EDWARD T. HALL

RFE / RL
NO LOAN

RETURN AS SOON AS POSSIBLE
TO LIBRARY OF
AMERICAN COMMITTEE FOR LIBERATION
1657 BROADWAY
NEW YORK 19, N. Y.

THE SILENT LANGUAGE

CEU
LIBRARY OF THE
CENTRAL EUROPEAN
UNIVERSITY
BUDAPEST

DOUBLEDAY & COMPANY, INC., GARDEN CITY, NEW YORK

1959

LIBRARY OF CONGRESS CATALOG CARD NUMBER 59–6359
COPYRIGHT © 1959, BY EDWARD T. HALL
ALL RIGHTS RESERVED
PRINTED IN THE UNITED STATES OF AMERICA
FIRST EDITION

DESIGN: CHARLES KAPLAN

301. 243- H 5 2057

AMERICAN COMMITTEE FOR LIBERATION
RESEARCH LIBRARY

To my friends and colleagues from foreign cultures
who taught me so much about my own culture.

CONTENTS

INTRODUCTION		13
chapter one	THE VOICES OF TIME	23
chapter two	WHAT IS CULTURE?	43
chapter three	THE VOCABULARY OF CULTURE	57
chapter four	THE MAJOR TRIAD	83
chapter five	CULTURE IS COMMUNICATION	119
chapter six	THE PERVASIVE SET	127
chapter seven	THE ILLUSIVE ISOLATE	135
chapter eight	THE ORGANIZING PATTERN	143
chapter nine	TIME TALKS: AMERICAN ACCENTS	165
chapter ten	SPACE SPEAKS	187
chapter eleven	LOOSENING THE GRIP	211
APPENDIX I	SCHEMA FOR SOCIAL SCIENTISTS	217
APPENDIX II	A MAP OF CULTURE	218
APPENDIX III	THREE STUDIES OF CHANGE	225
APPENDIX IV	SELECTED BIBLIOGRAPHY	232
INDEX		235

CONTENTS

INTRODUCTION		13
chapter one	THE VOICES OF TIME	23
chapter two	WHAT IS CULTURE?	43
chapter three	THE VOCABULARY OF CULTURE	57
chapter four	THE MAJOR TRIAD	83
chapter five	CULTURE IS COMMUNICATION	119
chapter six	THE PERVASIVE SET	127
chapter seven	THE ILLUSIVE ISOLATE	135
chapter eight	THE ORGANIZING PATTERN	143
chapter nine	TIME TALKS: AMERICAN ACCENTS	165
chapter ten	SPACE SPEAKS	187
chapter eleven	LOOSENING THE GRIP	211
APPENDIX I	SCHEMA FOR SOCIAL SCIENTISTS	217
APPENDIX II	A MAP OF CULTURE	218
APPENDIX III	THREE STUDIES OF CHANGE	225
APPENDIX IV	SELECTED BIBLIOGRAPHY	232
INDEX		235

ACKNOWLEDGMENTS

My friend and mentor, Ralph Linton, once observed that each book he wrote "came out of his hide." At this point I have no difficulty accepting the credibility of his observation. I would like to add that this book exacted a toll from my family and especially my wife, who had to put up with my 5 A.M. hours, a curtailed social life, my own irascibility during critical stages of the manuscript, as well as many versions of the manuscript which she read, criticized, and corrected. Many books have been dedicated to the author's wife "without whose patience and understanding they would never have seen the light of day." It is easy to see why this dedication is so popular. Yet its popularity tends to detract from the impact of the message and somehow makes the efforts of the wife seem less important than they really are. I do not know how to express adequately my appreciation for the vital part my wife played in the

production of this book. There were many times when I would have delayed or let other pressing obligations interrupt my writing if it had not been for her encouragement. My first acknowledgment, therefore, is to my wife, Mildred Reed Hall.

As an anthropologist and a scientist I owe a tremendous debt to my colleagues but especially to the late Ralph Linton, under whom I studied at Columbia University. We used to spend many pleasant hours together as he tried out ideas he was developing in an amazing range of subjects. As a student I used to find it difficult to communicate with professors and always experienced a gulf between us, not so much in status but in approach. With Linton this gulf was never present. He always seemed to be able to communicate clearly and enjoy a real exchange of ideas. While the content of this book is different from anything Linton would have written, I have the feeling that he would have understood the ideas I am presenting.

Three other colleagues who provided encouragement and stimulation over the years are Erich Fromm, David Riesman, and John Useem. Much of the material in this book was worked out in collaboration with my friend and colleague, George L. Trager, professor of anthropology and linguistics at the University of Buffalo. During the early phases of our work together, Trager and I were assisted and encouraged by Edward A. Kennard, Ralph Kepler Lewis, and Henry Lee Smith, Jr. However, I must take full responsibility for the form and content of the book.

Many of the comments on other cultures are the result of direct observation and field work which I have done with the Spanish-American in New Mexico and Latin America, the Navajo, Hopi, Trukese, Western Mediterranean Arabs, and Iranians. Needless to say, the anthropologist always owes a great debt to the people he studies, because it is what

he learns from them about their cultures that makes his own culture more meaningful.

Clarkson N. Potter first urged me to write this book and has provided the necessary encouragement and understanding for its completion. I wish to express my appreciation for editorial assistance to Richard K. Winslow and Kermit Lansner.

I wish to acknowledge the kindness of the following publishers who have permitted me to quote from these books:

"A Case of Identity" in *The Complete Sherlock Holmes* by Sir Arthur Conan Doyle. Reprinted by permission of the Trustees of the Estate of Sir Arthur Conan Doyle and John Murray, Ltd.

Language, Thought, and Reality, Selected Writings of Benjamin Lee Whorf, published jointly by the Technology Press and John Wiley & Sons of New York. Reprinted by permission.

INTRODUCTION

Though the United States has spent billions of dollars on foreign aid programs, it has captured neither the affection nor esteem of the rest of the world. In many countries today Americans are cordially disliked; in others merely tolerated. The reasons for this sad state of affairs are many and varied, and some of them are beyond the control of anything this country might do to try to correct them. But harsh as it may seem to the ordinary citizen, filled as he is with good intentions and natural generosity, much of the foreigners' animosity has been generated by the way Americans behave.

As a country we are apt to be guilty of great ethnocentrism. In many of our foreign aid programs we employ a heavy-handed technique in dealing with local nationals. We insist that everyone else do things our way. Consequently we manage to convey the impression that we simply regard foreign nationals as "underdeveloped Americans." Most of our

behavior does not spring from malice but from ignorance, which is as grievous a sin in international relations. We are not only almost totally ignorant of what is expected in other countries, we are equally ignorant of what we are communicating to other people by our own normal behavior.

It is not my thesis that Americans should be universally loved. But I take no consolation in the remark of a government official who stated that "we don't have to be liked just so long as we are respected." In most countries we are neither liked nor respected. It is time that Americans learned how to communicate effectively with foreign nationals. It is time that we stop alienating people with whom we are trying to work.

For many years I have been concerned with the selection and training of Americans to work in foreign countries for both government and business. I am convinced that much of our difficulty with people in other countries stems from the fact that so little is known about cross-cultural communication. Because of this lack, much of the good will and great effort of the nation has been wasted in its overseas programs. When Americans are sent abroad to deal with other peoples they should first be carefully selected as to their suitability to work in a foreign culture. They should also be taught to speak and read the language of the country of assignment and thoroughly trained in the culture of the country. All of this takes time and costs money. However, unless we are willing to select and train personnel, we simply sell ourselves short overseas.

Yet this formal training in the language, history, government, and customs of another nation is only the first step in a comprehensive program. Of equal importance is an introduction to the non-verbal language which exists in every country of the world and among the various groups within each country. Most Americans are only dimly aware of this silent language even though they use it every day. They are not conscious of the elaborate patterning of behavior which prescribes our handling of time, our spatial relationships, our attitudes toward work, play, and learning. In addition to what we say with our verbal language we are constantly communicating our real feelings in our silent language—the language of behavior. Sometimes this is correctly interpreted by other nationalities, but more often it is not.

Difficulties in intercultural communication are seldom seen for what they are. When it becomes apparent to people of different countries that they are not understanding one another, each tends to blame it on "those foreigners," on their stupidity, deceit, or craziness. The following examples will illuminate some of these cross-cultural cross-purposes at their most poignant.

Despite a host of favorable auspices an American mission in Greece was having great difficulty working out an agreement with Greek officials. Efforts to negotiate met with resistance and suspicion on the part of the Greeks. The Americans were unable to conclude the agreements needed to start new projects. Upon later examination of this exasperating situation two unsuspected reasons were found for the stalemate: First, Americans pride themselves on being outspoken and forthright. These qualities are regarded as a liability by the Greeks. They are taken to indicate a lack of finesse which the Greeks deplore. The American directness immediately prejudiced the Greeks. Second, when the Americans arranged meetings with the Greeks they tried to limit the length of the meetings and to reach agreements on general principles first, delegating the drafting of details to subcommittees. The Greeks regarded this practice as a device to pull the wool over their eyes. The Greek practice is to work out details in front of all concerned and continue meetings for as long as is necessary. The result of this

misunderstanding was a series of unproductive meetings with each side deploring the other's behavior.

In the Middle East, Americans usually have a difficult time with the Arabs. I remember an American agriculturalist who went to Egypt to teach modern agricultural methods to the Egyptian farmers. At one point in his work he asked his interpreter to ask a farmer how much he expected his field to yield that year. The farmer responded by becoming very excited and angry. In an obvious attempt to soften the reply the interpreter said, "He says he doesn't know." The American realized something had gone wrong, but he had no way of knowing what. Later I learned that the Arabs regard anyone who tries to look into the future as slightly insane. When the American asked him about his future yield, the Egyptian was highly insulted since he thought the American considered him crazy. To the Arab only God knows the future, and it is presumptuous even to talk about it.

In Japan I once interviewed an American scholar who was sent to Japan to teach American history to Japanese university professors. The course was well under way when the American began to doubt if the Japanese understood his lectures. Since he did not speak Japanese, he asked for an interpreter. After a few lectures with the interpreter translating for him, the American asked the group to meet without him and make a report on what they were learning from the course. The next time the American met with the class the interpreter told him that the class understood only about 50 per cent of what had been going on. The American was discouraged and upset. What he didn't know was that he had inadvertently insulted the group by requesting an interpreter. In Japan a sign of an educated man is his ability to speak English. The Japanese professors felt that the American had caused them to lose face by implying that

they were uneducated when he requested the interpreter.

Americans often do so badly in their jobs overseas that military officers have a real fear of being assigned to some countries. I once heard a retired admiral talking to an army general about a mutual acquaintance. "Poor old Charley," lamented the admiral, "he got mixed up with those Orientals in the Far East and it ruined his career." Periodically, after an incident like the Girard case, which was a tragedy of errors by both American military and diplomatic personnel in Japan, there is a brief flurry of interest in "doing something about better selection of personnel for foreign assignment." As one Pentagon aide remarked, "At least we ought to be able to select them so they don't shoot the local civilians."

