very real sense. Beyond it, a person cannot easily "get his hands on" someone else. Subjects of personal interest and involvement can be discussed at this distance. Head size is perceived as normal and details of the other person's features are clearly visible. Also easily seen are fine details of skin, gray hair, "sleep" in the eye, stains on teeth, spots, small wrinkles, or dirt on clothing. Foveal vision covers only an area the size of the tip of the nose or one eye, so that the gaze must wander around the face (*where the eye is directed* is strictly a matter of cultural conditioning). Fifteen-degree clear vision covers the upper or lower face, while 180-degree peripheral vision takes in the hands and the whole body of a seated person. Movement of the hands is detected, but fingers can't be counted. The voice level is moderate. No body heat is perceptible. While olfaction is not normally present for Americans, it is for a great many other people who use colognes to create an olfactory bubble. Breath odor can sometimes be detected at this distance, but Americans are generally trained to direct the breath away from others.

#### SOCIAL DISTANCE

The boundary line between the far phase of personal distance and the close phase of social distance marks, in the words of one subject, the "limit of domination." Intimate visual detail in the face is not perceived, and nobody touches or expects to touch another person unless there is some special effort. Voice level is normal for Americans. There is little change between the far and close phases, and conversations can be overheard at a distance of up to twenty feet. I have observed that in overall loudness, the American voice at these distances is below that of the Arab, the Spaniard, the South Asian Indian, and the Russian, and somewhat above that of the English upper class, the Southeast Asian, and the Japanese.

#### *Social Distance—Close Phase*

(Distance: four to seven feet)

Head size is perceived as normal; as one moves away from the subject, the foveal area of the eye can take in an ever-increasing amount of the person. At four feet, a one-degree visual angle covers an area of a little more than one eye. At seven feet the area of sharp focus extends to the nose and parts of both eyes; or the whole mouth, one eye, and the nose are sharply seen. Many Americans shift their gaze back and forth from eye to eye or from eyes to mouth. Details of skin texture and hair are clearly perceived. At a 60-degree visual angle, the head, shoulders, and upper trunk are seen at a distance of four feet; while the same sweep includes the whole figure at seven feet.

Impersonal business occurs at this distance, and in the close phase there is more involvement than in the distant phase. People who work together tend to use close social distance. It is also a very common distance for people who are attending a casual social gathering. To stand and look down at a person at this distance has a domineering effect, as when a man talks to his secretary or receptionist.

*Social Distance—Far Phase*

(Distance: seven to twelve feet)

This is the distance to which people move when someone says, "Stand away so I can look at you." Business and social discourse conducted at the far end of social distance has a more formal character than if it occurs inside the close phase. Desks in the offices of important people are large enough to hold visitors at the far phase of social distance. Even in an office with standard-size desks, the chair opposite is eight or nine feet away from the man behind the desk. At the far phase of social distance, the finest details of the face, such as the capillaries in the eyes, are lost. Otherwise, skin texture, hair, condition of teeth, and condition of clothes are all readily visible. None of my subjects mentioned heat or odor from another person's body as detectable at this distance. The full figure—with a good deal of space around it—is encompassed in a 60-degree glance. Also, at around twelve feet, feedback from the eye muscles used to hold the eyes inward on a single spot falls off rapidly. The eyes and the mouth of the other person are seen in the area of sharpest vision. Hence, it is not necessary to shift the eyes to take in the whole face. During conversations of any significant length it is more important to maintain visual contact at this distance than it is at closer distance.

Proxemic behavior of this sort is culturally conditioned and entirely arbitrary. It is also binding on all concerned. To fail to hold the other person's eye is to shut him out and bring conversation to a halt, which is why people who are conversing at this distance can be observed craning their necks and leaning from side to side to avoid intervening obstacles. Similarly, when one person is seated and the other is standing, prolonged visual contact at less than ten or twelve feet tires the neck muscles and is generally avoided by subordinates who are sensitive to their employer's comfort. If, however, the status of the two parties is reversed so that the subordinate is seated, the other party may often come closer.

At this distant phase, the voice level is noticeably louder than for the close phase, and it can usually be heard easily

in an adjoining room if the door is open. Raising the voice or shouting can have the effect of reducing social distance to personal distance.

