

It seems to be particularly difficult for the men and women who run our nation to grasp the fact that how culture molds behavior significantly influences what happens in the world. In the sense that it is used here, culture is almost totally divorced from the political process. There are ideologically neutral differences among the peoples of the world: there are monochronic and polychronic time systems, high and low context cultures, there are open and closed scores, long-term time and short-term planning, centralized and decentralized decision making, and individual and group performance on the job—all of which can be changed. If Margaret Mead's people of Manus² could sit down and deliberately redesign their culture and bring it in line with the twentieth century, we should be able to do the same.

But why bother to try to understand, to empathize, to learn somebody else's culture? Why bother to learn a new set of rules and new ways of communicating? Isn't the job too subtle, too complex, and too ill-defined? Perhaps. But the rewards can be very great, and the alternatives are unthinkable. First we must be willing to admit that the people of this planet don't just live in one world but in many worlds and some of these worlds, if not properly understood, can and do annihilate the others.

Time can be a metaphor for all of culture. And though we have said virtually nothing about physical time, there is one physicist, I. I. Rabi, who does have something to say. Addressing himself to the matter of time, the Columbia University Nobel Laureate says: "The real answer was given only in this century by Einstein, who said, in effect, that time is simply what a clock reads. The clock can be the rotation of the earth, an hourglass, a pulse count, the thickness of geological deposits, or the measured vibrations of a cesium atom" (italics added).3 They all have one thing in common: each is a physical mechanism. Much of what has been discussed in this book is consistent with Einstein's and Rabi's statements. However, culture's clocks add dimensions to physical time, since each clock represents a particular type of organization. Like the elaborate astrolabes of the Renaissance, which were working models of our solar system, cultural models of time are also models of everything else in that culture. The metaphor of the astrolabe is worthy of further examination. It is as though each culture had its own

model of the universe and lived in terms of that model. Furthermore, in at least some instances the models are so designed that they can literally annihilate each other if they overlap or are too close. As is the case with monochronic and polychronic time.

Support for this view comes from an unexpected source, Carlos Fuentes. Speaking to a college audience, the Mexican author and literary spokesman for developing countries in Latin America said: "The final question of time [is] whether we shall live together or die together... The West has been in love with its successive linear image of time... It has condemned the past to death as the tomb of irrationality and celebrated the future as the promise of perfectibility." According to Fuentes, our denial of the past has led to the degradation of morality and the denial of the lessons of the past. Denial of the rights as well as the reality of other cultures is another of the consequences of Western time concepts. As Fuentes says, "We shall know each other or exterminate each other" (italics added).

Fuentes has clearly identified our dilemma and, as is typical of polychronic, highly situational logic, some of the links in his chain of arguments are missing. Nevertheless, Fuentes knows the two worlds of which he speaks as well as anyone on the globe; his views cannot easily be dismissed. My only quarrel with his argument concerns his view of how we Americans look at the future. The future in the United States is a dream. Some make the dream come true, others do not. My point is that the future is not actually real to us. If it were, how could we do such terrible things to others and to our environment? And how could our government and our businesses act so blindly, denying the reality of other cultures and, in so doing, alienating the world because of cultural ineptitude? To us, the future seems either extremely narrow or else very short-term.

Observing my countrymen over the years, I have noticed two things which stand out: our warped and inadequate view of the past and the future, and our failure to acknowledge the reality of internalized time—our own time. Time is all we have in this life, and it is my belief that life can be richer and more meaningful if people were to know more about time as it affects them personally. Then perhaps the future would begin to take on some reality and we might begin to act more realistically.

In this book, I have done my best to sketch the outlines of what will someday be an active, important, major field of study, with significance to everyone. Why do I believe that the science of time will assume greater stature in the future? There are many reasons, such as the fact that humans in all parts of the earth have been involved with time from the very beginning. If Marschack's theories are correct, records of the seasons and the phases of the moon engraved by Acheulean hunters on the ribs of Ice Age mammoths represent mankind's first move in the direction of science—the earliest extensions of the human brain. Much later, in the Bronze Age, Stonehenge was only one of hundreds if not thousands of early devices built to record and forecast the movements of the sun, moon, and planets. In those days, all people lived in time and, one assumes, were not as alienated from time as are many today.

The study of time has led the human species out into the universe, down into the heart of the atom, and is the basis of much of the theory concerning the nature of the physical world. In addition, it has held the attention of philosophers and psychologists, who have tried to define the nature of time as well as the experience of time.

In the second half of this century, the subject of biological clocks marked the first demonstration that all life is regulated internally and externally by rhythms synchronized with nature. Although there were only a few who recognized time as culture, the study of time as a product as well as a molder of the human brain in the cultural sense was not reported until well into the second half of this century. While the study of micro time and primary level, out-of-awareness time came even later, both William S. Condon's pioneering work on synchrony as well as my own studies on time as an out-of-awareness system of communication cry out for continued research.

Condon's work in particular adumbrates a cultural stage, when it will be possible to make short film or TV sequences of people interacting in public—random samples—that will provide data on the degree of stress people are experiencing. The index of synchrony and dissynchrony will be as informative as samples of the blood. How people synchronize could also be used as an accurate index of acculturation. The Colliers' studies

of classrooms of Native Americans and Eskimos also show great promise as a means of measuring the coherence and success of the learning environment.¹⁰

Much remains to be investigated about time as an organizing frame for life. Basic systems such as monochronic and polychronic time patterns are like oil and water and do not mix under ordinary circumstances. In a schedule-dominated monochronic culture like ours, ethnic groups which focus their energies on the primary groups and primary relationships, such as the family and human relationships, find it almost impossible to adjust to rigid schedules and tight time compartments. This country could do much worse than follow the example of former Congressman Ben Reifel, a Sioux Indian, who taught his people technically how to be on time for school and buses on the reservation.¹¹ Reifel realized that it is not enough to tell polychronic peoples to be on time or to plan ahead. Time in this sense is like a language and until someone has mastered the new vocabulary and the new grammar of time and can see that there really are two different systems, no amount of persuasion is going to change behavior. The writer Richard Rodriguez¹² has much to say about the importance of teaching language and culture in the schools. The point is that until now the schools lacked even a framework or theory for describing primary level systems.

Human beings are such an incredibly rich and talented species with potentials beyond anything it is possible to contemplate that from the perspective of this writer it would appear that our greatest task, our most important task, and our most strategic task is to learn as much as possible about ourselves. At present, it would seem that most of the world's capitals are ruled by Stone Age mentalities using Stone Age models of what the human race is all about. If the insights gained from the study of individuals trying to cope with life mean anything at all, it is that there is a direct relationship between the unvoiced picture that people have of themselves and their view of human nature.

My point is that as humans learn more about their incredible sensitivity, their boundless talents, and manifold diversity, they should begin to appreciate not only themselves but also others. One hopes this will ultimately lead to lessening our tendency to subjugate or stamp out anything that is different. The human race is not nearly enough in awe of its own capabilities. My picture of the future is not so much one of developing new technologies as it is of developing new insights into human nature.

This book has taken one little corner of human nature and put it under a microscope. What I see is a whole new dimension or set of dimensions to be explored. God really is in the details. And I for one do not think for a moment that He intended us to blow each other off the face of the earth.