Obviously there are always going to be unavoidable incidents when our forces are stationed in foreign countries. Many of the incidents are made worse, however, by the inept way the Americans handle the consequences. When incidents do occur, the Americans rarely know how to act in such a way as to avoid adding fuel to the fire. They are usually blind to the fact that what passes as ordinary, acceptable American behavior is often interpreted in such a way by foreigners that it distorts our true sentiments or our intentions.

If this book does nothing more than to plant this idea, it will have served its purpose. Yet in writing these pages I have had a more ambitious goal. This book was written for the layman, the person who is at times perplexed by the life in which he finds himself, who often feels driven here and there by forces he does not understand, who may see others doing things that genuinely mystify him at home in America as well as overseas in another culture. I hope that I can show the reader that behind the apparent mystery,

confusion, and disorganization of life there is order; and that this understanding will set him to re-examine the human world around him. I hope that it will also interest the reader in the subject of culture and lead him to follow his own interests and make his own observations.

Though they will probably disagree with some of the points I make, professionals in various specialized fields may find some useful insights in these pages. The architect might well learn to employ the knowledge available to him about space as a culturally patterned dimension in his work. The educator will undoubtedly bristle under some of my criticisms, yet I sincerely hope that he will find the analysis in this book useful in its application to teaching. My colleagues in the field of psychiatry will find concepts here useful in their therapy, just as my collaboration with psychiatrists has proved invaluable in the study of different varieties of communication. Writers, artists, businessmen, and management experts have all contributed substantially to my knowledge. It is to be hoped that the social scientist will find the concept of culture as communication relevant to his work.

In my research on culture I received invaluable collaboration from my colleague, George L. Trager. Trager is an anthropologically trained linguist who has made a number of important contributions to the study of language. Trager and I developed a theory of culture based on a communications model which is contained in this book and which gives it its theoretical underpinning.

The pages that follow have been arranged in such a way as to lead the reader gradually from the known to the unknown. It will be helpful if the reader thinks of culture as analogous to music. If a person hasn't heard music, it is impossible to describe. Before the days of written scores,

people learned informally by imitation. Man was able to exploit the potential of music only when he started writing musical scores. This is what must be done for culture. This book represents the cultural analogue of a musical primer.

THE SILENT LANGUAGE

chapter

one

THE VOICES OF TIME

Time talks. It speaks more plainly than words. The message it conveys comes through loud and clear. Because it is manipulated less consciously, it is subject to less distortion than the spoken language. It can shout the truth where words lie.

I was once a member of a mayor's committee on human relations in a large city. My assignment was to estimate what the chances were of non-discriminatory practices being adopted by the different city departments. The first step in this project was to interview the department heads, two of whom were themselves members of minority groups. If one were to believe the words of these officials, it seemed that all of them were more than willing to adopt non-dis-

criminatory labor practices. Yet I felt that, despite what they said, in only one case was there much chance for a change. Why? The answer lay in how they used the silent language of time and space.

Special attention had been given to arranging each interview. Department heads were asked to be prepared to spend an hour or more discussing their thoughts with me. Nevertheless, appointments were forgotten; long waits in outer offices (fifteen to forty-five minutes) were common, and the length of the interview was often cut down to ten or fifteen minutes. I was usually kept at an impersonal distance during the interview. In only one case did the department head come from behind his desk. These men had a position and they were literally and figuratively sticking to it!

The implication of this experience (one which public-opinion pollsters might well heed) is quite obvious. What people do is frequently more important than what they say. In this case the way these municipal potentates handled time was eloquent testimony to what they inwardly believed, for the structure and meaning of time systems, as well as the time intervals, are easy to identify. In regard to being late there are: "mumble something" periods, slight apology periods, mildly insulting periods requiring full apology, rude periods, and downright insulting periods. The psychoanalyst has long been aware of the significance of communication on this level. He can point to the way his patients handle time as evidence of "resistances" and "transference."

Different parts of the day, for example, are highly significant in certain contexts. Time may indicate the importance of the occasion as well as on what level an interaction between persons is to take place. In the United States if you telephone someone very early in the morning, while he is shaving or having breakfast, the time of the call usually

signals a matter of utmost importance and extreme urgency. The same applies for calls after 11:00 P.M. A call received during sleeping hours is apt to be taken as a matter of life and death, hence the rude joke value of these calls among the young. Our realization that time talks is even reflected in such common expressions as, "What time does the clock *say?*"

An example of how thoroughly these things are taken for granted was reported to me by John Useem, an American social anthropologist, in an illuminating case from the South Pacific. The natives of one of the islands had been having a difficult time getting their white supervisors to hire them in a way consistent with their traditional status system. Through ignorance the supervisors had hired too many of one group and by so doing had disrupted the existing balance of power among the natives. The entire population of the island was seething because of this error. Since the Americans continued in their ignorance and refused to hire according to local practice, the head men of the two factions met one night to discuss an acceptable reallocation of jobs. When they finally arrived at a solution, they went en masse to see the plant manager and woke him up to tell him what had been decided. Unfortunately it was then between two and three o'clock in the morning. They did not know that it is a sign of extreme urgency to wake up Americans at this hour. As one might expect, the American plant manager, who understood neither the local language nor the culture nor what the hullabaloo was all about, thought he had a riot on his hands and called out the Marines. It simply never occurred to him that the parts of the day have a different meaning for these people than they have for us.

On the other hand, plant managers in the United States are fully aware of the significance of a communication made during the middle of the morning or afternoon that takes

everyone away from his work. Whenever they want to make an important announcement they will ask: "When shall we let them know?" In the social world a girl feels insulted when she is asked for a date at the last minute by someone whom she doesn't know very well, and the person who extends an invitation to a dinner party with only three or four days' notice has to apologize. How different from the people of the Middle East with whom it is pointless to make an appointment too far in advance, because the informal structure of their time system places everything beyond a week into a single category of "future," in which plans tend to "slip off their minds."

Advance notice is often referred to in America as "lead time," an expression which is significant in a culture where schedules are important. While it is learned informally, most of us are familiar with how it works in our own culture, even though we cannot state the rules technically. The rules for lead time in other cultures, however, have rarely been analyzed. At the most they are known by experience to those who lived abroad for some time. Yet think how important it is to know how much time is required to prepare people, or for them to prepare themselves, for things to come. Sometimes lead time would seem to be very extended. At other times, in the Middle East, any period longer than a week may be too long.

How troublesome differing ways of handling time can be is well illustrated by the case of an American agriculturalist assigned to duty as an attaché of our embassy in a Latin country. After what seemed to him a suitable period he let it be known that he would like to call on the minister who was his counterpart. For various reasons, the suggested time was not suitable; all sorts of cues came back to the effect that the time was not yet ripe to visit the minister. Our friend, however, persisted and forced an appointment which

was reluctantly granted. Arriving a little before the hour (the American respect pattern), he waited. The hour came and passed; five minutes—ten minutes—fifteen minutes. At this point he suggested to the secretary that perhaps the minister did not know he was waiting in the outer office. This gave him the feeling he had done something concrete and also helped to overcome the great anxiety that was stirring inside him. Twenty minutes—twenty-five minutes—thirty minutes—forty-five minutes (the insult period)!

He jumped up and told the secretary that he had been "cooling his heels" in an outer office for forty-five minutes and he was "damned sick and tired" of this type of treatment. This message was relayed to the minister, who said, in effect, "Let him cool his heels." The attaché's stay in the country was not a happy one.

The principal source of misunderstanding lay in the fact that in the country in question the five-minute-delay interval was not significant. Forty-five minutes, on the other hand, instead of being at the tail end of the waiting scale, was just barely at the beginning. To suggest to an American's secretary that perhaps her boss didn't know you were there after waiting sixty seconds would seem absurd, as would raising a storm about "cooling your heels" for five minutes. Yet this is precisely the way the minister registered the protestations of the American in his outer office! He felt, as usual, that Americans were being totally unreasonable.

Throughout this unfortunate episode the attaché was acting according to the way he had been brought up. At home in the United States his responses would have been normal ones and his behavior legitimate. Yet even if he had been told before he left home that this sort of thing would happen, he would have had difficulty not *feeling* insulted after he had been kept waiting forty-five minutes. If, on the other hand, he had been taught the details of the local time sys-

tem just as he should have been taught the local spoken language, it would have been possible for him to adjust himself accordingly.

What bothers people in situations of this sort is that they don't realize they are being subjected to another form of communication, one that works part of the time with language and part of the time independently of it. The fact that the message conveyed is couched in no formal vocabulary makes things doubly difficult, because neither party can get very explicit about what is actually taking place. Each can only say what he thinks is happening and how he feels about it. The thought of what is being communicated is what hurts.

AMERICAN TIME

People of the Western world, particularly Americans, tend to think of time as something fixed in nature, something around us and from which we cannot escape; an ever-present part of the environment, just like the air we breathe. That it might be experienced in any other way seems unnatural and strange, a feeling which is rarely modified even when we begin to discover how really differently it is handled by some other people. Within the West itself certain cultures rank time much lower in over-all importance than we do. In Latin America, for example, where time is treated rather cavalierly, one commonly hears the expression, "Our time or your time?" "*Hora americana, hora mejicana?*"

As a rule, Americans think of time as a road or a ribbon stretching into the future, along which one progresses. The road has segments or compartments which are to be kept discrete ("one thing at a time"). People who cannot schedule time are looked down upon as impractical. In at least some parts of Latin America, the North American (their

term for us) finds himself annoyed when he has made an appointment with somebody, only to find a lot of other things going on at the same time. An old friend of mine of Spanish cultural heritage used to run his business according to the "Latino" system. This meant that up to fifteen people were in his office at one time. Business which might have been finished in a quarter of an hour sometimes took a whole day. He realized, of course, that the Anglo-Americans were disturbed by this and used to make some allowance for them, a dispensation which meant that they spent only an hour or so in his office when they had planned on a few minutes. The American concept of the discreteness of time and the necessity for scheduling was at variance with this amiable and seemingly confusing Latin system. However, if my friend had adhered to the American system he would have destroyed a vital part of his prosperity. People who came to do business with him also came to find out things and to visit each other. The ten to fifteen Spanish-Americans and Indians who used to sit around the office (among whom I later found myself after I had learned to relax a little) played their own part in a particular type of communications network.

Not only do we Americans segment and schedule time, but we look ahead and are oriented almost entirely toward the future. We like new things and are preoccupied with change. We want to know how to overcome resistance to change. In fact, scientific theories and even some pseudo-scientific ones, which incorporate a striking theory of change, are often given special attention.

Time with us is handled much like a material; we earn it, spend it, save it, waste it. To us it is somewhat immoral to have two things going on at the same time. In Latin America it is not uncommon for one man to have a number of simultaneous jobs which he either carries on from one

desk or which he moves between, spending a small amount of time on each.