A proxemic feature of social distance (far phase) is that it can be used to insulate or screen people from each other. This distance makes it possible for them to continue to work in the presence of another person without appearing to be rude. Receptionists in offices are particularly vulnerable as most employers expect double duty: answering questions, being polite to callers, as well as typing. If the receptionist is less than ten feet from another person, even a stranger, she will be sufficiently involved to be virtually compelled to converse. If she has more space, however, she can work quite freely without having to talk. Likewise, husbands returning from work often find themselves sitting and relaxing, reading the paper at ten or more feet from their wives, for at this distance a couple can engage each other briefly and disengage at will. Some men discover that their wives have arranged the furniture back-to-back—a favorite sociofugal device of the cartoonist Chick Young, creator of "Blondie." The back-to-back seating arrangement is an appropriate solution to minimum space because it is possible for two people to stay uninvolved if that is their desire.

## PUBLIC DISTANCE

Several important sensory shifts occur in the transition from the personal and social distances to public distance, which is well outside the circle of involvement.

*Public Distance—Close Phase*

(Distance: twelve to twenty-five feet)

At twelve feet an alert subject can take evasive or defensive action if threatened. The distance may even cue a vestigial but subliminal form of flight reaction. The voice is loud but not full-volume. Linguists have observed that a careful choice of words and phrasing of sentences as well as grammatical or syntactic shifts occur at this distance. Martin Joos's choice

of the term "formal style" is appropriately descriptive: "Formal texts . . . demand advance planning . . . the speaker is correctly said to think on his feet." The angle of sharpest vision (one degree) covers the whole face. Fine details of the skin and eyes are no longer visible. At sixteen feet, the body begins to lose its roundness and to look flat. The color of the eyes begins to be imperceptible; only the white of the eye is visible. Head size is perceived as considerably under life-size. The 15-degree lozenge-shaped area of clear vision covers the faces of two people at twelve feet, while 60-degree scanning includes the whole body with a little space around it. Other persons present can be seen peripherally.

#### *Public Distance—Far Phase*

(Distance: twenty-five feet or more)

Thirty feet is the distance that is automatically set around important public figures. An excellent example occurs in Theodore H. White's *The Making of the President 1960* when John F. Kennedy's nomination became a certainty. White is describing the group at the "hideaway cottage" as Kennedy entered:

Kennedy loped into the cottage with his light, dancing step, as young and lithe as springtime, and called a greeting to those who stood in his way. Then he seemed to slip from them as he descended the steps of the split-level cottage to a corner where his brother Bobby and brother-in-law Sargent Shriver were chatting, waiting for him. The others in the room surged forward on impulse to join him. Then they halted. A distance of perhaps 30 feet separated them from him, but it was impassable. They stood apart, these older men of long-established power, and watched him. He turned after a few minutes, saw them watching him, and whispered to his brother-in-law. Shriver now crossed the separating space to invite them over. First Averell Harriman; then Dick Daley; then Mike DiSalle, then, one by one, let them all congratulate him. Yet no one could pass the little open distance between him and them uninvited, because there was this thin separation about him, and the knowledge they were there not as his patrons but as his clients. They

could come by invitation only, for this might be a President of the United States.

The usual public distance is not restricted to public figures but can be used by anyone on public occasions. There are certain adjustments that must be made, however. Most actors know that at thirty or more feet the subtle shades of meaning conveyed by the normal voice are lost as are the details of facial expression and movement. Not only the voice but everything else must be exaggerated or amplified. Much of the nonverbal part of the communication shifts to gestures and body stance. In addition, the tempo of the voice drops, words are enunciated more clearly, and there are stylistic changes as well. Martin Joos's *frozen style* is characteristic: "Frozen style is for people who are to remain strangers." The whole man may be seen as quite small and he is perceived in a setting. Foveal vision takes in more and more of the man until he is entirely within the small circle of sharpest vision. At which point—when people look like ants—contact with them as human beings fades rapidly. The 60-degree cone of vision takes in the setting while peripheral vision has as its principal function the altering of the individual to movement at the side.

#### WHY "FOUR" DISTANCES?

In concluding this description of distance zones common to our sample group of Americans a final word about classification is in order. It may well be asked: Why are there four zones, not six or eight? Why set up any zones at all? How do we know that this classification is appropriate? How were the categories chosen?

