

bankruptcy, and death. This fact complicates the Japanese telephone system. Good numbers bring a high price, unlucky ones are palmed off on foreigners.

It is quite clear then that one of the readily perceivable differences between cultures is the category to which a set is assigned and, once it is assigned, how it is treated: formally, informally, or technically.

In summary, we might point out that the only meaning which can be assigned to sets as sets is what we can call *demonstrational* meaning: This is a "dog"; that is a "man"; there goes an "airplane." By themselves, sets are neutral. In patterns, on the other hand, sets take on all sorts of more complex types of meaning. The most thorough analysis of sets in patterns has been carried on in the study of semantics, which is concerned with the meaning of words in various contexts. Though semantic studies have made remarkable progress they still have far to go. Their principal defect, as they are now conducted, is that the patterns are taken for granted.

chapter

seven

THE

ILLUSIVE

ISOLATE

If the set is that aspect of existence which is most readily perceivable by man and the pattern is the organizational plan which gives it meaning, *the isolate is an illusive abstraction*, almost a phantom. It is the element which goes to make up a set, yet, paradoxically, the moment one begins to examine the set closely for its isolates the distinction between sets and isolates dissolves. To be sure, the isolates will reveal themselves, but as soon as they are clearly perceived, they are seen to be sets on their own level. This transition from set to isolate to set is of great importance. It has caused innumerable problems for the scientist, because when the transition occurs the whole perceptual structure changes. Even the old sets become something different. For example, a set which we call a "word" is perceived. Yet, when it is broken down into its component sounds which are the isolates, we find that the word as it was thought of originally

has been lost forever. Every layman has noticed this phenomenon when he begins to play with the sounds of a word, disregarding the word itself. When the linguist operating in a much more sophisticated fashion begins to record and classify sounds in his search for isolates, he realizes that in addition to the usual vowels and consonants there are clusters of informal constants such as stress, pitch, and intonation. As a consequence, he is apt to find that the word does not break down and build up the way he thought it did. A series of new sets is perceived to take its place.

An analogue of the uncertainty principle of physics would seem to apply to this dilemma. The uncertainty principle holds that the observer and his instrument are inextricably bound up with the phenomena under observation and that the act of observation alters the conditions under observation. The more precisely our linguistic components are examined, the more abstract and imprecise the old observations become. In other words, when working with cultural data, *one can only be precise on one analytic level at a time and then only for a moment*. I call this "cultural indeterminacy."

When one considers the remarkable order repeatedly demonstrated by nature it is not surprising to discover that as soon as one starts looking for isolates in a given category of sets, like the sounds in words, certain recurrent uniformities appear. This fortunately puts definite limits to what otherwise might be an infinite job. One begins with the knowledge that what is being sought will ultimately turn out to be a discreet *category* of sets. In considering language, for example, one starts with the assumption that from a limited number of sounds all the words in English can be produced. We have also learned that there is a "sound *system*" for any language and that the speakers are *bound*

by the system of their own language. This is why the first language one learns exerts an influence over all subsequent ones and gives them an accent. The binding effect of language is *not* in the sets but in the isolates and patterns. Almost anyone can reproduce the sounds of a foreign language in isolation, but many find that it is difficult to join them into a word. When they try it they alter the sound, so strong is the tie of old habits.

When the scientist, whatever his specialty, starts his search for isolates, he knows he will eventually find a *system* which will have an order and a pattern, and that his job will not last forever. There will come a time when he has mastered the system and can describe it. He can then teach people and by so doing create new systems, such as writing systems and alphabets and codifications of legal systems, to mention only a few of the intellectual constructs of man.

The goal of the investigator who deals with human phenomena is to discover the patterns of isolates that exist hidden in the minds, the sensory apparatus, and the muscles of men. These systems cannot ordinarily be discovered by using machines and precise measuring instruments. They have too much leeway in them and depend upon the capacity of man to *recognize and respond to patterns*. If the scientist is going to use machines, he must use them with tolerances that are appropriate to the data he is analyzing and the level on which he is conducting his analysis. If he is too precise, he turns up parts of systems which he is not yet ready to handle. What is important are the distinctions the native speaker of the language makes when he talks and those that he hears when he listens. These are the same. They make up his hidden system, the one he shares with thousands, if not millions, of other people. The researcher is not concerned with individual variations, situational differences, dialects,

nor speech defects but with the system that makes it possible for people to understand others even when they are missing important parts of their vocal apparatus, such as their teeth. What he wants are the structure points around which behavior clusters and which are recognized as being related or thought to be the same. He is looking for those things which enable all normal participants of a given culture (not 90 per cent or 80 per cent, but all) to distinguish between event A and event B. These events can be the conversation distance between two people, the waiting time on a street corner or antechamber, or, for that matter, anything in a culture that has meaning to the members of that culture.

Actually, to ask what it is that enables a man to tell the difference between A and B involves a different procedure from asking what goes to make up A and B. The difference in procedure is due to the fact that the subject cannot give a precise account of how he goes about making distinctions. But he can tell whether A and B are the same or different. The scientist's job is to analyze the difference and thereby uncover the hidden system of his subjects.

The procedure most commonly used is to work with the contrasting pairs of sets, taking up the differences pair by pair until all the distinctions have been identified. For example, pit is different from pat, tit different from tat. Since initial *p* sound and final *t* are held constant in pit and pat, the only variable is the short *i* and *a*. The same holds for tit and tat, bit and bat, and so on. With this information it is possible to construct a hypothesis that short *i* and *a* sounds are isolates and that speakers of the language will distinguish between them. Further, if one is substituted for the other in a word, the word will change. From this point on the scientist is faced with a good deal of routine drudgery. He continues his analysis, holding everything constant except the

variable he is trying to pin down. A representative sample of the "words" of the language is worked through until it appears that all the significant distinctions made by native speakers have been identified. In spoken English there are 45 variables which combine to form all the sets and their combinations; 9 vowels, 3 semi-vowels, 21 consonants, 4 stresses, 4 pitches, and 4 junctures. There are only 26 variables—the 26 letters of the alphabet—used in the writing system, plus commas, periods, and question marks.

To summarize our discussion of isolates: It is quite clear that since they are, by definition, abstractions, isolates are difficult to describe. The concept of the isolate or the building block, however, seems to be an integral part of human communication on every level. Moreover, isolates are something man is constantly trying to discover and analyze whether he does it consciously or not. The term isolate is also one which is used for convenience to denote the type of constituent event which goes to make up other events and is as much a designation of an analytic level as anything else. Despite their tendency to merge with one another, isolates and sets are firmly different in a good many respects. Isolates are limited in number, whereas sets are limited only by the possible patterned combinations of isolates. They are bound in a system and become sets only when they are taken out of that system. Sets, on the other hand, can be handled and perceived out of their systems but *derive their meaning* from the context in which they occur. Unlike the set which is clearly perceived, the isolate is an abstraction for events that cluster about a norm recognized by the members of a given culture. The actual difference between two isolates that are close to each other in the world of measurements may be less than the range of variation within the norm of each; it is the *pattern* in which they occur that

enables man to distinguish between them. Speakers of the Mexican variety of Spanish, for example, can't distinguish between *i* as it occurs in "dish" and *e* as it occurs in "feet." For them, these are variants on the same sound. When they talk they don't know which they are reproducing.

The procedure for testing whether any given element in a grouping is an isolate is to hold everything constant and vary the element at will. If this changes the meaning of the grouping then the element is an isolate. The way one ends an utterance, for example, can make it either a statement or a question depending upon whether the voice falls or rises. Rising inflection at the end of the sentence is one isolate, falling inflection is another. This applies to English and some related languages but is not universal. A variant of this test is to note the one thing that keeps changing when everything else under observation seems to be constant. If this variation entails a change of meaning then the variable is apt to be an isolate.