While we look to the future, our view of it is limited. The future to us is the foreseeable future, not the future of the South Asian that may involve centuries. Indeed, our perspective is so short as to inhibit the operation of a good many practical projects, such as sixty- and one-hundred-year conservation works requiring public support and public funds. Anyone who has worked in industry or in the government of the United States has heard the following: "Gentlemen, this is for the long term! Five or ten years."

For us a "long time" can be almost anything—ten or twenty years, two or three months, a few weeks, or even a couple of days. The South Asian, however, feels that it is perfectly realistic to think of a "long time" in terms of thousands of years or even an endless period. A colleague once described their conceptualization of time as follows: "Time is like a museum with endless corridors and alcoves. You, the viewer, are walking through the museum in the dark, holding a light to each scene as you pass it. God is the curator of the museum, and only He knows all that is in it. One lifetime represents one alcove."

The American's view of the future is linked to a view of the past, for tradition plays an equally limited part in American culture. As a whole, we push it aside or leave it to a few souls who are interested in the past for very special reasons. There are, of course, a few pockets, such as New England and the South, where tradition is emphasized. But in the realm of business, which is the dominant model of United States life, tradition is equated with *experience*, and experience is thought of as being very close to if not synonymous with know-how. Know-how is one of our prized possessions, so that when we look backward it is rarely to take pleasure in the past itself but usually to calculate the

know-how, to assess the prognosis for success in the future.

Promptness is also valued highly in American life. If people are not prompt, it is often taken either as an insult or as an indication that they are not quite responsible. There are those, of a psychological bent, who would say that we are obsessed with time. They can point to individuals in American culture who are literally time-ridden. And even the rest of us feel very strongly about time because we have been taught to take it so seriously. We have stressed this aspect of culture and developed it to a point unequaled anywhere in the world, except, perhaps, in Switzerland and north Germany. Many people criticize our obsessional handling of time. They attribute ulcers and hypertension to the pressure engendered by such a system. Perhaps they are right.

SOME OTHER CONCEPTS OF TIME

Even within the very borders of the United States there are people who handle time in a way which is almost incomprehensible to those who have not made a major effort to understand it. The Pueblo Indians, for example, who live in the Southwest, have a sense of time which is at complete variance with the clock-bound habits of the ordinary American citizen. For the Pueblos events begin when the time is ripe and no sooner.

I can still remember a Christmas dance I attended some twenty-five years ago at one of the pueblos near the Rio Grande. I had to travel over bumpy roads for forty-five miles to get there. At seven thousand feet the ordeal of winter cold at one o'clock in the morning is almost unbearable. Shivering in the still darkness of the pueblo, I kept searching for a clue as to when the dance would begin.

Outside everything was impenetrably quiet. Occasionally

there was the muffled beat of a deep pueblo drum, the opening of a door, or the piercing of the night's darkness with a shaft of light. In the church where the dance was to take place a few white townsfolk were huddled together on a balcony, groping for some clue which would suggest how much longer they were going to suffer. "Last year I heard they started at ten o'clock." "They can't start until the priest comes." "There is no way of telling when they will start." All this punctuated by chattering teeth and the stamping of feet to keep up circulation.

Suddenly an Indian opened the door, entered, and poked up the fire in the stove. Everyone nudged his neighbor: "Maybe they are going to begin now." Another hour passed. Another Indian came in from outside, walked across the nave of the church, and disappeared through another door. "Certainly now they will begin. After all, it's almost two o'clock." Someone guessed that they were just being ornery in the hope that the white men would go away. Another had a friend in the pueblo and went to his house to ask when the dance would begin. Nobody knew. Suddenly, when the whites were almost exhausted, there burst upon the night the deep sounds of the drums, rattles, and low male voices singing. Without warning the dance had begun.

After years of performances such as this, no white man in his right mind will hazard a guess as to when one of these ceremonial dances will begin. Those of us who have learned now know that the dance doesn't start at a particular time. It is geared to no schedule. It starts when "things" are ready!

As I pointed out, the white civilized Westerner has a shallow view of the future compared to the Oriental. Yet set beside the Navajo Indians of northern Arizona, he seems a model of long-term patience. The Navajo and the European-American have been trying to adjust their concepts of time for almost a hundred years. So far they have not done too

well. To the old-time Navajo time is like space—only the here and now is quite real. The future has little reality to it.

An old friend of mine reared with the Navajo expressed it this way: "You know how the Navajo love horses and how much they love to gamble and bet on horse races. Well, if you were to say to a Navajo, 'My friend, you know my quarter horse that won all the races at Flagstaff last Fourth of July?' that Navajo would eagerly say 'yes, yes,' he knew the horse; and if you were to say, 'In the fall I am going to give you that horse,' the Navajo's face would fall and he would turn around and walk away. On the other hand, if you were to say to him, 'Do you see that old bag of bones I just rode up on? That old hay-bellied mare with the knock-knees and pigeon toes, with the bridle that's falling apart and the saddle that's worn out? You can have that horse, my friend, it's yours. Take it, ride it away now.' Then the Navajo would beam and shake your hand and jump on his new horse and ride away. Of the two, only the immediate gift has reality; a promise of future benefits is not even worth thinking about."

In the early days of the range control and soil conservation programs it was almost impossible to convince the Navajo that there was anything to be gained from giving up their beloved sheep for benefits which could be enjoyed ten or twenty years in the future. Once I was engaged in the supervision of the construction of small earth dams and like everyone else had little success at first in convincing Navajo workmen that they should work hard and build the dam quickly, so that there would be more dams and more water for the sheep. The argument that they could have one dam or ten, depending on how hard they worked, conveyed nothing. It wasn't until I learned to translate our behavior into their terms that they produced as we knew they could.

The solution came about in this way. I had been discuss-

ing the problem with a friend, Lorenzo Hubbell, who had lived on the reservation all of his life. When there were difficulties I used to find it helpful to unburden myself to him. Somewhere in his remarks there was always a key to the underlying patterns of Navajo life. As we talked I learned that the Navajo understood and respected a bargain. I had some inkling of this when I noticed how unsettled the Indians became when they were permitted to fall down on the job they had agreed to do. In particular they seemed to be apprehensive lest they be asked to repay an unfulfilled obligation at some future time. I decided to sit down with the Navajo crew and talk to them about the work. It was quite useless to argue about the future advantages which would accrue from working hard; linear reasoning and logic were meaningless. They did respond, however, when I indicated that the government was giving them money to get out of debt, providing jobs near their families, and giving them water for their sheep. I stressed the fact that in exchange for this, they must work eight hours every day. This was presented as a bargain. Following my clarification the work progressed satisfactorily.

One of my Indian workmen inadvertently provided another example of the cultural conflict centering around time. His name was "Little Sunday." He was small, wiry, and winning. Since it is not polite to ask the Navajo about their names or even to ask them what their name is, it was necessary to inquire of others how he came to be named "Little Sunday." The explanation was a revealing one.

In the early days of the white traders the Indians had considerable difficulty getting used to the fact that we Europeans divided time into strange and unnatural periods instead of having a "natural" succession of days which began with the new moon and ended with the old. They were particularly perplexed by the notion of the week introduced

by the traders and the missionaries. Imagine a Navajo Indian living some forty or fifty miles from a trading store that is a hundred miles north of the railroad deciding that he needs flour and maybe a little lard for bread. He thinks about the flour and the lard, and he thinks about his friends and the fun he will have trading, or maybe he wonders if the trader will give him credit or how much money he can get for the hide he has. After riding horseback for a day and a half to two days he reaches the store all ready to trade. The store is locked up tight. There are a couple of other Navajo Indians camped in the hogan built by the trader. They say the trader is inside but he won't trade because it's Sunday. They bang on his door and he tells them, "Go away, it's Sunday," and the Navajo says, "But I came from way up on Black Mesa, and I am hungry. I need some food." What can the trader do? Soon he opens the store and then all the Navajo pour in. One of the most frequent and insistent Sunday visitors was a man who earned for himself the sobriquet "Big Sunday." "Little Sunday," it turns out, ran a close second.

The Sioux Indians provide us with another interesting example of the differing views toward time. Not so long ago a man who was introduced as the superintendent of the Sioux came to my office. I learned that he had been born on the reservation and was a product of both Indian and white cultures, having earned his A.B. at one of the Ivy League colleges.

During a long and fascinating account of the many problems which his tribe was having in adjusting to our way of life, he suddenly remarked: "What would you think of a people who had no word for time? My people have no word for 'late' or for 'waiting,' for that matter. They don't know what it is to wait or to be late." He then continued, "I decided that until they could tell time and knew what time

was they could never adjust themselves to white culture. So I set about to teach them time. There wasn't a clock that was running in any of the reservation classrooms. So I first bought some decent clocks. Then I made the school buses start on time, and if an Indian was two minutes late that was just too bad. The bus started at eight forty-two and he had to be there."

He was right, of course. The Sioux could not adjust to European ways until they had learned the meaning of time. The superintendent's methods may have sounded a bit extreme, but they were about the only ones that would work. The idea of starting the buses off and making the drivers hold to a rigid schedule was a stroke of genius; much kinder to the Indian, who could better afford to miss a bus on the reservation than lose a job in town because he was late.

There is, in fact, no other way to teach time to people who handle it as differently from us as the Sioux. The quickest way is to get very technical about it and to make it mean something. Later on these people can learn the informal variations, but until they have experienced and then mastered our type of time they will never adjust to our culture.

Thousands of miles away from the reservations of the American Indian we come to another way of handling time which is apt to be completely unsettling to the unprepared visitor. The inhabitants of the atoll of Truk in the Southwest Pacific treat time in a fashion that has complicated life for themselves as well as for others, since it poses special problems not only for their civil and military governors and the anthropologists recording their life but for their own chiefs as well.

Time does not heal on Truk! Past events stack up, placing an ever-increasing burden on the Trukese and weighing heavily on the present. They are, in fact, treated as though they had just occurred. This was borne out by something

which happened shortly after the American occupation of the atoll at the end of World War II.

A villager arrived all out of breath at the military government headquarters. He said that a murder had been committed in the village and that the murderer was running around loose. Quite naturally the military government officer became alarmed. He was about to dispatch M.P.s to arrest the culprit when he remembered that someone had warned him about acting precipitously when dealing with "natives." A little inquiry turned up the fact that the victim had been "fooling around" with the murderer's wife. Still more inquiry of a routine type, designed to establish the place and date of the crime, revealed that the murder had not occurred a few hours or even days ago, as one might expect, but seventeen years before. The murderer had been running around loose in the village all this time.

A further example of how time does not heal on Truk is that of a land dispute that started with the German occupation in the 1890s, was carried on down through the Japanese occupation, and was still current and acrimonious when the Americans arrived in 1946.

