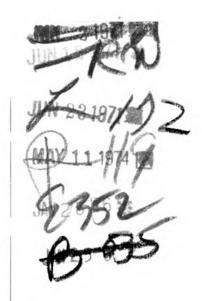
CHANGING TIME CONCEPTIONS AMONG GUATEMALAN PEASANTS

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ABSTRACT

CHANGING TIME CONCEPTIONS AMONG GUATEMALAN PEASANTS

By

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The more general concern of this paper is to study the sociological determinants of time conceptions. The particular focus is upon the changing time conceptions which result from the roles and experiences the individual acquires in the process of modernization. It examines first the identification with the traditional system and the dissociative experiences which weaken this identification. It is shown how these social-psychological processes influence the development of a more modern conception of time. The empirical referents are drawn from a study of symbolic systems and change orientation in five Guatemalan communities conducted in 1963-64. A series of hypotheses test a processual model of modernization developed by F. B. Waisanen. The major influence of educational experiences and media contact upon the development of an increased time consciousness and future time orientation is confirmed. There is also evidence that the sample being studied is more of a transitional society than an ideal type traditional system.

CHANGING TIME CONCEPTIONS AMONG GUATEMALAN PEASANTS

Ву

Deborah Jean Barndt

A THESIS

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The origins of this paper are far-reaching. Experiences of living with French students, Negro ghetto dwellers, and rural Appalachian farmers awakened my interest in differing conceptions of time. Dr. Harvey Choldin made me aware of the relationship between time and social change in a class on modernization. He encouraged me to review in depth theories of time. Dr. Denton Morrison offered valuable suggestions for the development of my theory and methodology.

My deepest gratitude goes to Dr. F. B. Waisanen. He not only provided me with a theoretical framework and with the empirical data, but he also gave generous counsel throughout the months of analysis. As Director of the Summer Institute for Comparative Sociology at Indiana University, he encouraged my seminar work to supplement the development of the thesis. Participants in the seminar were also most helpful in discussing my theoretical and analytical problems.

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CHAPTER I

THEORETICAL SIGNIFICANCE

General Concern: Changing socio-psychological conceptions in the process of social change.

Inherent in the words "process" and "change" is the idea of time. Some sociologists conceive of time as some "element" in the process of change while others submit to a personified Time as the Prime Mover, the initiator of change. In the study of social change, most social scientists have treated time as a setting, a condition, a constant, an independent variable. Yet lacking from the historical perspective of the process of social change is how time enters into our concerns and our behavior as a value, a resource, a guide, an indicator of other values. These varying conceptions of time seem to be related to both the psychological process of individual growth and the historical process of the development of society.

The Process of Concern: Modernization

Most theorists of modernization have concentrated on the origins and the consequences of social change. Employing the ideal-type method, they have dichotomized history into two systems: the traditional and the modern. Not only is this an over-simplification of changing systems but it is a static view of social change. An emphasis needs to be placed upon the "process" of change, which is inherently dynamic.

We recognize the necessity of isolating these systems and

comparing them to measure social change. Yet change is such a pervasive aspect of present-day society that what we call traditional and modern may often be interacting. Especially when studying developing societies, we must be careful with our definitions of the systems under consideration. And we must be sensitive to the process that is changing individuals who identify with these systems.

Thus, the model of modernization that is to be tested, though sociological in its perspective, attempts to isolate the social-psychological components of the process of social change. It is concerned with the individual's identification with the more traditional social system and with the experiences which dissociate him from the traditional and strengthen his identification with the more modern social system.

Waisanen has formulated a model which focuses upon the actor within the system (See the diagram on Table 1). The degree of identification that the actor has with the system is measured by four variables. Two are in-put variables: the time that he puts into the system (perhaps indicated by his age) and the interaction which he has with the system (through social ties and contacts such as marriage, neighborhood relationships, community involvement). Two other components which contribute to the identification with the system are the rank and the esteem which are bestowed upon the actor by the members of the system itself. These four variables measure the role circumscription of the actor within the system.

Of major concern in this new view of the process of change are the dissociative experiences which weaken the association of the actor

with the traditional system. The most important of these are embodied in the process of formal education. Other dissociative experiences often related to the educative process are travels away from the traditional system (physical mobility) and exposure to mass media (psychic mobility).