Up to now the isolate has been described primarily as a constituent of the set. It is also one of the key elements in a pattern. Moreover, it can now be demonstrated that the basic work done on isolates which once seemed so trivial has been of crucial value in analyzing patterns. The isolate provides the transition from the set to the pattern *and is the principal means of differentiating between patterns*. This isolate, so hard to get at and to define, is now discovered to be the key to a great deal of the analysis of communication because it functions on three levels in three different ways: on the set level as a component part (c-a-k-e=cake); on the isolate level as a set (*each sound* is built up of parts) which the phonetician analyzes; on the pattern level as a differentiator of patterns. Thus the inability of a speaker to distinguish between initial *v* and *w* often patterns him as Scandinavian.

Similarly, the transposition of the *oy* and *er* sounds in "oysters" and "birds" so that they come out as "ersters" and "boids" used to be a stereotype in most Americans' minds with native speakers of Brooklynese.

chapter

eight

THE

ORGANIZING

PATTERN

Patterns are those implicit cultural rules by means of which sets are arranged so that they take on meaning.

Too little has been known about patterns and how they operate. True, the rules which hold for many aspects of culture could be quoted, but there was no theory of patterning, no account of how one analyzes and describes patterns.

In this chapter I shall make explicit a number of points which were only hinted at earlier. Some of these points cut quite deeply into our systems of belief and represent radical departures from our current ways of thinking and doing. The most basic is that there is no such thing as "experience" in the abstract, as a mode separate and distinct from culture. Culture is neither derived from experience nor held up to the mirror of experience. Moreover, it cannot be tested against some mystical thing thought of as experience. *Ex-*

perience is something man projects upon the outside world as he gains it in its culturally determined form.

Another series of basic points which I would like to stress is that there are laws governing patterns: laws of order, selection, and congruence.

The idea that man as a cultural being is bound by hidden rules and is not master of his fate may come as a shock to some—it has always been hard to accept. The one thing that is quite clear, however, is that man is bound as long as he remains ignorant of the nature of the hidden pathways culture provides for him. To the traditional questions about free will, determinism, and his unique individuality which the ordinary citizen is apt to bring up when he meets the concept of a world of hidden rules, the anthropologist can give a convincing answer. Of course there are impulses that appear to have independent origins from within, but even these are radically altered by culture so that they are brought into play under controlled circumstances. The man who is attracted to a woman may want to invite her out for a date. The choice as to whether he acts or not is his. What is not his to decide fully is the language he will use, the presents he can give her, the hours he can call, the clothes he can wear, and the fact that in the United States the woman has the ultimate say in the matter. An American these days will not normally consider the revenge of the brothers as a price for seeing a woman without her family's permission, nor will it cross his mind that she might lose her life if she chooses to be intimate with him. These are not "alternatives" which occur to him as he is weighing the choice of patterns available to him. Death of the woman and revenge on the man are within the expected range of behavior in the less Europeanized parts of the Arab world. This sort of example is rather obvious and is the type of point which has been made many times and dismissed just as many times. Our

rationalization is that it is "uncivilized" to kill one's sister just because she was intimate with a man. What we often don't know and have difficulty accepting is that such patterns fit into larger over-all patterns and that what is being guarded is not the sister's life (though she may be deeply loved) but a centrally located institution without which the society would perish or be radically altered. This institution is the family. In the Middle East the family is important because families are tied together in a functional interlocking complex. The accompanying network (and obligations) satisfies many of the same functions that our government satisfies. The sister is a sacred link between families and, like the judge in our own culture, she has to remain above reproach. Thus it is usually necessary to take a second look at the more obvious differences in behavior because they often hide or grow out of more fundamental differences that are just beginning to be studied: differences which control behavior in a way that was never dreamed of, that are not conventions implying a choice but rules that are so constant that they are not recognized as rules at all.

Benjamin Whorf, using language as the object of his investigation, had a good deal to say about the deep-lying rules which control both thought and behavior. He was, in fact, one of the first to speak technically about the implications of differences which influence the way in which man experiences the universe. Until very recently it was believed that the thing that every man shared with others regardless of culture was *experience*. Yet it now seems doubtful indeed that experience is shared or that there is a *constant* that one can call experience in terms of which everything can be judged or measured. All cultures, rather, can be said to be relative to each other on the pattern level. There is a growing accumulation of evidence to indicate that man has no direct contact with experience per se but that there is an interven-

ing set of patterns which channel his senses and his thoughts, causing him to react one way when someone else with different underlying patterns will react as *his* experience dictates.

Americans and Spaniards at a bullfight provide a familiar example of how the same set of circumstances can be experienced differently. The American experiences the fear he would have if he were in the ring; the Spaniard, vicariously, the joy in the control the matador exercises over the bull. Or take the brute fact of death as another example: Cora Du Bois, the well-known anthropologist, states that the people of Alor consider another person as dead long before Europeans would and often bury persons whom we consider still living. Ralph Linton, talking about the Tanala of Madagascar, describes how what we call death is conceived of as the assumption of a *new* status that involves active participation with the living. A woman has to get a divorce from her dead husband in order to marry someone else. To much of this the reader will say, "Yes, of course, but those people don't know any better, they are backward and ignorant and have no science. They haven't come as far as we have. What else can you expect of savages?" To this one can only answer, "Yes, but life and death are objective experiences and should therefore be the same—whatever the culture." The fact remains that they are not.

Whorf was concerned with the unconscious nature of the underlying assumptions upon which many of our actions are based. He develops this point in part in his article, "Science and Linguistics":

We dissect nature along lines laid down by our native languages. The categories and types that we isolate from the world of phenomena we do not find there because they stare every observer in the face; on the contrary, the world

is presented in a kaleidoscopic flux of impression which has to be organized by our minds—and this means largely by the linguistic systems in our minds. We cut nature up, organize it into concepts, and ascribe significances as we do, largely because we are parties to an agreement to organize it in this way—an agreement that holds throughout our speech community and is codified in the patterns of our language. The agreement is, of course, an implicit and unstated one, *but its terms are absolutely obligatory*; we cannot talk at all except by subscribing to the organization and classification of data which the agreement decrees.

This fact is very significant for modern science, for it means that no individual *is free to describe nature with absolute impartiality* but is constrained to certain modes of interpretation even while he thinks himself most free.

In another article titled "Linguistics as an Exact Science," Whorf continues:

. . . we all hold an illusion about talking, an illusion that talking is quite untrammelled and spontaneous and merely 'expresses' whatever we wish to have it express. This illusory appearance results from the fact that the obligatory phenomena within apparently free flow of talk are so completely autocratic that the speaker and listener are bound unconsciously as though in the grip of a *law of nature*. [Italics mine.]

The implications of these statements go very deep indeed. They mean for one thing that once we have begun to really understand another people by mastering their language, we will still find hidden barriers which separate one people from another.

Yet there is a way to hurdle these hidden barriers.