Prior to Missionary Moses' arrival on Uman in 1867 life on Truk was characterized by violent and bloody warfare. Villages, instead of being built on the shore where life was a little easier, were placed on the sides of mountains where they could be better protected. Attacks would come without notice and often without apparent provocation. Or a fight might start if a man stole a coconut from a tree that was not his or waylaid a woman and took advantage of her. Years later someone would start thinking about the wrong and decide that it still had not been righted. A village would be attacked again in the middle of the night.

When charges were brought against a chief for things he had done to his people, every little slight, every minor graft

would be listed; nothing would be forgotten. Damages would be asked for everything. It seemed preposterous to us Americans, particularly when we looked at the lists of charges. "How could a chief be so corrupt?" "How could the people remember so much?"

Though the Truk islanders carry the accumulated burden of time past on their shoulders, they show an almost total inability to grasp the notion that two events can take place at the same time when they are any distance apart. When the Japanese occupied Truk at the end of World War I they took Artie Moses, chief of the island of Uman, to Tokyo. Artie was made to send a wireless message back to his people as a demonstration of the wizardry of Japanese technology. His family refused to believe that he had sent it, that he had said anything at all, though they knew he was in Tokyo. Places at a distance are very real to them, but people who are away are very much away, and any interaction with them is unthinkable.

An entirely different handling of time is reported by the anthropologist Paul Bohannan for the Tiv, a primitive people who live in Nigeria. Like the Navajo, they point to the sun to indicate a general time of day, and they also observe the movement of the moon as it waxes and wanes. What is different is the way they use and experience time. For the Tiv, time is like a capsule. There is a time for visiting, for cooking, or for working; and when one is in one of these times, one does not shift to another.

The Tiv equivalent of the week lasts five to seven days. It is not tied into periodic natural events, such as the phases of the moon. The day of the week is named after the things which are being sold in the nearest "market." If we had the equivalent, Monday would be "automobiles" in Washington, D.C., "furniture" in Baltimore, and "yard goods" in New York. Each of these might be followed by the days for

appliances, liquor, and diamonds in the respective cities. This would mean that as you traveled about the day of the week would keep changing, depending on where you were.

A requisite of our own temporal system is that the components must add up: Sixty seconds have to equal one minute, sixty minutes one hour. The American is perplexed by people who do not do this. The African specialist Henri Alexandre Junod, reporting on the Thonga, tells of a medicine man who had memorized a seventy-year chronology and could detail the events of each and every year in sequence. Yet this same man spoke of the period he had memorized as an "era" which he computed at "four months and eight hundred years' duration." The usual reaction to this story and others like it is that the man was primitive, like a child, and did not understand what he was saying, because how could seventy years possibly be the same as eight hundred? As students of culture we can no longer dismiss other conceptualizations of reality by saying that they are childlike. We must go much deeper. In the case of the Thonga it seems that a "chronology" is one thing and an "era" something else quite different, and there is no relation between the two in operational terms.

If these distinctions between European-American time and other conceptions of time seem to draw too heavily on primitive peoples, let me mention two other examples—from cultures which are as civilized, if not as industrialized, as our own. In comparing the United States with Iran and Afghanistan very great differences in the handling of time appear. The American attitude toward appointments is an example. Once while in Tehran I had an opportunity to observe some young Iranians making plans for a party. After plans were made to pick up everyone at appointed times and places everything began to fall apart. People would leave messages that they were unable to take so-and-so or were

going somewhere else, knowing full well that the person who had been given the message couldn't possibly deliver it. One girl was left stranded on a street corner, and no one seemed to be concerned about it. One of my informants explained that he himself had had many similar experiences. Once he had made eleven appointments to meet a friend. Each time one of them failed to show up. The twelfth time they swore they would both be there, that nothing would interfere. The friend failed to arrive. After waiting for forty-five minutes my informant phoned his friend and found him still at home. The following conversation is an approximation of what took place:

"Is that you, Abdul?" "Yes." "Why aren't you here? I thought we were to meet for sure." "Oh, but it was raining," said Abdul with a sort of whining intonation that is very common in Parsi.

If present appointments are treated rather cavalierly, the past in Iran takes on a very great importance. People look back on what they feel are the wonders of the past and the great ages of Persian culture. Yet the future seems to have little reality or certainty to it. Businessmen have been known to invest hundreds of thousands of dollars in factories of various sorts without making the slightest plan as to how to use them. A complete woolen mill was bought and shipped to Tehran before the buyer had raised enough money to erect it, to buy supplies, or even to train personnel. When American teams of technicians came to help Iran's economy they constantly had to cope with what seemed to them an almost total lack of planning.

Moving east from Iran to Afghanistan, one gets farther afield from American time concepts. A few years ago in Kabul a man appeared, looking for his brother. He asked all the merchants of the market place if they had seen his brother and told them where he was staying in case his

brother arrived and wanted to find him. The next year he was back and repeated the performance. By this time one of the members of the American embassy had heard about his inquiries and asked if he had found his brother. The man answered that he and his brother had agreed to meet in Kabul, but neither of them had said what year.

Strange as some of these stories about the ways in which people handle time may seem, they become understandable when they are correctly analyzed. To do this adequately requires an adequate theory of culture. Before we return to the subject of time again—in a much later chapter of this book—I hope that I will have provided just such a theory. It will not only shed light on the way time is meshed with many other aspects of society but will provide a key to unlock some of the secrets of the eloquent language of culture which speaks in so many different ways.

chapter

two

WHAT IS CULTURE?

Culture is a word that has so many meanings already that one more can do it no harm. Before this book is finished I will redefine it again—in such a way, I hope, as to clarify what has become a very muddied concept. For anthropologists culture has long stood for the way of life of a people, for the sum of their learned behavior patterns, attitudes, and material things. Though they subscribe to this general view, most anthropologists tend to disagree however, on what the precise substance of culture is. In practice their work often leads some of them to a fascination with a single category of events among the many which make up human life, and they tend to think of this as the essence of all culture. Others, looking for a point of stability in the flux of society, often become preoccupied with identifying a common particle or element which can be found in every aspect of culture. In sum, though the concept of culture was first defined in print

in 1871 by E. B. Tylor, after all these years it still lacks the rigorous specificity which characterizes many less revolutionary and useful ideas.

Even more unfortunate is the slowness with which the concept of culture has percolated through the public consciousness. Compared to such notions as the unconscious or repression, to use two examples from psychology, the idea of culture is a strange one even to the informed citizen. The reasons for this are well worth noting, for they suggest some of the difficulties which are inherent in the culture concept itself.

From the beginning, culture has been the special province of the anthropologist, who usually gained a firsthand experience of its pervasive power in the field during the internship which follows the prescribed period of classroom training. As the fledgling anthropologist moved deeper and deeper into the life of the people he was studying he inevitably acquired the conviction that culture was real and not just something dreamed up by the theoretician. Moreover, as he slowly mastered the complexities of a given culture he was apt to feel that they could be understood in no other way than by prolonged experience; and that it was almost impossible to communicate this understanding to anyone who had not lived through the same experience.

This frame of mind alone would have been enough to isolate the growing skills of the anthropologist from the everyday society about him which might have well used his special insights and knowledge. But there were other reasons too. What technical training the anthropologists had was rather lengthy and detailed. It concerned subjects which seemed to have little relevance to the problems of the layman engrossed in his own little society. Moreover, until the last war few Americans had even heard of the places the anthropologists frequented or the people they studied, who

were generally small isolated populations with little place in the power politics of the modern world. There seemed to be no "practical" value attached to either what the anthropologist did or what he made of his discoveries. Except for a certain curiosity or nostalgia which might be satisfied, what point was there in studying the American Indian, who was usually viewed as the romantic red man, a remnant of the days long gone, or as an embarrassing reminder that there had been a time when Americans were ruthless with those who stood in the way of progress? Despite an occasional flurry of popular interest, anthropology (and the culture concept which is at its heart) was long associated in men's minds with subject matter and individuals who are far removed from the realities of the everyday world of business and politics. Though it still persists in some quarters, this viewpoint was at its strongest up until the time of the early 1930s.

The depression changed many things. It led to the peaceful introduction of many ideas which had been considered revolutionary. One was the application of social science theory and techniques to the mundane problems of the nation's domestic economy. Anthropologists, for example, were suddenly called from their academic refuge and put to work trying to relieve some of the more pressing burdens of the nation's minority groups.

Among this long-suffering population were the Indians, living miserably depressed lives on reservations as wards of the government. Most of these Indians had neither the dignity of their old ways nor the advantages of the now dominant society that surrounded them. Up to this point it had been the government's policy to treat all the different tribes alike, as if they were ignorant and somewhat stubborn children—a mistake which is yet to be really rectified. A body of custom had grown up in the government's Indian Service

as to how to "handle" Indians and Indian problems. Like the State Department's Foreign Service, the Indian Service transferred its employees from post to post so often that they could put in a lifetime of service without learning anything about the people they were administering. The bureaucracy that grew up was more oriented toward the problems of the employees than those of the Indians. Under such conditions it was almost impossible to introduce the disturbing anthropological idea that the Indians were deeply and significantly different from European-Americans, for that would have threatened to upset the bureaucratic applecart. Though the treatment of the Indians by the government still leaves much to be desired, it has been vastly improved during the years in which trained anthropologists have worked on the reservations.

In World War II many anthropologists such as myself were not only put to work on various projects having to do with the natives of the Southwest Pacific but were even asked to deal with the Japanese. Under the pressure of war some of the advice we gave was heeded—though, like many wartime innovations, much that was done was forgotten in the peace that followed.

However, the field work which anthropologists did as pure research, plus the applied projects on which we worked, was not entirely wasted. If this rich experience taught us one thing it was that culture is more than mere custom that can be shed or changed like a suit of clothes. The people we were advising kept bumping their heads against an invisible barrier, but they did not know what it was. We knew that what they were up against was a completely different way of organizing life, of thinking, and of conceiving the underlying assumptions about the family and the state, the economic system, and even of man himself. The big problem was how to communicate this brute fact. When

we tried to point it out our explanations didn't make sense. Most of our attempts were anecdotal and very little was specific.

Apart from having problems with laymen who often did not really care about a definition of culture, we had certain methodological difficulties in the field itself. The most pressing one was consistency of basic information. Field workers would record their interpretations of what informants told them, but if someone else visited the same group and interviewed a different set of informants or even the same informants (a practice frowned upon by anthropologists) the second man would usually come back with a different set of interpretations. There was no way to gather data that could be legitimately checked, no way to reproduce field procedures, no way to equate an event in culture A with culture B except to try to describe each and then say that they were different. It was difficult, if not impossible, to say in precise terms what it was that made one culture really different from another, except to point out that there were people who raised sheep and others who gathered food; that there were those who hunted and those who cultivated plants; that people worshiped different gods and organized their societies in varying ways. The anthropologist knew that there were even more profound differences, but his readers and often the very officials he was advising preferred to ignore them. Without being quite aware of it these well-meaning gentlemen assumed a naïvely evolutionary view which classified most foreigners as "underdeveloped Americans."