Though there are often barriers (physical or psychic) between the traditional and more modern systems, the dissociative experiences enable the individual to cross the barriers, and they usually result in an increased identification with the more modern social system. This new identification is manifested in modern cognitions and value orientations. Among these, of specific concern in this paper is the modern conception of time, which is here defined to be an increased consciousness of time and a futuristic time orientation.

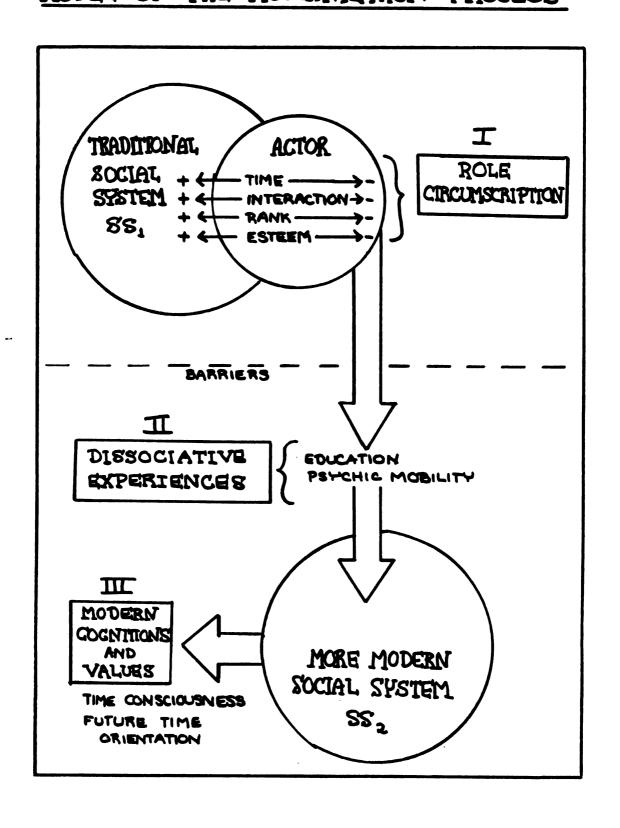
The Conception of Concern: Time

The concept of time has been variously defined by natural scientists, philosophers, historians, sociologists, and psychologists. The multiplicity of times is explored in a more theoretical paper, which reviews the literature on time in these fields (available on request of the author). This discussion lays the theoretical background for the present empirical study and references consulted are listed in the bibliography. For the present purposes, however, a narrower and more explicit definition of time is necessary.

A modern social-psychological conception of time will be examined empirically in this paper. I will distinguish between two interrelated aspects of time, defining each conceptually and operationally.

MODEL OF THE MODERNIZATION PROCESS

TABLE 1



* This is a modified version of a model conceptualized by F.B. Waisanen.

Accompanying the process of modernization, I would propose, there is an increased TIME CONSCIOUSNESS and a greater futuristic TIME ORIENTATION.

Time Consciousness: An increased awareness of time can be seen in part as a product of the historical development of a world society. The conventional time units (minutes, hours, days) which comprise our modern time system were invented to meet the social needs of increased interaction. The mechanical clock, for example, wasn't used until the fifteenth century when a uniform time system seemed inevitable for transactions among cultures with varying time systems. The internalization of these constructions of time can be seen accompanying two processes of social change which are closely related to modernization: urbanization and industrialization. When the city became the center of commercial, economic, political, and social activity, it drew more and more people who followed conflicting and particular time systems. Industrialization, of course, speeded up the interaction of urban life. But more than ever it demanded a uniform time system. Differentiation and specialization created a complex network of interdependent work units - each of which depended upon certain time spans and deadlines. Punctuality became vital to the functioning of the industrial world.

These historical developments, of course, had tremendous impact upon the values and conceptions of the industrial workers and urban dwellers. Time was now seen as a value, a resource in the productive system, a scarce commodity. New cultural values reflected this increased consciousness. Promptness became important. An individual organized his day according to a "time schedule" and was careful to allocate well his "time budget."

Not only did minutes and hours become guidelines for activity, but also days, months, and years became more distinct as convenient frameworks for organizing the affairs of the individual and the society alike. With this broadening time perspective, planning for the future was done in the context of these quantitative units of time measurement. This orientation to planning and toward the future as it relates to modern social systems will be viewed from a slightly different perspective in the next section.