In terms of my earlier discussions of sets and isolates, the simplest definition of a pattern that one could arrive at was this: A pattern is a meaningful arrangement of sets. What is left unsaid here is that a pattern is only meaningful if analyzed on its own level. For instance, the linguist's phoneme is a meaningful arrangement of sets to the linguist but not to laymen. A tastefully decorated living room is a meaningful arrangement of sets to women who belong to the same group and who are aware of the art of decorating a room. Men are likely to look at the room as a set, to see it as one thing, and to respond to the over-all effect. What they don't see, which many women do, is the detail. It is the detail in a pattern that tells one woman so many things about another. To most people a horse is a horse, yet a trainer experienced in the buying and selling of horses examines a number of sets such as height, weight, length of barrel, thickness of chest, depth of chest, configuration of the neck and head, stance, coat condition, hoofs, and gait. To the non-expert these characteristics are seen as isolates, but the expert with his broader experience sees them in light of his own extensive experience. He ticks them off in his mind to see what they add up to. That is, he places this horse into a pattern along with other horses that are similar, just as a winetaster evaluates the "qualities" of a wine. The important thing to remember is that the pattern is *seen* as a pattern only if it is examined on its own level and without leaving that level.

A given pattern is only obvious to certain categories of people. A man sees one thing in a room, a woman something else, a maid something else. This means there is a relationship between the people and patterns. In effect, groups can be defined by the relation of their members to a certain pattern. The individuals of a group share patterns that enable them to see the same thing and this holds them

together. In the light of this analysis it is necessary to expand the definition of a pattern. It should now read: A pattern is a meaningful arrangement of sets shared by a group.

THE THREE TYPES OF PATTERNS

At the beginning of the century Japanese businessmen were coming to this country in increasing numbers. Like all travelers, they had difficulty orienting themselves. One of them is said to have written a book for other Japanese businessmen who might travel to America. In interpreting the passage that follows, it should be remembered that relative status is the key to much of Japanese life. This hierarchical system is formal, yet a great many of the rules are technical. It comes as no surprise, then, to find that our Japanese author opens his book by telling his readers that American life is full of ceremony but that the ceremony is so complex that no foreigner can ever hope to master it. Courageously, however, the writer offers a guide to conduct by instancing examples of behavior which might be followed. When two American businessmen meet, he points out, there is a lot of noise, they beat each other on the back, then as though by signal they both reach for cigars which they offer to each other. Both men will refuse the other's cigar, but ultimately the man of inferior status will accept the cigar of the man of superior status.

Despite this ludicrous analysis, most of us recognize the pattern. It is an informal one which is dying out. But we also know that part of the pattern is that the senior will accept the cigar of the junior if the junior is on the way up—a cue to him that the "old man" recognizes this. The hierarchical emphasis which the Japanese observer gave this pattern suggests another aspect of our way of life which is ostensibly characterized by an underlying formal pattern of

equality. It points up to the fact that we also have a very complex informally patterned status system. The counters on the mobility scale are numerous and so finely grained that while the average person can manipulate the system he cannot describe how it works technically. Many recent American novels such as *The Man in the Gray Flannel Suit* have tried to describe one segment of this system. Status, as a matter of fact, is a persistent thread running through the American novel. One theme is to play on the conflict between informal ranking system and the basic equality pattern. Another deals with characters who rise too fast, find themselves caught in unfamiliar patterns, and are penalized for their unfamiliarity.

Formal patterns in America hold that when we want to express joy we laugh, to express grief we cry. They insist, moreover, that it is much easier for women to laugh and cry than for men. In Japan, as many an American discovered, laughter does not always mean that a person is happy. It may mean that he is embarrassed. Crying, too, may not necessarily mean that a person is sad. Whenever the social scientist tries to illustrate formal patterns and is of necessity restricted to a bit of a communication torn out of context, he has to deal with people who take great pleasure in saying such things as, "Oh yes, but in the United States people cry when they are happy too." This is quite true. But the fact is that we think it is "natural" to cry when sad and laugh when happy. Luckily, as I have pointed out, formal patterns often offer a great deal of leeway in the way in which they can be expressed. The boundaries are usually well known by everyone concerned, and as long as they are not violated there is considerable range of variation allowed. The principal difference between the German and the Austrian illustrates this point. The German tends to be more technical in the restrictions he places upon himself, the Austrian

more formal. The result is that the Austrian appears to be much more easygoing. He is, in fact, much more relaxed about a lot of things and has a good deal of genuine freedom, providing he stays within certain well-prescribed limits. Americans, on the other hand, have comparatively few technical and formal restrictions placed upon them but are loaded with informal ones. This means that Americans are apt to be quite inhibited, because they cannot state explicitly what the rules are. They can only point to them when they are violated.

I have already touched upon the differences between the United States and the Middle East in the art of bargaining. The example is worth further elaboration. The American pattern of bargaining is predicated on the assumption that each party has a high and a low point that is hidden (what he would like to get and what he will settle for). The function of the bargaining is to discover, if possible, what the opponent's points are without revealing one's own. The American in the Middle East, projecting his own unconscious pattern, will ask, "What percentage of the asking price do I give?" That is, "If he's asking ten pounds, will he settle for five?" This procedure is not only wrong but can end in trouble. The principle to be remembered is that instead of each party having a high and a low there is really only *one* principal point, which lies somewhere in the middle. Much like our latest stock market quotation, this point is determined, not by the two parties, but by the market or the situation. An important isolate in this pattern is that the price is never determined by the person or his wishes but always by some set of circumstances which are known to both parties. If they are not known it is assumed that they could be. Negotiation, therefore, swings around a central pivot. Ignorance of the position of the pivot opens one up to the worst type of exploitation, as well as loss of face.

It doesn't matter whether it is a squash in the bazaar or a hydroelectric dam in the international market. The pattern remains constant. Above and below the central point there is a series of points which indicate what the two parties feel as they enter the field.

Here is how an Arab from Damascus described this process. The pivotal point was six piasters, the price of squash on the day he described. Above and below this there were four points. Any one of the top four might be the first price asked by the seller. Any one of the lower four represents the first offer made by the prospective buyer. The hidden or implicit meaning of this code is given opposite each step on the scale below. This meaning is not exact but represents a clue as to the attitudes of the two parties as they enter the bargaining process.

Piasters

12 or more	complete ignorance on the part of the seller	} Seller's asking prices
10.....	an insult, arguments and fights ensue, seller doesn't want to sell	
8.....	will sell, but let's continue bargaining	
7.....	will sell under the market	
6.....	<i>market price (the pivot)</i>	
5.....	buyer really wants the squash, will pay over the market	} Buyer's offering prices
4.....	will buy	
2.....	arguments and fighting, buyer doesn't want to buy	
1.....	ignorance of the value of the item on the part of the buyer	

Considering the difference of meaning which is carried by a variation of one piaster, the question, "What percentage of the asking price do I give?" seems meaningless. Which asking price? The let's-do-business one, the let's-not-do-business one, or the let's-fight asking price? Other variations on this pattern have as many as five or six points above and below the line, each with its own meaning.

One cannot underestimate the importance of such patterns and the hold they have on people at all levels. In discussing our stand in Egypt during and directly following the Aswan Dam fiasco and before our position in the Middle East had deteriorated so badly, an Arab sympathetic to our cause expressed it this way. "If you don't give a little in bargaining, the other fellow will back up. If he gives two steps, you have to give two steps. If you don't, he will back up four." We didn't give our two steps and Nasser backed up four.

When events of such magnitude may depend on such small understandings it seems clear that one of the most promising developments in the intercultural field has to do with research directed toward bringing informal patterns to awareness. In many ways this work is the most meticulous, painstaking, and difficult of all. Even the best of informants can never describe informal patterns though he has been born and raised in a culture and has all his wits about him. The scientist works in the dark, creating hypotheses about what he thinks are consistent behavior patterns and then tests the hypotheses until he is sure he has pinned one down. Work of this type is highly rewarding because of the genuine sense of discovery. Once an informal pattern has been adequately described it can then be understood by others in the same culture with almost lightning speed since it has already been learned. By making it explicit all the scientist really does is to "put it in words." But if he does

it well, the scientist will make it easy for informal patterns to be taught easily and effectively.