Even now, when the populations of the so-called "underdeveloped" areas balk at the introduction of new techniques of health and agriculture by the Americans, they are thought to be backward and stubborn, or thought to be led by grasping leaders who have no concern for their people's welfare.

Leaders were usually blamed and sometimes even accused of coercing their people to resist innovation because it would break their strangle hold on the economy.

Unfortunately some of these things are true, and they offer a convenient excuse for this country's failures abroad on the technical assistance, military aid, and diplomatic fronts. Most of our difficulties stem from our own ignorance. Honest and sincere men in the field continue to fail to grasp the true significance of the fact that culture controls behavior in deep and persisting ways, many of which are outside of awareness and therefore beyond conscious control of the individual. When the anthropologist stresses this point he is usually ignored, for he is challenging the deepest popular American beliefs about ourselves as well as foreigners. He leads people to see things they might not want to see.

Moreover, as I have pointed out, the solemn strictures of the anthropologist to the layman who might make use of his insights lack the necessary concreteness. There is no way to *teach* culture in the same way that language is taught. Until recently no one had defined any basic units of culture. There was no generally agreed upon underlying theory of culture—no way of being specific—no way for B to get to the field and check A's results. Even today a volume examining the various concepts and theories of culture, written by the nation's two most distinguished anthropologists, A. L. Kroeber and Clyde Kluckhohn, calls for such qualities as "empathy" in the investigator. The authors also state that no constant elemental units of culture have as yet been satisfactorily established.

This state of affairs had been a source of irritation for a number of years, and it drove me to work toward an integrated theory of culture which would overcome the shortcomings I have just sketched. In 1951, when I came to Washington to train Point Four technicians, I had a very

practical reason for pressing this work toward a tangible conclusion. Prior to this time I had been teaching at a university and a small college. College students are content to take subjects for their general interest. Point Four technicians and Foreign Service officers, on the other hand, are expected to go overseas and get results, and they have to be well prepared. In general I found that they are not too interested in the anthropologist's preoccupation with "what culture is" and tend to become impatient unless they have been abroad previously and have had some actual experience. Foreign Service officers in particular used to take great delight in saying that what the anthropologists told them about working with the Navajo didn't do them much good, for we didn't have an embassy on the Navajo reservation. Unfortunately the theory we were able to bring to bear at the time I began working in Washington simply had no relevance to the operator in the field. His defenses were too well entrenched and we could show him no compelling reasons to change. Additional harassment came from the government administrators who failed to grasp the fact that there was something really different about overseas operation; that what was needed was something bold and new, not just more of the same old history, economics, and politics.

Those Foreign Service officers and other trainees who did take seriously what they heard and managed to make something out of it came up against another problem. They would say, "Yes, I can see that you have something there. Now I'm going to Damascus. Where can I read something that will help me to do business with the Arabs?" We were stumped! If they were going to Japan we could tell them to read Ruth Benedict's excellent book, *The Chrysanthemum and the Sword*, with the caution that it was for background only and they shouldn't expect to find conditions exactly like those that Benedict described. Of course the remarkable

thing about Benedict's book was that, while she had never been to Japan and could only work with Japanese who were in the United States (the book was written during the war), it showed extraordinary insight into the psychological processes of the Japanese. It is one of the best pieces of evidence that the anthropologist has something crucial and practical to say if he can only systematize it.

Just about this time George L. Trager and I began our collaboration to develop a method for the analysis of culture. Our ultimate objectives included five basic steps.

1. To identify the building blocks of culture—what we later came to call the *isolates* of culture, akin to the notes in a musical score.

2. To tie these isolates into a biological base so that they could be compared among cultures. We also stipulated that this comparison be done in such a way that the conditions be repeatable at will. Without this, anthropology can lay no claim to being a science.

3. To build up a body of data and a methodology that would enable us to conduct research and teach each cultural situation in much the same way that language is taught without having to depend upon such qualities as "empathy" in the researcher.

4. To build a unified theory of culture that would lead us to further research.

5. Finally, to find a way to make our discipline tangibly useful to the non-specialist.

Trager and I felt that much of the preoccupation of anthropologists with statistics was having a stultifying effect on our discipline and that the methodologies and theories borrowed from sociology, psychology, and other biological and physical sciences had been ineptly used. In many instances social scientists, under pressure from physical scientists, have been virtually panicked into adopting prema-

turely the rigors of formal mathematics and the "scientific method." Our view was that it was necessary for anthropology to develop its own methodology adapted to its own subject matter.

This book outlines both a theory of culture and a theory of how culture came into being. It treats culture in its entirety as a form of communication.

It sketches in the biological roots from which most if not all of culture grew and outlines the ten basic foci of activity that combine to produce culture. Chapters Three and Four describe how man experiences things on three different levels, how he communicates to his children in three ways while in the process of rearing them, how he alternates between three different types of awareness or consciousness and embues each experience with three different types of emotional overtones. I have called this crucial trio the *formal*, *informal*, and *technical*. An understanding of what these terms mean is basic to an understanding of the rest of the book. Since man progresses from formal belief to informal adaptation and finally to technical analysis, a theory of change is also implied in this tripartite division which is at the heart of my theory.

The next chapters (Five through Eight) specify and deal with the communication spectrum. Little is said about mass-communication media such as the press, radio, and television, which are the instruments used to extend man's senses. Rather these chapters are focused on one main aspect of communication, the ways in which man reads meaning into what other men do. Language is the most technical of the message systems. It is used as a model for the analysis of the others. In addition to language there are other ways in which man communicates that either reinforce or deny what he has said with words. Man learns to read different segments of a communication spectrum covering events of a

fraction of a second up to events of many years. This book deals with only a small part of this spectrum. Other chapters describe the content of messages of the man-to-man variety and how they are put together.

The final chapters are a more detailed analysis of time and space. Time, that silent language which was sketched so broadly in the first chapter, is analyzed in more detail as an example of one of the types of primary message systems. Chapter Eleven deals with space (territoriality) as communication.

If this book has a message it is that we must learn to understand the "out-of-awareness" aspects of communication. We must never assume that we are fully aware of what we communicate to someone else. There exists in the world today tremendous distortions in meaning as men try to communicate with one another. The job of achieving understanding and insight into mental processes of others is much more difficult and the situation more serious than most of us care to admit.

Up to this point I have talked primarily of problems that have grown out of attempts to teach others to apply anthropological knowledge to foreign relations. I have also emphasized the need for more systematic understanding of local culture on the part of our citizens who are working abroad. The average reader who hasn't lived abroad, who finds the work of the diplomat and the Point Four technician exceedingly remote, may be inclined to ask, "What's this got to do with me?" This point touches on the ultimate purpose of this book, which is to reveal the broad extent to which culture controls our lives. Culture is not an exotic notion studied by a select group of anthropologists in the South Seas. It is a mold in which we are all cast, and it controls our daily lives in many unsuspected ways. In my discussion of culture I will be describing that part of man's

behavior which he takes for granted—the part he doesn't think about, since he assumes it is universal or regards it as idiosyncratic.

Culture hides much more than it reveals, and strangely enough what it hides, it hides most effectively from its own participants. Years of study have convinced me that the real job is not to understand foreign culture but to understand our own. I am also convinced that all that one ever gets from studying foreign culture is a token understanding. The ultimate reason for such study is to learn more about how one's own system works. The best reason for exposing oneself to foreign ways is to generate a sense of vitality and awareness—an interest in life which can come only when one lives through the shock of contrast and difference.

Simply learning one's own culture is an achievement of gargantuan proportions for anyone. By the age of twenty-five or thirty most of us have finished school, been married, learned to live with another human being, mastered a job, seen the miracle of human birth, and started a new human being well on his way to growing up. Suddenly most of what we have to learn is finished. Life begins to settle down.

Yet man's tremendous brain has endowed him with a drive and a capacity for learning which appear to be as strong as the drive for food or sex. This means that when a middle-aged man stops learning he is often left with a great drive and highly developed capacities. If he goes to live in another culture, the learning process is often reactivated. For most Americans tied down at home this is not possible. To forestall atrophy of his intellectual powers man can begin learning about those areas of his own culture which have been out of awareness. He can explore the new frontier.

The problem which is raised in talking about American culture without reference to other cultures is that an audience tends to take the remarks personally. I once addressed

a group of school principals on the subject of culture. We were discussing the need for Americans to progress in their jobs, to get ahead, and to receive some recognition so that they would know in a tangible way that they were actually getting someplace. One of the audience said to me, "Now you are talking about something interesting, you're talking about me." When the man in the audience learned something about himself, the study of culture got lost in the shuffle. He did not seem to realize that a significant proportion of the material which was highly personal to him was also relevant cultural data.

A knowledge of his own culture would have helped this same man in a situation which he subsequently described for the audience. In the middle of a busy day, it seems, his son had kept him waiting for an hour. As a result he was aware that his blood pressure had risen rather dangerously. If both the father and the son had had a cultural perspective on this common and infuriating occurrence the awkward quarrel which followed might have been avoided. Both father and son would have benefited if the father had understood the cultural basis of his tension and explained, "Now, look here. If you want to keep me waiting, O.K., but you should know it is a real slap in the face to anyone to be kept waiting so long. If that's what you want to communicate, go ahead, but be sure you know that you are communicating an insult and don't act like a startled fawn if people react accordingly."

The best reason for the layman to spend time studying culture is that he can learn something useful and enlightening about himself. This can be an interesting process, at times harrowing but ultimately rewarding. One of the most effective ways to learn about oneself is by taking seriously the cultures of others. It forces you to pay attention to those details of life which differentiate them from you.

For those who are familiar with the subject the remarks I have just made should be a clear indication that what follows is not simply a rehash of what previous writers on the subject of culture have said. The approach is new. It involves new ways of looking at things. Indians and natives of the South Pacific, the hallmarks of most anthropological texts, are used. However, they are introduced solely to clarify points about our own way of life, to make what we take for granted stand out in perspective. Some of what appears between these covers has been presented before in short articles in technical journals by either Trager or myself. Most of it is presented to the public for the first time. The complete theory of culture as communication is new and has not been presented in one place before. If the reader is looking for a book on strange customs, he will be sorely disappointed. This book stresses more than anything else, not what people talk about, but what people do and the hidden rules that govern people.

Some of what follows will make the reader self-conscious. He will discover that he is conveying to others things that he never dreamed he was revealing. In some instances he will learn things that he has been hiding from himself. The language of culture speaks as clearly as the language of dreams Freud analyzed, but, unlike dreams, it cannot be kept to oneself. When I talk about culture I am not just talking about something in the abstract that is imposed on man and is separate from him, but about man himself, about you and me in a highly personal way.

chapter

three

THE VOCABULARY OF CULTURE

Sir Arthur Conan Doyle's success with his creation, Sherlock Holmes, is largely attributable to the fact that Holmes knew how to make the most of non-verbal communication and extracted the maximum from what he observed. The following excerpt from "A Case of Identity" aptly illustrates this point.