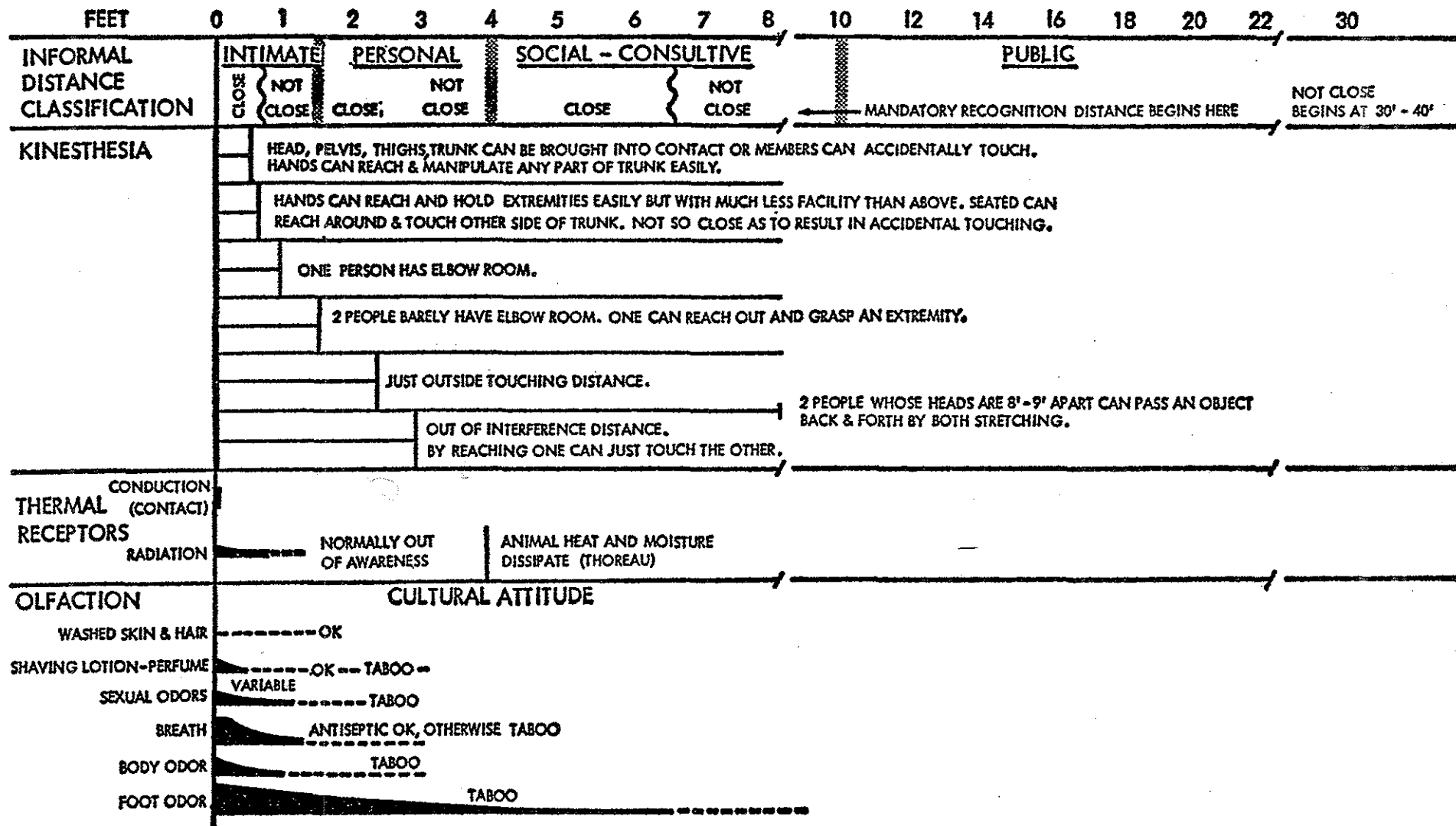
As I indicated earlier in Chapter VIII, the scientist has a basic need for a classification system, one that is as consistent as possible with the phenomena under observation and one which will hold up long enough to be useful. Behind every classification system lies a theory or hypothesis about the nature of the data and their basic patterns of organization. The hypothesis behind the proxemic classification system is this:

FEET		0	1	2	3	4	5	6	7	8	10	12	14	16	18	20	22	30	
VISION	VISION BLURRED DISTORTED																		
	DETAIL VISION (VIS < OF FOVEA 1°)		ENLARGED DETAILS OF IRIS, EYEBALL, PORES OF FACE, FINEST HAIRS	DETAIL OF FACE SEEN AS NORMAL SIZE. EYES, NOSE, SKIN, TEETH CONDITION, EYELASHES, HAIR ON BACK OF NECK		SMALLEST BLOOD VESSELS IN EYE LOST. SEE WEAR ON CLOTHING HEAD HAIR SEEN CLEARLY.		FINE LINES OF FACE FADE DEEP LINES STAND OUT SLIGHT EYE WINK LIP MOVEMENT SEEN CLEARLY		ENTIRE CENTRAL FACE INCLUDED		HAIR FEATURES DIS-SOLVE, EYE COLOR NOT DISCERNIBLE, SMILE-SROWN VISIBLE HEAD BOBBING MORE PRONOUNCED		SHELLEN'S STANDARD FOR DISTANT VISION - EMPLOYING ANGLE OF 1 MIN. GUILD OPTICIANS OF AMERICA EYE CHART A PERSON WITH 20-40 VISION HAS TROUBLE SEEING EYES & EXPRESSION AROUND EYES THOUGH EYE BLINK IS VISIBLE.					
	CLEAR VISION (VIS < AT MACULA 12° HOR, 3° VERT)	29" x 3" ON EYE NOSTRILS OR MOUTH	2.77" x .84" UPPER OR LOWER FACE	6.25" x 1.60" UPPER OR LOWER FACE	10" x 2.5" UPPER OR LOWER FACE OR SHOULDERS		20" x 5" 1 OR 2 FACES		31" x 7.5 FACES OF TWO PEOPLE		4'2" x 1'6" TORSOS OF TWO PEOPLE		6'3" x 1'7" TORSOS OF 4 OR 5 PEOPLE						
	60° SCANNING	1/3 OF FACE   EYE EAR OR MOUTH AREA FACE DISTORTED	NOSE PROJECTS WHOLE FACE SEEN FACE UNDISTORTED	UPPER BODY CAN'T COUNT FINGERS	UPPER BODY & GESTURES		WHOLE SEATED BODY VISIBLE PEOPLE OFTEN KEEP FEET WITHIN OTHER PERSON'S 60° ANGLE OF VIEW		WHOLE BODY HAS SPACE AROUND IT, POSTURAL COMMUNICATION BEGINS TO ASSUME IMPORTANCE										
	PERIPHERAL VISION	HEAD AGAINST BACK - GROUND	HEAD & SHOULDERS	WHOLE BODY MOVEMENT IN HANDS - FINGERS VISIBLE	WHOLE BODY		OTHER PEOPLE SEEN IF PRESENT		OTHER PEOPLE BECOME IMPORTANT IN PERIPHERAL VISION										
	HEAD SIZE	FILLS VISUAL FIELD FAR OVER LIFE SIZE	OVER NORMAL	NORMAL SIZE	NOTE: PERCEIVED HEAD SIZE VARIES EVEN WITH SAME SUBJECTS AND DISTANCE				NORMAL TO BEGINNING TO SHRINK.		VERY SMALL								
	ADDITIONAL NOTES	SENSATION OF BEING CROSS-EYED						PEOPLE & OBJECTS SEEN AS ROUND UP TO 12" - 15"		ACCOMMODATIVE CONVERGENCE ENDS AFTER 15' PEOPLE & OBJECTS BEGIN TO FLATTEN OUT									
	TASKS IN SUBMARINES	47% OF TASKS IN THIS RANGE		23% FALL IN THIS RANGE		DIMMICH, F. L. & FARNSWORTH, D. VISUAL ACUITY TASKS IN A SUBMARINE, NEW LONDON, 1951													
	ARTISTS' OBSERVATIONS OF GROSSER		VERY PERSONAL DISTANCE	ARTIST OR MODEL HAS TO DOMINATE	A PORTRAIT. A PICTURE PAINTED AT 4-8' OF A PERSON WHO IS NOT PAID TO "SIT"		TOO FAR FOR A CONVERSATION		BODY IS 1/3 SIZE		FULL LENGTH STATE PORTRAITS. HUMAN BODY SEEN AS A WHOLE, COMPREHENDED AT A GLANCE, WARMTH AND IDENTIFICATION CEASE								
ORAL	AURAL	GRUNTS GROANS	SOFT VOICE WHISPER INTIMATE STYLE	CONVENTIONAL CASUAL OR CONSULTIVE STYLE	MODIFIED VOICE				LOUD VOICE WHEN TALKING TO A GROUP, MUST RAISE VOICE TO GET ATTENTION FORMAL STYLE		FULL PUBLIC SPEAKING VOICE FROZEN STYLE								