Much of the difficulty in our schools today stems from the fact the teachers try to inculcate and teach patterns that are partially or incorrectly analyzed. In many instances the technical descriptions simply do not fit the facts. Instead of having a familiar ring to the child there is a decidedly unfamiliar ring. In fact, much of what he hears goes against everything he has learned outside the classroom. A good deal of the content taught under the rubric of "grammar" falls in this category. Take the "can" and "may" distinction that teachers spend so much time trying to instill in children. It would seem that this distinction originally developed informally and was linked to sex; men and boys said "can," women and girls "may." "May" naturally sounded more refined to the women so they insisted on foisting it on the men along with a lot of gobbledygook about possible and not possible. At the present time, what with the women trying to be like the men and the men doing more and more things women used to do, the may-can now is so mixed up it's almost impossible to develop any rules. It is possible for either to be applied in a great many situations.

The can-may distinction illustrates one of the many different types of informal patterns that exist in our language. Another type is associated with the use of what is technically known as the *superfix* first identified by Trager. The reader is familiar with prefixes and suffixes that are added at the beginnings and ends of stems. The superfix, as the word implies, goes over or above the utterance.

By identifying the superfix Trager raised a whole category of grammatical and other events from the informal to the technical. That ill-defined, highly significant agglomeration of vocalizations known as "tone of voice" began to be unraveled by identification of the superfix. The difference be-

tween an adjectival and a nominal is signaled by the use of superfixes, in this case varying degrees of loudness or stress. For example, in English the difference in the spoken language between green house (the color green), greenhouse (where plants are grown), and the Green house (house owned by Mr. and Mrs. Green) is solely a function of varying stress. The French, incidentally, do not share this pattern with us and cannot hear the difference between these three utterances. The new rules of grammar for English, when they eventually appear may describe adjectivals in terms of their stress pattern in relation to other items.

It would not be right to blame early grammarians because they did not analyze all the informal patterns of language or because much of what they did analyze fell short of the mark. We should distinguish, however, between the three types of patterns in order to help bolster our sagging educational system as well as for the peace of mind of our children. All three can be learned or taught but in entirely different ways. As has been said, the best way to learn an informal pattern is by selecting a good model and copying him as closely as possible. Formal patterns, as stated previously, are learned by precept and admonition. Technical ones are spelled out.

In addition to isolating the three principal types of patterns, Trager and I discovered that all seem to be bound by three laws: those of *order*, *selection*, and *congruence*. It should be emphasized that there may be additional laws governing the formation of patterns which have not yet been discovered. These three seem to provide a beginning.

ORDER

The laws of order are those regularities governing changes in meaning when order is altered. "The cat caught the

mouse" means something obviously different from "The mouse caught the cat." A great sin in medieval times was the saying of the Black Mass in which the order of the service was reversed. Anyone who is a practitioner of any of the communicative arts is fully familiar with the effect of reorienting the sequence of words, sentences, and paragraphs. Below the sentence level, the order in which the sounds are put together is the basis of the formation of words. Words that mean the same thing whether you read them forward or backward are a pleasant aberration from the rule of verbal order, as are words which have a real meaning when read backwards. Order is used differently in different cultures. With us it is a basic part of our grammatical system. It should be noted that while order is of critical importance on the sentence level in English this is not the case in languages like Latin and Old English of the time of Alfred. Order has great importance in other cultural systems besides language: order of birth, order of arrival, order in line to get tickets. Order applies to the courses of a meal. Consider what it would be like to start dinner with dessert, then switch to potatoes, hors d'oeuvre, coffee, salad, and end with meat.

Order permeates almost every activity in a culture like our own. Yet in some other cultures the activities in which order is important may represent basic pattern differences between cultures. American housewives who have had to train servants overseas are all too familiar with the difficulty of inculcating them with American ordering patterns, the order in which courses should be served, or the weekly schedule of household cleaning. Anyone who has listened to the ever-increasing number of Americans who have lived abroad has probably heard an anecdote in which a servant suddenly appears with a lighted birthday cake in the middle of a meal.

In short, the placing of the climax of any event varies all over the world.

Understanding the variations in order is a major factor in overseas work. The American knows that in his own country the order in which people arrive at a restaurant is supposed to determine when they get served and the order in which they are hired dictates when they are laid off. To Americans, to be first is to be more deserving. If an American has been sitting at a table in a restaurant for some time and a latecomer is served before he is, his blood pressure will rise noticeably. Yet in most places outside of Europe ordering in situations of this type is unknown. Instead the laws of selection apply; that is, service is dependent upon a person's rank.

Another type of order is that of societies like the Pueblo of New Mexico and Arizona where age (order of birth) determines prestige, status, respect, and deference. The essential point is that societies will order the *people*, or the *situation*, or a *station* in life but not all three simultaneously.

SELECTION

Selection controls the combination of sets that can be used together. We say *a* boy and *an* arm. Struck and stricken illustrate another case in which the rule of selection is seen to function. We say that he was "awe-struck" but also that he was "stricken dumb." We may be struck by a car, but we are always stricken with grief. There is no inherent logic to selection. The most one can say is that in such and such a case the selection works as follows and state the over-all category. Why, for instance, should we drive on the right and the British on the left? Like all the rest of culture, the selection patterns change with time. There was a time, for example,

when men wore much more jewelry and more fancy clothing than they do now.

For every pattern there are certain points at which selection applies, just as there are other points at which order is brought into play. What enables us to differentiate between patterns is that they do not use selection and order in the same way.

Order has been mentioned as having an important part in our eating pattern. Selection also plays an important but different role. Breakfast usually consists of a number of items selected from a limited list of edibles: fruits and their juices, cereals in various forms, berries, bacon, sausage, eggs, pancakes, waffles, rolls, toast, butter, jelly or jam, and coffee, tea or milk. Depending on the region of the United States, certain other items can become part of this pattern—like grits in the South and pan-fried potatoes in the Middle West, for example. Steak and potatoes are still eaten for breakfast by a few New Englanders and by cattlemen in the West in diminishing numbers. The list does not include châteaubriant, green turtle soup, or oysters Rockefeller.

Selection plays a prominent part in the patterns of social relations around the world in dress, sex, and in work and play—in fact, all of the basic primary message systems. The easiest way to determine when selection is being applied is to note whether there is something bound to something else by custom when any number of other items could “logically” serve the same purpose. The law of selection demands a white tie with tails. This law also demands the residence of a wife or female relative of the President in the White House. I chose the term selection for the very reason that something is “selected” out of a category. Once the selection has occurred it is arbitrarily binding. The arbitrariness of culture is generally not understood because there are other

areas where culture has tremendous leeway. Selection is a major exception.

CONGRUENCE

Congruence is more difficult to talk about precisely than either order or selection. Its subtle dictates may, nevertheless, be more binding. Unlike order and selection, which have to do with the patterning of sets, the law of congruence can be expressed as a pattern of patterns. Congruence is what all writers are trying to achieve in terms of their own style, and what everyone wants to find as he moves through life. On the highest level the human reaction to congruence is one of awe or ecstasy. Complete congruence is rare. One might say that it exists when an individual makes full use of all the potentials of a pattern. Lincoln's Gettysburg Address is an example. Complete lack of congruence occurs when everything is so out of phase that no member of a culture could possibly conceive himself creating such a mess.

Lack of congruence in dress is always obvious and often humorous—witness the endless cartoons of natives wearing a loin cloth and a silk hat. In architecture when Culture A borrows architecture from Culture B, Culture A takes the sets but not the pattern. Witness the outrageous Greek columns on any suburban mansion.