> He had risen from his chair and was standing between the parted blinds, gazing down into the dull neutral-tinted London street. Looking over his shoulder, I saw that on the pavement opposite there stood a large woman with a heavy fur boa around her neck, and a large curling red feather in a broad-brimmed hat which was tilted in

a coquettish Duchess of Devonshire fashion over her ear. From under this great panoply she peeped up in a nervous, hesitating fashion at our windows, while her body oscillated backward and forward, and her fingers fidgeted with her glove buttons. Suddenly, with a plunge, as of the swimmer who leaves the bank, she hurried across the road and we heard the sharp clang of the bell.

"I have seen those symptoms before," said Holmes, throwing his cigarette into the fire. "Oscillation upon the pavement always means an *affaire de coeur*. She would like advice, but is not sure that the matter is not too delicate for communication. And yet even here we may discriminate. When a woman has been seriously wronged by a man she no longer oscillates, and the usual symptom is a broken bell wire. Here we may take it that there is a love matter, but that the maiden is not so much angry as perplexed, or grieved. But here she comes in person to resolve our doubts."

Sir Arthur made explicit a highly complex process which many of us go through without knowing that we are involved. Those of us who keep our eyes open can read volumes into what we see going on around us. The citizens of a typical American farming community, for example, do not have to be told why old Mr. Jones is going to town. They know that every other Thursday he makes a trip to the druggist to get his wife a bottle of tonic and that after that he goes around to the feed store, visits with Charley, drops in to call on the sheriff, and then goes home in time for the noonday meal. Jones, in turn, can also tell whenever anything is bothering one of his friends, and the chances are that he will be able to figure out precisely what it is. He feels comfortable in his way of life because most of the time he "knows what the score is." He doesn't have to

say very much to get his point across; a nod of the head or a grunt as he leaves the store is sufficient. People take him as he is. On the other hand, strangers disturb him, not because their mannerisms are different, but because he knows so little about them. When Jones meets a stranger, communication, which is normally as natural as breathing, suddenly becomes difficult and overly complex.

Most of us move around so much these days that we seldom achieve that comfortable stage that Jones has reached with his cronies—though there are always enough familiar landmarks around so that we are never at a total loss for orientation. Yet in many cases people who move from one part of the country to another require several years before they are really worked into the new area and feel completely at ease. Not only do Americans engage in a constant internal migration, but a million and a half of us are living overseas in foreign surroundings and the number is increasing each year. Jones's anxieties when he meets an unfamiliar person or environment are trivial compared to what our overseas travelers go through when they land on foreign soil. At first, things in the cities look pretty much alike. There are taxis, hotels with hot and cold running water, theaters, neon lights, even tall buildings with elevators and a few people who speak English. But pretty soon the American discovers that underneath the familiar exterior there are vast differences. When someone says "yes" it often doesn't mean yes at all, and when people smile it doesn't always mean that they are pleased. When the American visitor makes a helpful gesture he may be rebuffed; when he tries to be friendly nothing happens. People tell him they will do things and don't. The longer he stays, the more enigmatic the new country looks, until finally he begins to learn to observe new cues that reinforce or negate the words people are saying with their mouths. He discovers that even

Sherlock Holmes would be helpless in a country so different as Japan and that only his Japanese counterpart could play such a role.

At this point the American abroad may either burst with exasperation and try to withdraw as much as he can from the foreign life about him or begin to wonder, rather shrewdly, about what he must do to escape a frustrating comedy of errors. If he is charitable he may even begin to reflect on how he can help a new arrival avoid the wearing experience of doing all the wrong things. This can be the beginning of cultural wisdom, for it leads to systematic thinking about the learning process which nearly everyone goes through as he becomes familiar with a new culture.

In pursuing this problem of how one culture differs from another and how one can communicate this difference in general terms I first decided that there was no single touchstone which could be used to explain any given culture. In this I found myself in disagreement with many anthropologists who look upon culture as a single category. I was led to my conclusion by the realization that there is no break between the present, in which man acts as a culture-producing animal, and the past, when there were no men and no cultures. There is an unbroken continuity between the far past and the present, for culture is bio-basic—rooted in biological activities. Infra-culture is the term which can be given to behavior that preceded culture but later became elaborated by man into culture as we know it today. Territoriality is an example of an infra-cultural activity. It has to do with the way in which territory is claimed and defended by everything from fish to lions to modern man.

By going back to infra-culture it is possible to demonstrate that the complex bases—mainly biological—upon which human behavior have been built were laid down at different times in the history of evolution. Trager and I also reasoned

that the number of infra-cultural bases were probably very few and that they probably led to very different types of activities, things that on the surface bore little or no apparent relationship to each other.

Since culture is learned, it also seemed clear that one should be able to teach it. Yet in the past there had been singularly little success in this regard with the important exception of language, one of the dominant threads in all cultures. Dramatic progress in teaching, analyzing, and working with language made possible by modern linguistic science prompted us to take a very careful look at how this success had been achieved. Our observations led to the establishment of criteria for other systems of culture. In order to qualify as a cultural system, each system had to be:

A. Rooted in a biological activity widely shared with other advanced living forms. It was essential that there be no breaks with the past.

B. Capable of analysis in its own terms without reference to the other systems and so organized that it contained isolated components that could be built up into more complex units, and paradoxically—

C. So constituted that it reflected all the rest of culture and was reflected in the rest of culture.

These criteria are operational. That is, they are based on direct observation of the actual functioning of a cultural system, in this case language. The criteria, from an anthropological point of view, are firm. There are ten separate kinds of human activity which I have labeled Primary Message Systems (PMS). Only the first PMS involves language. All the other PMS are non-linguistic forms of the communication process. Since each is enmeshed in the others, one can start the study of culture with any one of the ten and eventually come out with a complete picture. The Primary Message Systems are:

1. Interaction
2. Association
3. Subsistence
4. Bisexuality
5. Territoriality
6. Temporality
7. Learning
8. Play
9. Defense
10. Exploitation (use of materials)

In discussing the PMS one by one I will stress three things: How biology pervades each PMS, how each can be examined by itself, and how each gears into the over-all network of culture.

1. *Interaction* has its basis in the underlying irritability of all living substance. To interact with the environment is to be alive, and to fail to do so is to be dead. Beginning with the basic irritability of the simplest life forms, interaction patterns become more complex as they ascend the philogenetic scale.

One of the most highly elaborated forms of interaction is speech, which is reinforced by tone of voice and gesture. Writing is a special form of interaction which uses a particular set of symbols and specially developed forms. In addition to the well-known linguistic interaction there are specialized versions for each PMS. Man interacts with others as a function of living in groups (association). Time and space are dimensions in which interaction takes place. Teaching, learning, play, and defense also represent specialized forms of interaction.

Ultimately everything man does involves interaction with something else. Interaction lies at the hub of the universe of culture and everything grows from it.

2. *Association.* It is easy to forget that the bodies of

complex organisms are in reality societies of cells, most of which have highly specialized functions, and that the first associations along this line were between cells that banded together in colonies. Association, therefore, begins when two cells have joined.

Years ago psychologists attracted considerable attention with their descriptions of the "pecking order" of chickens. It will be remembered that in each flock there is always one chicken that pecks all the others but does not get pecked by any others, and at the bottom there is one that gets pecked by all the rest. Between the extremes the flock is arranged in an orderly progression ranging from the one that is second from the bottom and has only one chicken it can peck, up to the #2 bird, who is pecked only by the leader. As it happens, all living things arrange their lives in some sort of recognizable pattern of *association.* Chickens have a peck order, horses a "kick-bite" order. In some cases a rigidly ordered hierarchy is replaced by another form of association. Konrad Lorenz describes two different patterns of association in his descriptions of dogs. These patterns are based on the ancestral behavior of wolves and jackals. The wolves have a very highly developed loyalty to the pack as well as to the leader, which is established early and persists through life. Jackals, on the other hand, seem to form much more loosely knit associations that are situational in character. They do not have the loyalty of the wolf either to the leader or to the pack. They are much more fickle, quicker to make friends, and less loyal over the long haul.

Other forms of association can be seen in flocks of sheep, herds of deer or cattle, schools of fish, paired relationships of some birds and mammals like the lion and the goose, and the family of the gorilla. Associational patterns persist over long periods of time, and if they change at all it is because of very strong pressure from the environment. The

famous anthropologist, Ralph Linton, pointed out that lions in Kenya used to hunt singly or in pairs. When game became scarce they took up hunting in packs. The interesting thing is that each lion had a function associated with his role in the group. The procedure was for the lions to form a large circle, leaving one of their number in the center. By roaring and closing in they would drive the game toward the middle, where it could be killed by the single lion. Changes in association of this sort anticipate the kind of adaptive behavior man exhibits.

Man's elaborations on the simpler mammalian base are so complex and varied that only their grosser outlines have been analyzed and described. What I am dealing with here are the various ways in which societies and their components are organized or structured.

The interrelation of the PMS of association and language is exemplified in the varieties of dialects of social classes. Other examples: the tone of voice of a person when he is acting as a leader; the very special elaboration of status and deference forms developed by the Japanese to fit their highly structured hierarchies; in our own society the deferential ways of talking to individuals who are ranked higher in work or status situations (nurses to doctors, privates to captains, captains to generals, etc.).

3. *Subsistence.* Like the other PMS, subsistence is basic and dates back to the very beginning of life. One of the first things anyone has to know about any living thing is its nutritional requirements; what does it eat and how does it go about getting food in its natural state? Man has elaborated this matter of feeding himself, working, and making a living in the same way he has elaborated the other PMS. Included in the PMS of subsistence is everything from individual food habits to the economy of a country. Not only are people classified and dealt with in terms of diet, but each society has its own characteristic economy.

In regard to the relationship of subsistence to the other PMS, one has only to mention such things as the special language behavior at meals. There are strict taboos covering discussion at the table of topics such as sex or the bodily functions. Then there are the special vocabulary and usage that have grown up around each occupation and profession, each a highly specialized form of subsistence. Work is of course always ranked, fitting very closely into the existing patterns of association. What is ranked high in one culture, however, may be ranked very low in the next. This is one of the many points which constantly confront an American abroad, whether he is in a government technical assistance program, an industrial operation, or traveling as a tourist.

Americans attach no stigma to work with the hands, but in many other cultures manual labor is considered to be undignified, a sign of low status. This difference alone creates innumerable difficulties and delays. Sometimes the role of the American is misinterpreted when he "pitches in" or demonstrates how something is to be done. On other occasions the local nationals simply refuse to have anything to do with an occupation that is ranked so low that it has to be done with the hands. For years throughout Latin America nursing was retarded because it ranked so near the bottom of the scale that only uneducated girls would become nurses. The handling of bedpans as well as many other duties normally linked with nursing were considered menial and dirty. Similarly, attempts to teach industrial safety in Latin America foundered on cultural reefs when it was discovered that safety engineers had to wear coveralls and "demonstrate" safety measures on machines in the plant.