There could be many implicit measures of this awareness of time as it is manifested in several different ways in modern society: the segmentation of time as a scheme or reference, the importance of time in determining activities: their length and quality, the dependency placed upon time units as guides, the social value attached to promptness, and the cultural value that quantitative time takes on as a productive resource.

Time Orientation: Although there is evidently a relationship between increased time consciousness and futuristic orientation, this second conception of time can be seen as a result of other aspects of the modernization process. Societies undergoing socio-economic development are driven by a belief in progress. They plan for the future because they have come to recognize that they have some role in the molding of that future. This increased confidence in the mastery of man over nature has also grown out of the industrial revolution. Modern man has been able to create and to control. His fate is no longer solely in the hands of Providence. Man thinks he can perfect himself and so he directs his activities toward this progressive goal.

In a broader sense, then, time orientation is considered the individual's identification with the abstractions of past, present, and future. Though they are psychological conceptions, they are manifested in the individual's world view, his philosophy of life, and his behavior. Perhaps one way to understand better future orientation is to contrast it with an orientation toward the past.

The past-oriented individual has his reference point in the past. He believes the best life is behind him. He may glorify tradition and age. Conversely, he may scorn or fear change. His roots in the past may be held more firmly because of a fatalistic philosophy of life or because of no sense of the present or future. In striking contrast, the futuristic individual sees beyond today. He plans for a future and may even delay immediate gratification. This is usually an optimistic perspective; one believes that things will be better in the future. From this viewpoint, then, it incorporates a sense of progress. But one may be very oriented toward the future and at the same time maintain a pessimistic view of its possible outcomes.

One further mention should be made of the conceptual distinction between the two time variables. For it may appear that they are so interrelated as to be measuring the same phenomenon. The author believes that even though future orientation may seem to depend upon an increased consciousness and allocation of time as a resource, the two variables can exist independently of each other. Take, for example, the immigrant shop-keeper in the big city, who clings to the traditional ways of the old country, while counting on his pocket watch to guide him precisely through a day of orderly business. On the other hand, the

young political idealist may reject an emphasis on time or the use of planning according to a time budget, while advocating a very futuristic utopian state. This is thus the rationale for using the two components of modern time conceptions separately in the analysis.

CHAPTER II

EMPIRICAL REFERENTS

PROJECT

The data to be used in the empirical test of the Waisanen model of modernization were gathered for a larger study of symbolic systems and change orientation in five Guatemalan communities. The project, conducted in 1963-64, was sponsored by the Instituto de Nutricion de Centro America y Panama and the Programa Interamericano de Informacion Popular. It was primarily concerned with the usage of innovative nutrients and the effect of literacy programs. The measurements of time orientation were of secondary interest. Other variables will be selected from the data as dictated by the components of the Waisanen model.

SAMPLE

A probability sample of 710 was drawn from adult residents of the five villages. The villages themselves were selected according to three criteria: cultural tradition (Indian or Ladino), degree of urbanization, and degree of acculturation. Thus included are two hamlets, two county seats, and one village on the outskirts of Guatemala City; two villages are primarily Indian, two dominated by Ladinos, and one of mixed representation.

La Cholena is an isolated rural village, thriving primarily on the cultivation of corn. Inhabited by 68 families, it has few developed civic institutions.

Known as a center of commerce as well as a county seat, San Jose del Golfo has many more public buildings, including a school, church, town hall, and jail. The 110 families are distinctly stratified.

Santa Maria Cauque had little contact with any outside community until 15 years ago. It still remains a quite isolated hamlet.

Another county seat in the sample is San Antonio Aquas Calientes, which is inhabited by 400 families. The community institutions are well-developed and greater stratification is present in its social system.

Belem, a village of 200 families on the fringe of Guatemala City, is primarily Ladino. Though it remains quite rural, it is witnessing some occupational differentiation.

Most of these villages have been studied by anthropologists, thus ample information about them is available. A pre-test of 200 interviews was administered to an additional village and the instrument was corrected and refined. The resulting questionnaire was twenty pages long (see Appendix) and required an interview of 45 minutes. Six university girls, students in the social sciences, were trained to do the interviewing. The results were coded on IBM cards and analysis of the larger project was carried out at Michigan State University. The secondary analysis described in this paper was done at Indiana University and with the facilities of the Indiana University Computer Center.