In many instances attempts are made to achieve congruence on one level without regard to distortions introduced on another. For example, schoolteachers are apt to criticize their charges for saying “most unique,” their argument being that uniqueness is not a matter of degree. What is happening, of course, is that the teacher is borrowing a criterion from the level of logic and applying it to the level of language. Language, it so happens, works in such a way that any adjectival can have comparative and superlative

degrees. In order to obtain complete congruity, however, the word unique can only be used in certain situations.

Many jokes are based on incongruities of one sort or another, which is one reason why the reader (or listener) has to be almost a native speaker in order to appreciate the full implications of a joke. If he is unable to assess the degree of incongruity he can't appreciate the humor. The old joke about the girl from Brooklyn trying to put on airs in Schrafft's by ordering "erstes on the half shell" (using a very Bostonian *a!*) is funny because it is incongruous on several levels. Not only does she use two dialects but switches from substandard usage to what she thinks is upper-class.

Pattern congruity or style in writing is a function of knowing what can and cannot be achieved within the limits of the pattern. Newspaper or journalistic writing is adapted to the medium and all that medium implies. When it is bad it's because the writer has not learned what can be done within the limits set by the pattern. To do this type of writing well is a highly skilled art and is learned only after years of experience. The writing of the scientist is often incongruous because it drags the reader from one analytic level to the next and then back again. This kind of writing treats the reader like the boor who says "get it," indicating the scientist's fear that people will twist, distort, and take exception to what he says. He has to communicate on a number of different analytic levels at once by footnoting and overqualifying each statement. In defense of my fellow scientists it should be said that one of the most difficult things in the world to do is to learn to keep the levels apart as well as to maintain congruity. Harry Stack Sullivan, a very great contributor to psychiatric thinking in this country, once described his own attempts at writing by saying that the person who appeared before him as he wrote and who appraised his sentences as they were coming out was a cross

between an imbecile and a bitterly paranoid critic! Sullivan was not alone in having this kind of self-image; he recognized the difficulties and the humor of having to try to force one's writing onto such a Procrustean couch. Another point to make about scientists is that most of them are more concerned about making precise statements than they are about writing. They depend upon their colleagues to know what they are talking about. Therefore, they can get by with less literary ability than writers. Scientific congruity and not literary congruity is their preoccupation.

There is one thing that seems quite certain. While people demonstrate varying degrees of sensitivity for congruence, perfect congruence is seldom achieved. It *lurks* in every culture and is captured by man only in rare creations. True artistry exists when congruence is so high that everything appears simple and easy, when it communicates so clearly that people wonder why they didn't say it themselves.

Men toil to perfect congruence. They pay endless attention to details, to sets and the isolates, and to the over-all pattern. Usually it is a matter of going over and over a statement and making it clearer and clearer so that finally everything fits and nothing comes between what is being communicated and the audience.

One might assume that much is known about pattern congruity. Actually the field has hardly been delineated as a field of scientific study. The principal difference between the concept of congruence and the more widely held beliefs about ecstatic productions is that traditionally the artist's productions are viewed as if he created the rules for his masterpieces without reference to the pattern of the culture. This is not to say that the artist has no control over what is "good" or "bad" art. He has. There is a close relationship between the person and the over-all pattern in which he participates. Some artists are more sensitive to lack of con-

gruence than others and strive more strongly to reduce tensions induced by incongruity. Indeed, it is this tremendous sensitivity to pattern incongruity that the artist brings to his work. He has a highly developed sense for working within patterns, making the most of them, pushing and stretching their boundaries but never crossing them, so that the spell can be maintained and not broken. The artist likes to play with patterns and find out what really can be done with the material at hand. He often does this in the context of small groups of people concerned with or interested in areas of culture stress, tension, and change. Because many artists are participating in variants of the over-all pattern that are not widely shared, they often have the reputation for setting the pace for everyone else. They are credited with "creating" new patterns. Yet most artists know that what greatness they have lies in being able to make meaningful statements about what is going on around them. They say what others have tried to say but say it more simply, more directly, and more accurately.

The artist does not lead cultures and create patterns; he holds up a mirror for society to see things it might not otherwise see. Proof that art reflects the culture and the times of the artist can be had by simply walking through any reasonably well-stocked museum or by looking at the illustrations in contemporary art books.

The "rule" of congruence, or style in the broadest sense, pervades not only the world of art but all kinds of communication. The present state of our understanding of how congruence works is so rudimentary, however, that we are barely able to provide evidence of faulty communications, much less specify what the faults may be. Yet in an international debate serious errors are made in interpreting such supposedly simple matters as whether one participant is actually angry or merely bluffing. No wonder there are

wars! The sheer frustration of not being able to understand sometimes makes one want to strike out in the feeling that at least the blow will be understood. Yet it's quite obvious that mankind can do better than that; the drive toward congruity would seem to be as strong a human need as the will to physical survival. The study of culture is beginning to provide insights. It could do more, but what is encouraging is the development of the tools for understanding. Two of the most promising leads are in the study of patterns of the informal type and in developing our knowledge of congruence and how it functions.

chapter

nine

TIME

TALKS:

AMERICAN

ACCENTS

At the beginning of this book I offered a cursory analysis of time as an element of culture which communicates as powerfully as language. Since my conceptual scheme had not yet been developed in detail at that point my survey was of necessity rather sketchy. Now that I have presented the technical tools for probing the secrets of culture, I return to time again. Here I shall consider the way Americans use time and communicate by it, stressing the details and the subtleties which close analysis turns up. Some of the points I make may arouse a shock of recognition, a feeling that here is something which the reader knew all along. This is the way it should be. The analysis of one's own culture

simply makes explicit the many things we take for granted in our everyday lives. Talking about them, however, changes our relation with them. We move into an active and understanding correspondence with those aspects of our existence which are all too frequently taken for granted or which sometimes weigh heavily on us. Talking about them frees us from their restraint.

A well-known authority on children in the United States once stated that it took the average child a little more than twelve years to master time. This estimate is probably somewhat conservative. Young people of this age know how our basic time system works but do not yet seem to have fully internalized either the details or the emotional overtones of the formal time system.

Why does it take a child so long to learn time? The answer is not simple. In fact, when one begins to discover how many complications are involved he may wonder whether the full subtleties of time can be mastered at all.

The three systems I have discussed—formal, informal, technical—often use identical items of vocabulary. This does not make it any easier for the child, or the foreigner, to learn them. The year, for instance, is a *formal* or traditional part of our time system. It means three hundred sixty-five days plus one fourth day which is accounted for by inserting leap year. It can also mean twelve months, as well as fifty-two weeks.

Informally, we may say, "Oh, it takes years to get that done." You have to be there and know the person and the background of the remark before you know exactly what his word "years" means. It may be a matter of minutes, weeks, or actual years. *Technically*, the year is quite another thing again. Not only is it counted in days, hours, minutes, seconds, but there are different types of years of different

lengths. Minutes, hours, months, and weeks are also used in all three contexts. It is only the total context that tells which type of time is being referred to.

Almost anyone can recapture that moment of his childhood when the day was almost spent and Mother was asked, "Mommy, how long will it be before we get home? I'm tired." And Mother replies, "Just a little while, dear. Now you just be good and before you know it we'll be home."

"How long is a while?" "It's hard to say, dear." "Is a while five minutes, Mommy?" "Sometimes, dear, but not always. In this case it will be a little longer than five minutes." "Oh."

At this point the child gives up—for the time being at least.

Not only are there three different categories of time, but each has its own subdivisions; its sets, its isolates, and its patterns, which make nine different types of time found for our culture. Fortunately, to simplify matters, the layman need not know the whole technical system in order to get along. Yet he depends upon others to know it.