4. *Bisexuality.* Sexual reproduction and differentiation of both form and function along sex lines (bisexuality) is also

deeply rooted in the past. Its primary function can best be explained in terms of a need to supply a variety of combinations of genetic background as a means of meeting changes in the environment. Without sex, progeny follow only one line and maintain one set of characteristics. In man the combinations of genes are practically unlimited.

People who have had anything to do with animals know how basic sexual differences are within a species. One of the first things that must be known about an animal is whether it is the male or female of the species. The fact that behavior in animals is predominately sex-linked has led to certain misconceptions concerning the role of sex in man. It is a great mistake to assume that the behavior which is observed in man is linked to physiology. Studies of culture have shown us that this is usually not the case. Behavior that is exhibited by men in one culture may be classed as feminine in another. All cultures differentiate between men and women, and usually when a given behavior pattern becomes associated with one sex it will be dropped by the other.

In much of Latin America it was long thought that a man could not possibly suppress the strong urges that took possession of him every time he was alone with a woman. Women, of course, were considered unable to resist a man. The result was that the patterns of association contained safeguards and protective measures. Americans who were going to Latin America had to be cautioned that if they let themselves get into a situation with a member of the opposite sex where something could have happened, it would be no use to tell people that it had not. The Latin response would be, "After all, you're a man, aren't you? She's a woman, isn't she?" The point the Americans couldn't get through their heads was that these people really considered that men and women were constituted differently from the

way the American views them. In Latin America both sexes expect their will power to be provided by other people rather than by personal inhibition.

In Iran one encounters another variation of the PMS of bisexuality. Men are expected to show their emotions—take Mossadegh's tantrums. If they don't, Iranians suspect they are lacking a vital human trait and are not dependable. Iranian men read poetry; they are sensitive and have well-developed intuition and in many cases are not expected to be too logical. They are often seen embracing and holding hands. Women, on the other hand, are considered to be coldly practical. They exhibit many of the characteristics we associate with men in the United States. A very perceptive Foreign Service officer who had spent a number of years in Iran once observed, "If you will think of the emotional and intellectual sex roles as reversed from ours, you will do much better out here."

Remarks like this come as a shock to many people, because almost everyone has difficulty believing that behavior they have always associated with "human nature" is not human nature at all but learned behavior of a particularly complex variety. Possibly one of the many reasons why the culture concept has been resisted is that it throws doubts on many established beliefs. Fundamental beliefs like our concepts of masculinity and femininity are shown to vary widely from one culture to the next. It is easier to avoid the idea of the culture concept than to face up to it.

Speech and sex are linked in obvious ways. Let the reader, if he doubts this, start talking like a member of the opposite sex for a while and see how long people let him get away with it. Sex and territory are also intermingled. For many birds there are breeding grounds, nesting territories, and, for many species, areas defended by males against other males. For humans there are places where the behavior of

the sexes toward each other is prescribed, like the parlor or the bedroom. We can see an intermingling of sex and territory in pool halls or in the old-time saloon from which "ladies" were excluded.

Time also enters the picture, dating back to the era when there were mating seasons for many species. Man, having freed himself from the limitations formerly imposed by biology, has burdened himself with many more, including those having to do with the determination of the age at which heterosexual relations are supposed to begin. Malinowski, when he described the Trobriand Islanders, told how the sex life of the Trobriander is usually in full progress at the ages of six to eight for girls and ten to twelve for boys.

5. *Territoriality.* Territoriality is the technical term used by the ethologist to describe the taking possession, use, and defense of a territory on the part of living organisms. Birds have recognizable territories in which they feed and nest; carnivorous animals have areas in which they hunt; bees have places in which they search for honey, and man uses space for all the activities in which he engages. The balance of life in the use of space is one of the most delicate of nature. Territoriality reaches into every nook and cranny of life. When they are in the ring, even the fighting bulls of Spain are likely to establish safe territories from which it is difficult to get them to move.

The history of man's past is largely an account of his efforts to wrest space from others and to defend space from outsiders. A quick review of the map of Europe over the past half century reflects this fact. A multitude of familiar examples can be found to illustrate the idea of human territoriality. Beggars have beats, as do the policemen who try to get them to leave, and prostitutes work their own side of the street. Salesmen and distributors have their own territories which they will defend like any other living organism. The symbolism of the phrase "to move in on someone" is completely accurate and appropriate. To have a territory is to have one of the essential components of life; to lack one is one of the most precarious of all conditions.

Space (or territoriality) meshes very subtly with the rest of culture in many different ways. Status, for example, is indicated by the distance one sits from the head of the table on formal occasions; shifts take place in the voice as one increases the distance (whispering to shouting); there are *areas* for work, play, education, and defense; and there are instruments such as rulers, chains, and range finders for measuring space and boundaries for everything from a house to a state.

6. *Temporality.* Temporality, as I have pointed out in the past chapter, is tied into life in so many ways that it is difficult to ignore it. Life is full of cycles and rhythms, some of them related directly to nature—the respiration rate, heartbeat, menstrual cycle, and so on. Such practices as age-grading (dividing society according to rather rigid age groups) combine both time and association. Mealtimes, of course, vary from culture to culture, as do tempos of speech. It should be mentioned that there are students of culture who look at everything as a historical process, and there can be no doubt that if you know the temporal relationships between events you know a tremendous amount.

7. *Learning.* Learning assumed primary importance as an adaptive mechanism when an unknown common ancestor of birds and mammals became warm-blooded at some time either late in the Permian or early Triassic periods, over 100,000,000 years ago.

Before this time all life's tempo was tied to the temperature of the external environment. As the temperature dropped, movement slowed down. This did not represent a

disadvantage to any given species when all were cold-blooded, because everything slowed down together. With the internalization of temperature controls, the warm-blooded animals were freed from the restrictions imposed upon them by the fluctuations in external temperature. This endowed them with a tremendously enhanced survival value, enhanced sensory perceptions, and at the same time placed a premium on adaptations—such as migrations, nests, lairs, etc.—that enabled the organism to cope with temperature extremes.

One result of warm-bloodedness is that it imposes on the organism a minimal size below which it cannot fall since it would perish of heat loss. When body size falls below a certain minimum the increased surface in relation to volume is such that the animal cannot eat fast enough to keep its metabolic fires going. It has been established that a *fat* hummingbird can fly 7.7 hours before its reserve of fat (1 gram) is consumed. Thin ones would fare less well, while some shrews apparently will die of starvation in a few hours.

With the increase in size associated with warm-bloodedness, a ceiling is set on numbers. Birds, mammals, and insects have all demonstrated high aptitude for adaptation to environmental changes. The insect kingdom compensated for the short life span of its members by breeding in enormous numbers. Warm-blooded animals obviously needed some other adaptive technique because of their great size, long life, and relatively small numbers of offspring. They grew to depend more and more on learning as an adaptive device. Learning really came into its own as an adaptive mechanism when it could be *extended in time and space by means of language.* A fawn can learn about men with guns by the reaction of its mother when a man with a gun appears, but there is no possible way, lacking language, for that fawn

to be forewarned in the absence of an actual demonstration. Animals have no way of symbolically *storing* their learning against future needs.

Psychologists of late have been preoccupied with learning theory, and one anthropologist, John Gillin, has worked learning theory into his text on anthropology. What complicates matters, however, is that people reared in different cultures *learn to learn* differently. Some do so by memory and rote without reference to "logic" as we think of it, while some learn by demonstration but without the teacher requiring the student to do anything himself while "learning." Some cultures, like the American, stress doing as a principle of learning, while others have very little of the pragmatic. The Japanese even guide the hand of the pupil, while our teachers usually aren't permitted to touch the other person. Education and educational systems are about as laden with emotion and as characteristic of a given culture as its language. It should not come as a surprise that we encounter real opposition to our educational system when we make attempts to transfer it overseas.

Learning to learn differently is something that has to be faced every day by people who go overseas and try to train local personnel. It seems inconceivable to the average person brought up in one culture that something as basic as this could be done any differently from the way they themselves were taught. The fact is, however, that once people have learned to learn in a given way it is extremely hard for them to learn in any other way.

The rest of culture reflects the way one learns, since culture is "learned and shared behavior." Learning, then, is one of the basic activities of life, and educators might have a better grasp of their art if they would take a leaf out of the book of the early pioneers in descriptive linguistics and learn about their subject by studying how other people learn.

Men like Sapir revolutionized linguistic theory and ultimately language-teaching methods as the direct consequence of their having to deal with problems that arose from studying the "primitive" languages. The so-called "army method" of World War II was deeply influenced by anthropologically trained linguistic scientists. So was the current State Department language program.

The educator has much to learn about his own systems of learning by immersing himself in those that are so different that they raise questions that have never been raised before. Americans in particular have too long assumed that the U.S. educational system represents the ultimate in evolution and that other systems are less advanced than our own. Even the highly elaborated and beautifully adapted educational techniques of Japan have been looked down upon. Just why we feel so complacent and smug can be explained only by the blindness that culture imposes on its members. Certainly there is very little reason for complacency when one looks, not at others, but at ourselves. The fact that so many of our children dislike school or finish their schooling uneducated suggests that we still have much to learn about learning as a process.

As one watches one's own children grow up and learn, one reflects upon the vital role of learning as an agent of culture, to say nothing of its strategic place in the mechanism of survival. Any child, from the time it is born, without culture, until the time it is four or five, absorbs what goes on around him at a rate which is never equaled again in his lifetime. At six to ten children are still going strong, provided that the educational system hasn't produced blocks to learning.

Yet the schools are not the only agents responsible for education. Parents and older people in general play a part. Having learned to learn in a particular fashion, adults can

communicate their prejudices or convictions in a variety of subtle and often not so subtle ways. Here is an example of this which has been experienced in one way or another by almost everyone who shares in our culture.

This story begins when a great-grandmother visits her three-year-old great-granddaughter. The child, like most three-year-olds, is toddling around and absorbing everything that's going on. Apart from eating and sleeping, one of her main concerns is to gain control of the communications taking place around her in order to be able to interact with others on their own terms. Great-grandmother watches this. Something in what she sees makes her anxious. She sits still for a moment and suddenly blurts out without warning and in a disapproving tone of voice, "Look at the little copycat. Louise, stop that! Don't be such a copycat." By withholding approval the great-grandmother was demonstrating one of the principal ways in which learning is directed away from conscious imitation, which she obviously disapproves. Children, of course, are exceedingly sensitive to this process.

In order to serve mankind, learning, like sex, cannot run wild but has to be channeled and at times directed. There is much to learn of the details of how this process works in different cultures, and it is just barely possible that by studying others we Americans, who pride ourselves on our efficiency, might actually learn things that would help us to break our educational log jam. Our current approach to the teaching of reading is just one of the many obvious defects in American pedagogy. It is a symptom that something is wrong with our way of teaching. Instead of being rewarding for the child, learning has often become painful and difficult.