CHAPTER III

THE PROBLEM

In its broadest sense, this analysis shall serve as a test of the Waisanen model of the process of modernization. It becomes specific in the choice of modern time conceptions as representative of Waisanen-defined modern cognitions and value orientations. The central focus is upon the changing time conceptions which result from the roles and experiences the individual acquires in the process of modernization. The sociological determinants of time conceptions shall be limited to components of "role circumscription" and "dissociative experiences." These latter two phenomena are designated as the general independent variables; the dependent variable of concern is the modern conception of time. Following the author's conceptual definitions of two interrelated aspects of time conception, both time consciousness and future time orientation will be related to the independent variables.

General Hypotheses

- I: The lower the individual's role circumscription in the traditional social system, (A) the more time conscious, and (B) the more future oriented he will be.
- II: The greater the dissociative experiences of the individual,
 (A) the more time conscious, and (B) the more future oriented
 he will be.

TABLE 2.

INDEPENDENT VARIABLES	DEPENDENT VARIABLES
Less Role Circumscription More Dissociative Experiences	Modern Time Conceptions: Time Consciousness Future Time Orientation

Specific Hypotheses

Attention is now given to the middle-level variables of the Waisanen model. It is recalled that in the conceptual scheme, the components of "role circumscription" in the traditional system included the input variables of TIME and INTERACTION and the output variables were RANK and ESTEEM. As "dissociative experiences," Waisanen noted EDUCATION and PSYCHIC MOBILITY. Thus, following the deductive method, we can further hypothesize:

- 1. The less time the individual has invested in the traditional social system, (a) the more time conscious, and (b) the more future-oriented he will be.
- 2. The less interaction the individual has with the traditional system, (a) the more time conscious and (b) the more future-oriented he will be.
- 3. The lower the individual's rank in the traditional social system, (a) the more time conscious and (b) the more future-oriented he will be.
- 4. The lower the individual's esteem within the context of the traditional social system, (a) the more time conscious, and (b) the more future-oriented he will be.
- 5. The higher the educational level the individual attains, (a) the more time conscious and (b) the more future-oriented he will be.
- 6. The more psychic mobility the individual experiences, (a) the more time conscious and (b) the more future-oriented he will be.

A third component, physical mobility, also is a major factor in the dissociating process, but it is excluded from the present analysis because the data contained no valid measure of this concept.

Finally, the relationship between the two conceptions of time can be tested:

The more time conscious the individual is, the more futureoriented he will be.

Measurement of Concepts

When confronting the problem of defining the middle-level variables in more empirical terms, one must recognize two major limitations that the present investigation faces. As is true of any secondary analysis, the data cannot be molded into the personal theoretical framework of this author. The measures of time conception were of minor concern in a much larger study with other very particular purposes in mind. Therefore, the four questions concerning time do not measure all the aspects of time orientation that are considered relevant to the modernization process. The second limitation is that the data do not do justice to the Waisanen processual model. I am forced to define the components of the theoretical model in terms of empirical indicators drawn from data that were collected five years before the model was conceived. Thus, the referents don't always coincide with Waisanen's well-defined concepts.

On thorough inspection of the research schedule, I selected 17 items as possible measures of the 8 middle-level concepts. These comprise the raw data that are used for the total analysis. These empirical indicators are viewed in the context of the total conceptual scheme in Table 3 below. Though the indicators appear self-explanatory, they may be clarified by reference to the interview schedule in the Appendix.

All except marital status, sex, ethnic group, and language spoken are

clearly quantitative interval variables. The four exceptions are not purely nominal, however, for each is represented by two dimensions that should be related in a linear fashion to the other variables.

TABLE 3.

EMPIRICAL INDICATORS	CONCEPTUAL SCHEME		
Low-Level Variables	Middle-Level Variables	High-Level Variables	
Age of Respondent	TIME		
Marital Status Friend Contact Relative Contact	INTERACTION	ROLE	
Sex — Family Income — >	RANK	CIRCUMSCRIPTION	
Self-perceived Importance Ethnic Group	ESTEEM		
Years in School———————————————————————————————————	EDUCATION	DISSOCIATIVE	
TV Viewing ————————————————————————————————————	PSYCHIC MOBILITY	EXPERIENCES	
Importance of Clock ————————————————————————————————————	TIME CONSCIOUSNESS		
Perception of Self Conditions in Future Perception of Self as Person Open to Change in the Future	FUTURE TIME ORIENTATION	MODERN TIME CONCEPTIONS	