The layman, for example, thinking he is getting technical, may ask an astronomer exactly how long a year is. At which point he discovers his own ignorance by being asked what kind of year he has in mind—the tropical or solar year (365 days, 5 hours, 48 minutes, 45.51 seconds plus a fraction); the sidereal year (365 days, 6 hours, 9 minutes, 9.54 seconds); or the anomalistic year (365 days, 6 hours, 13 minutes, 53.1 seconds).

Our formal time system is that part of the over-all system which we would not change and don't want others tampering with. Yet this formal system we take so much for granted was once a technical system known only to a few priests along the Nile who had perfected it in response to a need to forecast annual floods more accurately.

FORMAL TIME: SETS, ISOLATES, AND PATTERNS

A quick way to discover how our European time sets operate is to teach them to children. The day is a formal set deeply rooted in the past. It has two primary isolates, day and night, and is further broken down into morning and afternoon, punctuated by meals and naps, and other recurrent occasions. There are seven different categories of days: Monday, Tuesday, Wednesday, etc. They are valued differently, Sunday being set apart. The child is usually in control of these notions by the age of six. At eight most children learn to tell time by the clock. This process can be simplified for them if it is explained that there are two types of time (two categories of sets): hours and minutes. The hours—one to twelve—have to be learned so well that recognition is instantaneous. Before learning the minutes the child learns that the quarter hour is the isolate most useful to him. He can grasp these quite quickly: five-fifteen, five-thirty, and five forty-five begin to make sense. Minutes should not be taught as isolates first but as sets, of which there are sixty. However, to make life a little simpler since the child can't perceive a minute, these cluster together in five-minute periods; five, ten, and fifteen after the hour, right on up to five fifty-five. Finally, the two sets of sets are blended into one system.

In America any Easterner or urban Middle Westerner conversant with the way his own culture values time can perceive that five minutes is different from ten minutes. That is, the five-minute period is the smallest formal set. It has only recently crossed the boundary from isolate to set. Twenty years ago the five-minute period was an isolate of a particular type that went to make up the quarter hour. Now people are aware of whether they are five minutes late or not and will apologize.

In Utah the Mormons have developed promptness to a degree that is unknown in the rest of the country. In their system the minutes would seem to be an inviolate set. On the northwest coast the traditional feelings about time are altered and are not experienced in as pressing a manner as they are elsewhere. The Northwest uses the same time structure as the rest of the country, but nobody seems particularly driven by it. The main difference is that they lack the informal isolate of urgency.

Above the five-minute period there is the *ten*-minute period, the quarter hour, the half hour, and the hour. Then there is the morning divided into early, middle, and late; the noon hour; early, mid- and late afternoon; and evening, as well as similar divisions for the nighttime.

Formally, our day starts at midnight. The periods set off by meals and by sleeping and waking are probably the earliest of the perceived temporal sets for children. Television is speeding up the process of helping children to notice the difference between, say, five o'clock and six o'clock, since these are the times when their pet programs come on.

The week is also a set, introduced as a part of the Egyptian's technical time system. It is not, however, universally grasped. The term fortnight, like many other Anglo-Saxon survivals, remains present in the system, a reminder of earlier times. It is still used as the pay period in the government and as a publication period for certain periodicals. It is, however, a bit archaic and is slowly falling into disuse. The month, like the day, is a set that has been established as a component in our time system for a long time. It is used for payments and rendering of accounts, reports of almost every type, and jail sentences.

The season is both a formal set and an informal one. It is probably one of the oldest of our sets. It used to mark plowing, planting, cultivating and harvesting time, as well

as the time when the soil could rest. Now, of course, there are hunting, fishing, skiing, tourist, or Christmas seasons, as well as the traditional summer, fall, winter, spring class of sets. The season and the quarter are probably related, although the quarter is tied to the calendar while the season, being older, is rooted in climatic changes and activities associated with agriculture.

Formal isolates are difficult to pin down. Like all isolates, they are abstractions, yet because they are formal abstractions which seem right and proper little attention has been paid to them. They are often overlooked because they seem so "natural."

The list of true isolates which follows is undoubtedly incomplete. It includes what I call ordering, cyclicity, synthesis, valuation, tangibility, duration, and depth.

The week is the week not only because it has seven days but because they are in a fixed *order*. Ordering as a formal isolate would seem to be an expression of *order* as in the laws of order, selection, and congruence. The Western world has elaborated this to some extent. That is, we keep constant track of all sorts of things which are otherwise identical and *only distinguish between them because of their order*. The six millionth Ford built becomes a milestone, as does the fifty millionth passenger-mile flown by an airline. The first-born, first president, first position, the number-two man, the tenth in a class of one thousand assume meaning because of their order. The seventh day is different from the first day; the middle of the week is different from the end, and so on.

For most temporal events the *cyclic* element is taken for granted. One day follows the next, as does the week, month, year, and century. The common cycles are limited in number. The sixty-cycle series (minutes and seconds) the seven-day week, and the twelve-month year.

Valuation is expressed in our attitude that time itself is valuable and should not be wasted.

Tangibility is expressed in the fact that we consider time is a commodity. It can be bought, sold, saved, spent, wasted, lost, made up, and measured.

For people raised in the European tradition time is something that occurs between two points. *Duration* is the most widely shared implicit assumption concerning the nature of time in the Western world. It seems inconceivable to those of us who have learned to take this one isolate so much for granted that it would be possible to organize life in any other way. Yet one of the miracles of human existence is the tremendous variety that occurs in such basic matters as this. For instance, the Hopi are separated from us by a tremendous cultural gulf. Time, for example, is not duration but many different things for them. It is not fixed or measurable as we think of it, nor is it a quantity. It is what happens when the corn matures or a sheep grows up—a characteristic sequence of events. It is the natural process that takes place while living substance acts out its life drama. Therefore, there is a different time for everything which can be altered by circumstances. One used to see Hopi houses that were in the process of being built for years and years. Apparently the Indians had no idea that a house could or should be built in a given length of time since they could not attribute to it its own inherent time system such as the corn and the sheep had. This way of looking at time cost the government untold thousands of dollars on construction projects because the Hopi could not conceive of there being a fixed time in which a dam or a road was supposed to be built. Attempts to get them to meet a schedule were interpreted as browbeating and only made things worse.

It was mentioned earlier that in contrast to some of the African systems, the components of American time—the

minutes, the hours—have to add up. Americans start with the assumption that they are working with a *synthesized* system. Basically the reason why time has to add up is that we start with the assumption that we are dealing with a system and that there is order in the universe. We feel it is man's job to discover the order and to create intellectual models that reflect it. We are driven by our own way of looking at things to synthesize almost everything. Whenever we have to deal with people whose time systems lack this isolate of synthesisity we experience great difficulty. To us it's almost as if they were missing one of their senses and were therefore unaware of part of nature. The synthesisity isolate is basic to most if not all of our appraisal of life around us.

Americans consider *depth* as a necessary component of time; that is, there is a past on which the present rests. Yet we have not elaborated the depth isolate to the extent that this has been done in the Middle East and South Asia. The Arab looks back two to six thousand years for his own origins. History is used as the basis for almost any modern action. The chances are that an Arab won't start a talk or a speech or analyze a problem without first developing the historical aspects of his subject. The American assumes that time has depth but he takes this for granted.

Most of the formal patterns of time in the United States will seem immediately obvious to the American reader though he may not have taken the trouble to think about them. They would not be formal patterns if they were not so easily recognized. But for the benefit of the foreign reader I will summarize briefly the American formal pattern.