NOTE: THE BOUNDARIES ASSOCIATED WITH THE TRANSITION FROM ONE VOICE LEVEL TO THE NEXT HAVE NOT BEEN PRECISELY DETERMINED



### CHART SHOWING INTERPLAY OF THE DISTANT AND IMMEDIATE RECEPTORS IN PROXEMIC PERCEPTION



it is in the nature of animals, including man, to exhibit behavior which we call territoriality. In so doing, they use the senses to distinguish between one space or distance and another. The specific distance chosen depends on the transaction; the relationship of the interacting individuals, how they feel, and what they are doing. The four-part classification system used here is based on observations of both animals and men. Birds and apes exhibit intimate, personal, and social distances just as man does.

Western man has combined consultative and social activities and relationships into one distance set and has added the public figure and the public relationship. "Public" relations and "public" manners as the Europeans and Americans practice them are different from those in other parts of the world. There are implicit obligations to treat total strangers in certain prescribed ways. Hence, we find four principal categories of relationships (intimate, personal, social, and public) and the activities and spaces associated with them. In other parts of the world, relationships tend to fall into other patterns, such as the family/non-family pattern common in Spain and Portugal and their former colonies or the caste and outcast system of India. Both the Arabs and the Jews also make sharp distinctions between people to whom they are related and those to whom they are not. My work with Arabs leads me to believe that they employ a system for the organization of informal space which is very different from what I observed in the United States. The relationship of the Arab peasant or fellah to his sheik or to God is not a public relationship. It is close and personal without intermediaries.

Until recently man's space requirements were thought of in terms of the actual amount of air displaced by his body. The fact that man has around him as extensions of his personality the zones described earlier has generally been overlooked. Differences in the zones—in fact their very existence—became apparent only when Americans began interacting with foreigners who organize their senses differently so that what was intimate in one culture might be personal or even public in another. Thus for the first time the American became aware of his own spatial envelopes, which he had previously taken for granted.

The ability to recognize these various zones of involvement and the activities, relationships, and emotions associated with each has now become extremely important. The world's populations are crowding into cities, and builders and speculators are packing people into vertical filing boxes—both offices and dwellings. If one looks at human beings in the way that the early slave traders did, conceiving of their space requirements simply in terms of the limits of the body, one pays very little attention to the effects of crowding. If, however, one sees man surrounded by a series of invisible bubbles which have measurable dimensions, architecture can be seen in a new light. It is then possible to conceive that people can be cramped by the spaces in which they have to live and work. They may even find themselves forced into behavior, relationships, or emotional outlets that are overly stressful. Like gravity, the influence of two bodies on each other is inversely proportional not only to the square of the distance but possibly even the cube of the distance between them. When stress increases, sensitivity to crowding rises—people get more on edge—so that more and more space is required as less and less is available.

The next two chapters, dealing with proxemic patterns for people of different cultures, are designed to serve a double purpose: first, to shed additional light on our own out-of-awareness patterns and by this means hopefully to contribute to improved design of living and working structures and cities as well; and second, to show the great need for improved intercultural understanding. Proxemic patterns point up in sharp contrast some of the basic differences between people—differences which can be ignored only at great risk. American city planners and builders are now in the process of designing cities in other countries with very little idea of people's spatial needs and practically no inkling that these needs vary from culture to culture. The chances of forcing whole populations into molds that do not fit are very great indeed. Within the United States urban renewal and the many crimes against humanity that are committed in its name usually demonstrate total ignorance of how to create congenial environments for the diverse populations that are pouring into our cities.