On Truk, the atoll in the Southwest Pacific, children are permitted to reach the age of nine or ten before anyone begins to get technical with them about what they are

supposed to know. As the Trukese phrase it, "He doesn't know yet, he is only a child." Americans tend to correct children rather impatiently. With us, learning is supposed to be endowed with a certain amount of pressure so that the person who learns fast is valued over the one who learns slowly. Some cultures seem to place less emphasis on speed and perhaps a little more on learning correctly. On the other hand, the current educational mode in the United States is to tell the child to guess if he doesn't know the meaning of a word. Not very good training for future scientists.

Americans like to think that children must "understand" what they have learned. What happens, of course, is that a good deal of material that would be simple enough to learn without frills is made more difficult by the complex, and often erroneous, explanations that go with it. Somehow the fetish of explanation and logic as a process does not seem to weigh down the Arab or the Japanese, yet both have made singular contributions to the world of science.

How people learn to learn differently will continue to be an area of investigation for some time to come. As it now stands, however, these differences represent one of the barriers that have to be overcome each time two people raised in different cultures interact over any but the shortest period of time. The American will say, "Why can't the South Americans learn to be on time?" or "Why can't the Thai learn to boil the water for the ice cubes?" The answer, of course, is because no one taught them in a way which was consistent with how they learned everything else in life.

8. *Play.* In the course of evolution, play has been a relatively recent and not too well understood addition to living processes. It is well developed in mammals but not so easily recognizable in birds, and its role as an adaptive mechanism is yet to be pinned down. However, one can say that it is interwoven into all of the other PMS. People laugh and

tell jokes, and if you can learn the humor of a people and really control it you know that you are also in control of nearly everything else. Many peoples around the world have what are known as "joking relationships," and even in our own culture there is a category of relationship known as the "playmate." There are *places* and *times* for play—such as recreation rooms in houses and recreation areas in parks—as well as a vast amusement industry which keeps flourishing. Play and learning are intimately intertwined, and it is not too difficult to demonstrate a relationship between intelligence and play. Some games like chess and Chinese checkers are almost entirely a function of a specific type of intellectual development.

Play and the PMS of defense are also closely related; humor is often used to protect or hide vulnerabilities. Another example of the close relationship between play and defense is the practice exercises and maneuvers of the military which are spoken of as "war games."

One of the cardinal features of much western European play is that often it involves competition. As a consequence, games among the Pueblo of New Mexico, even races, seem very strange to us because they may involve an old man and a little boy in the same race with young men. The function of the race is not to beat someone else but only to "do one's very best." In fact, play with us is seldom an autonomous activity. In the Old West, to take an extreme example, there was often a certain amount of violence associated with play—jokes had an earthy flavor and often hurt or embarrassed the butt of the joke. In general, American humor is a binary type of humor, which is either turned on or off. In the Far East, however, one encounters a continuum, a wide spectrum of subtle degrees of enjoyment.

9. *Defense.* For man and animal alike, defense is a specialized activity of tremendous importance. The ethologist

studying lower life forms has traditionally examined and described the defensive mechanisms of the organisms he studies. He may be familiar with these even before he uncovers such basic things as the details of an animal's diet. The opossum plays dead, the lizard changes the color of its coat to match the surrounding background, the turtle draws into its shell, the skunk deploys its odors and the squid its cloud of ink, birds travel in flocks to confuse hawks. These are only a few of the defensive devices that can be named by any schoolboy.

Man has elaborated his defensive techniques with astounding ingenuity not only in warfare, but also in religion, medicine, and law enforcement. He has to defend himself not only against potentially hostile forces in nature but against those within human society. Moreover, he also has to cope with the destructive forces within his own person. Religion is concerned with warding off both the dangers in nature and within the individual. Law-enforcement agencies have been developed to deal with offenders against society, and armies are used against other societies. Medicine, too, defends the welfare of the groups as well as the individual against disease.

Since the functions of religion have been more completely documented and are more widely understood in the cross-cultural sense than those of medicine, law enforcement, or warfare, it will be treated only briefly. There is, however, one main point which should be kept in mind about the way different cultures tend to treat religion. With the possible exception of the people of the U.S.S.R., Americans have tended to compartmentalize religion and to reduce its social function more than any other people. The Navajo regard many activities, such as medicine, entertainment, sports, and science, as religious activities. In the Middle East, Islam plays a more pervasive role than Christianity does today in Europe. People in the Western world have difficulty grasping the extent to which religion infiltrates all aspects of life in the Arab world. The content of religion, its organization, and the manner in which it is integrated with the rest of life varies greatly from culture to culture.

Medicine varies too as one moves about the globe. Though Western medicine has achieved remarkable successes, we should not close our minds to the possibilities that other systems of healing can prevent untold suffering. Scholars have accumulated extensive material on the curing practices of other societies. The voodoo of Haiti, medicine men of the Navajo, and the herb doctor of the Chinese are well known to almost everyone. Like religion, medical practices are rigidly adhered to and given up only after everything else has failed. Basic attitudes toward sickness also differs. As Margaret Mead once pointed out, the American has the underlying feeling that if he is sick he is bad. The Navajo, in turn, rarely blames himself; he feels that if he is sick he may have inadvertently stepped on a place that was taboo or that a bad person has bewitched him.

Like medicine, which is a defense against the ravages of disease, warfare, which man uses against his human enemies, is also held in the tight vise of culture. In many ways it is as ritualistic as religion in its formal patterns. A striking example of this occurred during World War II. Since the Japanese cultural system ignored the contingency that Japanese troops might be taken alive, it provided no instruction for its soldiers as to how they should behave as prisoners. The result was that most POWs had no sense of military security, freely responded to interrogation, and cooperated with their captors to a degree which Europeans consider traitorous. In Korea, the American military assumed that U.S. prisoners would act properly even without specific training on how to behave under the stress of capture. Reports from the Korean War on the behavior of

American men who were taken prisoner indicate that Americans are quite vulnerable pyschologically. The simple rule of "tell 'em your name, rank, and serial number, nothing else," didn't work. Many Americans talked too much. Needless numbers died, many defected or were killed, and none escaped. The main reason was that they were operating according to one culture pattern and were unprepared to cope with either the North Korean or Chinese Communist pattern. Most had been led to believe that they would be treated very badly by the Communists and were thrown off base when they occasionally got "soft" treatment. Small kindnesses by Communists became magnified because of the physical hardship of prison life. Some Americans assumed that because they were prisoners the war was over for them and that they were no longer under military control. The cultural glue which held their life together crumbled under the pressure which the Communists applied so artfully. On their part, the Communists were miscued by the American pattern of egalitarianism, the lack of clear-cut class boundaries, and the fact that American leadership has to emerge informally for each new situation. When the Communists saw American prisoners going to one man with their problems or to get advice, they would suspect a conspiracy. The Communists would then remove this potential leader of the group and send him away. As a result, group support, sanctions, and controls failed to develop. The Turks fighting in Korea fared much better. They simply told the Communists who their leader was and made it clear that, in the event of his removal, the next in line would be leader, and so on down to the lowliest private. This meant that there was always a replacement for any leader the Communists removed. The Turk organization remained intact.

10. *Exploitation.* In order to exploit the environment all organisms adapt their bodies to meet specialized environmental conditions. A few examples: the long neck of the giraffe (adapted to high foliage of trees), the teeth of the saber-toothed tiger, toes of the tree sloth, hoof of the horse, and man's opposable thumb. Occasionally organisms have developed specialized extensions of their bodies to take the place of what the body itself might do and thereby free the body for other things. Among these ingenious natural developments are the web of the spider, cocoons, nests of birds and fish. When man appeared with his specialized body, such extension activities came into their own as a means of exploiting the environment.

Today man has developed extensions for practically everything he used to do with his body. The evolution of weapons begins with the teeth and the fist and ends with the atom bomb. Clothes and houses are extensions of man's biological temperature-control mechanisms. Furniture takes the place of squatting and sitting on the ground. Power tools, glasses, TV, telephones, and books which carry the voice across both time and space are examples of material extensions. Money is a way of extending and storing labor. Our transportation networks now do what we used to do with our feet and backs. In fact, all man-made material things can be treated as extensions of what man once did with his body or some specialized part of his body.

Materials and the rest of culture are intimately entwined. People sometimes mistake material elaboration or its absence for the whole of culture, but, in fact, each Primary Message System (PMS) has a material aspect which is closely associated with it. Men and women dress differently, tools go with work, time and space are measured with instruments, there are toys for play, books for learning, and even material signs of status. The relationship between materials and language is particularly close. Not only does each material thing have a name, but language and materials are

often handled by man in much the same way. It is impossible to think of culture without language or materials. Think how difficult it would be to teach someone how to make a stone ax without being able to talk at all. At least you would need to be able to communicate something that stands for "No, not this way, that way."

One reason for stressing the relationship between language and materials is that there has been considerable discussion among anthropologists as to when language first came into being. It is generally accepted that it started a long time ago, but it is difficult to say just how long ago. My own estimate would be that, because of the intimate relationship between language and material culture, verbal communication arose at the same time as tool-making, sometime between 500,000 and 2,000,000 years ago.

The close relationship between language and materials finds parallels in the linkage between other Primary Message Systems. For example, association and defense are functions of each other (people form "protective associations," etc.), as are work and play, bisexuality and learning, and space and time. Of this group only the relation between bisexuality and learning may seem obscure, and then only to a member of our own culture. Those who belong to other societies may make this connection immediately. In our own culture the dividing line between the sexes has become fuzzy, but it is still true, even in the United States, that what one learns is largely a function of one's sex. If this were not true, there would be little cultural difference between the sexes.

By the way of summary, it is important to remember that culture is not one thing but a complex series of activities interrelated in many ways, activities with origins deeply buried in a past when there were no cultures and no men. The development of language and technology, an interrelated pair, made possible the storing of knowledge. It gave man a lever to pry out the secrets of nature. It was the necessary condition for that burst of creativeness which we think of as culture in the highest sense. Well-developed language and technology are somehow closely associated with man in his present form, although just how this came about is not clearly understood. None of this would have been possible if it had not been for the highly evolved infracultural systems elaborated by lower organisms. By the time man came along a good deal of evolution basic to culture had taken place in the very systems that are thought of as most characteristically human.

Each PMS is obviously so rich and complex that it can be made the subject of a lifetime's work. It is embarrassing to deal with such broad and inclusive fields in such a summary manner, but to skip over them would be to deprive the reader of a sense of how densely intricate the origins of culture are. The last generalization that should be made about culture is that it not only has great breadth and depth in the historical sense but that it also has other dimensions of equal importance. Culture is saturated with both emotion and intelligence. Many things that man does are not even experienced, for they are accomplished out-of-awareness. But a great part of human activity is either the direct result of conscious thought or suffused with emotion and feeling. The way behavior—and culture—can be divided by the degree of awareness or feeling which attaches to it is the subject of the chapters which follow.