The American never questions the fact that time should be planned and future events fitted into a schedule. He thinks that people should look forward to the future and not dwell too much on the past. His future is not very far ahead of him. Results must be obtained in the foreseeable future

—one or two years or, at the most, five or ten. Promises to meet deadlines and appointments are taken very seriously. There are real penalties for being late and for not keeping commitments in time. From this it can be surmised that the American thinks it is natural to quantify time. To fail to do so is unthinkable. The American specifies how much time it requires to do everything. "I'll be there in ten minutes." "It will take six months to finish that job." "I was in the Army for four and a half years."

The Americans, like so many other people, also use time as a link that chains events together. *Post hoc, ergo propter hoc* (after the fact, therefore because of the fact) is still an integral part of the traditional structure of our culture. The occurrence of one event on the heels of another results inevitably in attempts on our part to attribute the second to the first and to find a causal relationship between them. If A is seen in the vicinity of B's murder shortly after the crime has been committed we automatically form a connection between A and B. Conversely, events which are separated by too much time are difficult for us to connect in our minds. This makes it almost impossible for us as a nation to engage in long-range planning.

INFORMAL TIME: SETS, ISOLATES, AND PATTERNS

To complicate matters for the young who are trying to learn the culture and the scientist who is trying to analyze it, the vocabulary of informal time is often identical with that of technical and formal time. Words such as minute, second, year are common to all three. The context usually tells the hearer which level of discourse is being used. There are, of course, words which are typically informal and are recognized as such (a while, later, a long time, etc.). In

describing informal time we begin with the sets, because it is the set that is most easily perceived.

When a person says, "It'll take a while," you have to know him personally and also a good deal about the total context of the remark before you can say what the term "a while" means. Actually, it is not as vague as it seems at first, and people who have this information can usually tell what is meant. What is more, if a man whose normal "while" is thirty to forty-five minutes returns to his office after an hour, having said he would only be gone for "a while," he will usually apologize or make some remark about having been gone longer than he expected. This is proof that he himself realized that there was a limit to the degree to which you stretch "a while."

The basic vocabulary of informal time is simple. There are only eight or nine different distinctions made by Americans. It is as if we measured informal time with a rubber ruler which could be infinitely expanded or compressed but which would still maintain the integrity of the basic relationships. The shortest time on the informal scale is the "instantaneous event." The following additional distinctions are interposed between the "instantaneous event" and "forever": very short duration, short duration, neutral duration (neither noticeably short nor long), long duration, very long duration, and impossibly long duration. The last is sometimes indistinguishable from "forever."

In general, informal time is quite vague because it is situational in character. The circumstances vary, hence the measured time varies: The "longest time," "forever," and "an eternity" are all words or expressions which are used to describe any time which is experienced as being excessively drawn out. Depending on circumstances, "eternity" may be the time it takes to hit the water when one jumps from a

high diving board for the first time, or it may be a month or two spent overseas away from one's family.

Informally, for important daytime business appointments in the eastern United States between equals, there are eight time sets in regard to punctuality and length of appointments: on time, five, ten, fifteen, twenty, thirty, forty-five minutes, and one hour early or late. Keeping in mind that situations vary, there is a slightly different behavior pattern for each point, and each point on the scale has a different meaning. As for the length of appointments an hour with an important person is different from thirty minutes with that same person. Ponder the significance of the remark, "He spent over an hour closeted with the President." Everyone knows the business must have been important. Or consider, "He could only spare ten minutes, so we didn't get much accomplished." Time then becomes a message as eloquently direct as if words were used. As for punctuality no right-minded American would think of keeping a business associate waiting for an hour; it would be too insulting. No matter what is said in apology, there is little that can remove the impact of an hour's heel-cooling in an outer office.

Even the five-minute period has its significant subdivisions. When equals meet, one will generally be aware of being two minutes early or late but will say nothing, since the time in this case is not significant. At three minutes a person will still not apologize or feel that it is necessary to say anything (three is the first significant number in the one-to-five series); at five minutes there is usually a short apology; and at four minutes before or after the hour the person will mutter something, although he will seldom complete the muttered sentence. The importance of making detailed observations on these aspects of informal culture is driven home if one pictures an actual situation. An American am-

bassador in an unnamed country interpreted incorrectly the significance of time as it was used in visits by local diplomats. An hour's tardiness in their system is equivalent to five minutes by ours, fifty to fifty-five minutes to four minutes, forty-five minutes to three minutes, and so on for day-time official visits. By their standards the local diplomats felt they couldn't arrive exactly on time; this punctuality might be interpreted locally as an act relinquishing their freedom of action to the United States. But they didn't want to be insulting—an hour late would be too late—so they arrived fifty minutes late. As a consequence the ambassador said, "How can you depend on these people when they arrive an hour late for an appointment and then just mutter something? They don't even give you a full sentence of apology!" He couldn't help feeling this way, because in American time fifty to fifty-five minutes late is the insult period, at the extreme end of the duration scale; yet in the country we are speaking of it's just right.

For another way of apportioning informal time consider the eastern Mediterranean Arab. He makes fewer distinctions than we do. His scale has only three discernible points to our eight. His sets seem to be: no time at all; now (or present), which is of varying duration; and forever (too long). In the Arab world it is almost impossible to get someone to experience the difference between waiting a long time and a very long time. Arabs simply do not make this temporal distinction.

Informal time isolates will be more significant to the reader if he will sit back for a minute and think in some detail about times when he was aware that time was either passing very rapidly or else dragging. It may even be helpful if he will note what it was in the situation that made time behave the way it did. If he goes even further and thinks at length about how he was able to distinguish between a

very short time and a long time regardless of the clock time, he will be well on the road to understanding how the American system works. What follows below merely attempts to simply put into words things that people know but have not formulated precisely.

Four isolates enable people to distinguish between the duration sets mentioned above. The most difficult of all to characterize, they are: urgency, monochronism, activity, and variety.

The impression of time as passing rapidly or slowly is related to *urgency*. The more urgent the need, the more time appears to drag. This applies to everything from basic physiological needs to culturally derived needs. A man who has an urgent need to succeed and reach the top will experience the passage of time on the way up with more anguish than will another man who is more relaxed about success. The parent with a sick child desperately in need of medical attention feels time moving very slowly; so does the farmer whose crops are withering for lack of rain. One could list many more examples. However, more to the point is what is not included when we consider urgency as an informal temporal isolate: First, urgency on different levels of analysis is both a set and a pattern. Second, our own variety of urgency distinguishes us from the rest of western European culture. A lack of a sense of urgency has been very apparent to Americans traveling abroad.

Even physiological urgency is handled quite differently by people around the world. In many countries people need less of what Americans would call urgency in order to discharge a tension. In the United States the need must be highly critical before people act.

The distribution of public toilets in America reflects our tendency to deny the existence of urgency even with normal physiological needs. I know of no other place in the world

where anyone leaving home or office is put to periodic torture because great pains have been taken to hide the location of rest rooms. Yet Americans are the people who judge the advancement of others by their plumbing. You can almost hear the architect and owner discussing a new store's rest room. Owner: "Say, this is nice! But why did you hide it? You'd need a map to find it." Architect: "I'm glad you like it. We went all out on this washroom, had a lot of trouble getting that tile to match. Did you notice the anti-splash aerated faucets on the wash basins? Yes, it would be a little hard to find, but we figure people wouldn't use it unless they had to, and then they could ask a clerk or something."

Monochronism means doing one thing at a time. American culture is characteristically *monochronic*. As Americans we find it disconcerting to enter an office overseas with an appointment only to discover that other matters require the attention of the man we are to meet. Our ideal is to center the attention first on one thing and then move on to something else.

North Europeans and those of us who share in this culture make a distinction between whether or not a person is engaged in an *activity*. In fact, we distinguish between the "active" and "dormant" phases of everything. I therefore refer to this isolate, in terms of its Latin root, as an *ageric* isolate (from *agere*, to act). Just plain sitting, trying to capture a sense of self, is not considered to be *doing anything*. Hence, such remarks as, "You didn't seem to be doing anything, so I thought I would stop in and talk to you for a while." The exception is, of course, prayer, which has special and easily identified postures associated with it.

In a number of other cultures, including the Navajo, Trukese, eastern Mediterranean Arab cultures, Japanese, and many of those of India, just plain sitting is doing something. The distinction between being active or not is not made.

Thus there are *ageric* cultures and non-*ageric* ones. A culture is non-*ageric* if, in the process of handling the matter of "becoming later," it makes no difference whether you do something or not. With us, we have to work to get ahead. We do not get ahead automatically. In the cultures mentioned above, this is not nearly so important.

Variety enables us to distinguish between intervals such as short duration and long duration, or long duration and very long duration. Variety is a factor in boredom, while the degree of boredom experienced depends on how rapidly time passes.

We look for variety in occupations, careers, and hobbies. Our public "demands" a variety of material objects, food, clothing, and so forth. Consider for a moment the fact that few of us can say what we are going to have for lunch or dinner three days from now, let alone next year. Yet there are millions of people in the world who know exactly what they are going to have, if they are to have anything at all. They will eat the same thing they had today, yesterday, and the day before.

For us it is a matter of importance whether or not there is variety in life. Take the teen-age girl who complains to her mother that there weren't any boys at the dance, meaning that there weren't any new boys. Our demand for variety and for something new would seem to exceed that of almost any other culture in the world today. It is necessary to an economy like ours. Without constant innovation we could never keep our industrial plant expanding.

On the informal level of time the basic distinction is between sameness and variety. With variety, time moves more rapidly. People who are imprisoned away from light where they cannot tell whether it is day or not apparently lose practically all sense of the passage of time. They become

disoriented and if kept away long enough they may "lose their minds."

As was the case with activity, we associate variety with external events. Maturing and aging—just getting old—are not considered by us to constitute variety except in someone else, so that we will say, "My, he certainly has aged a lot since I last saw him." To the Pueblo of New Mexico, however, aging is something to be experienced. It means increased stature in the community and a greater part in decision making. Variety, from this point of view, is a natural part of living, and an inherent aspect of the self, providing a basically different view of life from our own.

To summarize this discussion of informal time isolates we can say that Americans determine relative duration by four means: degree of urgency, whether they are trying to do more than one thing at a time, whether they are busy or not, and the degree of variety that enters into the situation. In the informal isolates of a culture, one finds the building blocks of time that go to make up the values and driving forces which characterize a culture.

The informal patterning of time is one of the most consistently overlooked aspects of culture. This is not because men are blind or stupid or pigheaded, although their capacity to hold on to informal patterns in the face of weighty evidence sometimes makes them appear to be so.

It seems that it is impossible to participate in two different patterns at the same time. As I will illustrate below, a person has to stop using one in order to take up another. Furthermore, patterns are anchored, when they are being learned and forever after, in the behavior of groups and institutions. They are the ways of doing things that one learns early in life and for which one is rewarded or punished. Hence, it is no wonder that people hold on to them so tenaciously and look askance at all other patterns.

Informal patterns are seldom, if ever, made explicit. They exist like the air around us. They are either familiar and comfortable, or unfamiliar and wrong. Deviations from the pattern are usually greeted with highly charged emotion because people are not doing things our way. "Our way" is, of course, almost invariably supported or reinforced by a technical rationalization such as the following: "If you are five minutes late for a meeting and have kept ten people waiting, you have therefore wasted almost an hour of their time."

In the United States the nature of the points on a time scale is a matter of patterning, as is the handling of the interval between them. By and large, the space between the points is inviolate. That is, compared to some other systems, there is only a limited amount of stretching or distortion of the interval that is permissible. Conditioning for this way of conceiving time begins very early for us. A mother says, "I thought I told you you could play with Susan until five o'clock. What do you mean by staying over there until almost supertime?" Later in life we hear Father saying to a friend, "I promised to spend an hour with Johnny working on his tree house, and I can't very well get off with much less." And in adult life, "But Mr. Jones, this is the third time Mr. Brown has tried to see you, and you promised to spend at least thirty minutes going over those specifications with him."

Our pattern allows very little switching of the position of "intervals" once they are set in a schedule, nor does it allow for much tampering with either the content or the position of the points on the time scale. An appointment to talk about a contract scheduled to begin at ten o'clock and end at eleven o'clock is not easily moved, nor can you talk about anything but the contract without offending people. Once set, the schedule is almost sacred, so that not only is it wrong, ac-

ording to the formal dictates of our culture, to be late, but it is a violation of the informal patterns to keep changing schedules or appointments or to deviate from the agenda.

How much this is a factor in other cultures has not been determined precisely. There are cases, however, where the content or "agenda" of a given period of time is handled quite differently. In the Middle East, again, refusal of one party to come to the point and discuss the topic of a meeting often means he cannot agree to your terms but doesn't want to turn you down, or simply that he cannot discuss the matters under consideration because the time is not yet ripe. He will not, moreover, feel it is improper to meet without ever touching on the topic of the meeting.

Our pattern calls for the fixing of the agenda informally beforehand. We do not, as a whole, feel too comfortable trying to operate in a semi-public situation, hammering out an agenda, the way the Russians do. We prefer to assume that both parties want to talk about the subject, otherwise they wouldn't be there; and that they are sufficiently involved in the topic to make it worth their while. With the Russians there is some indication that, while this is true, negotiation over the separate points of the agenda signals to the other side how the opponent is going to react during the actual conference. Softness on our part in early negotiation, because we do not technically fix the agenda but agree informally about what should be taken up, is often interpreted as weakness. Or it may give the impression that we are going to give in on certain points when we aren't at all.

Earlier it was mentioned that the content and limits of a period of time were sacrosanct. If, however, the topic for discussion is completed satisfactorily, or it is apparent that no progress can be made, then the meeting or visit may be cut short. This often leaves people feeling a little funny. By and large, the overriding pattern with us is that once you

have scheduled the time, you have to use it as designated, even when it turns out that this is not necessary or advantageous.

All of which seems very strange to the Arab. He starts at one point and goes until he is finished or until something intervenes. Time is what occurs before or after a given point. The thing to remember in contrasting the two systems is that Americans cannot shift the partitions of schedules without violating a norm; Arabs can. With us the compartments are sacred. If we have allocated so much time to a certain activity, we can change it once, or maybe twice, when we are trying to discover the proper amount of time for the activity. We cannot continually move the walls of our time compartments back and forth, even though an activity may actually call for such flexibility. The pattern of the immovable time wall applies in most situations, even long periods of time, such as how long it takes to complete a college career.

It is not necessary to leave the country to encounter significantly different time patterns. There are differences between families and differences between men and women; occupational differences, status differences, and regional differences. In addition there are two basic American patterns that often conflict. I have termed these the "diffused point pattern" and the "displaced point pattern." The difference between them has to do with whether the leeway is on one side of the point or is diffused around it.

Contrasting the behavior of two groups of people participating in the two patterns, one observes the following: Taking 8:30 A.M. as the point, participants in the "displaced point" pattern will arrive ahead of time anywhere from 8 A.M. to 8:27 A.M. (cutting it fine), with the majority arriving around 8:25 A.M. Diffused point people will arrive anywhere from 8:25 A.M. to 8:45 A.M. As can be seen, there is practically no overlap between these two groups.