The specific content of the time measurements merits further explanation. The form of all four questions concerning time is patterned after the Cantril ladder device. For the two indicators of Time Consciousness, the respondent was shown a ten-step ladder and was told

"Above step five are things that are very important to you and below are things that are not important. Where (on what step) would you place (1) a clock or watch, and (2) a calendar?" The two measures of future time orientation took the more specific form of Cantril's self-anchoring scale: (3) "Here is a picture of a ladder. Suppose that on the top step stands a person who is living the best possible conditions and at the bottom stands a person who is living the worst possible conditions. On what step of the ladder do you think you would be five years from now?" (4) The final question uses the same approach, but the respondent is to rate himself as a change-oriented and risk-oriented individual he thinks he will be five years from now.

Analytical Approach

Reversing the direction of abstraction now, I will begin the analysis with the lowest level variables. (1) The first step will be to examine closely the frequency distributions of the 17 indicators. Some collapsing of categories within the variables may prove necessary. (2) Next I will test the strength and adequacy of the 17 indicators as measures of the middle-level concepts. An inter-item analysis will determine the choice of specific indicators as single measures of a concept or of composite indices of indicators serving as a valid measure. (3) Using the middle-level variables in their empirical form, the specific hypotheses can be tested. Of secondary interest will be the relationship among the variables making up the three more abstract concepts. The statistical techniques employed will be Pearson's product moment correlation and chi-square analysis. (4) The components of the high-

level variables thus examined, broader conclusions can be drawn in terms of the general hypothesized relationship between time conceptions and the process of modernization. Interpretation of the findings will comprise the major portion of the analysis.

CHAPTER IV

ANALYSIS

FREQUENCY DISTRIBUTION AND COLLAPSING OF CATEGORIES

Upon observation of the frequency distributions, logical breaks were noted in the distributions for collapsing categories. This condensation was deemed necessary for several reasons: Some double-column variables could not be handled in their raw form. The data often fell into logical patterns which could be maintained with collapsing. This process simplified the analysis in general. Table 4 lists all the variables considered in the total analysis as they were recoded and distributed.

The starred codes indicate those extreme categories included in chi-square analysis. Though contingency tables were made of all the variables, the middle categories rarely followed a consistent pattern. The extreme cells, however, appeared more interesting; it is those which occupy the extreme positions that are most clearly relevant to the hypotheses. (The chi-squares thus computed are based on four-fold tables, so in every case, there is only one degree of fredom.) It must be understood that, while this operation of using extreme categories reduces ambiguity, it also effects the randomness of the sample. Thus, the chi-square must be interpreted in this context. The product moment correlations, which are based upon the total sample, are more valid measures of association.

TABLE 4.
FREQUENCY DISTRIBUTION OF VARIABLES
IN FINAL COLLAPSED CATEGORIES

NUMBER	VARIABLE	CODE	CATEGORIES	FRE - QUENCY	PERCEN- TAGE
(1)	Age	*1	17-25 years old	138	19.4
		2	26-35	281	39.6
		3	36-45	160	22.5
		4	46-55	76	10.7
		*5	56-83	55	7.7
2)	Marital Status	1 2	Married, free union Single (5), sepa- rated, widowed, divorced	673 37	94.8 5.2
3)	Friend Contact	1	High: once per wk.	404	56.9
		2	Medium: few times a mo. to once a month	105	14.8
		3	Low: few times a year to never	201	28.3
(4)	Relative	*1	High	386	54.4
	Contact	2	Medium	154	21.7
		*3	Low	1 70	23.9
5)	Sex	1	Male	272	38.3
		2	Female	438	61.7
(6)	Family Income	*1	Low: 1-5 (dollar equiv)	476	67.0
		2	Middle: 6-10	126	17.7
		*3	High: 11-63	108	15.2
(7)	Self-perceived	*1	Low: 1-4 rating	183	25.8
	Importance	2	Medium: 5-6	215	30.3
	-	*3	High: 7-10	312	43.9
8)	Ethnic Group	1	Ladino	372	52.4
•	-	2	Indian	338	47.6
(9)	Years in	1	Low: none	244	34.4
	School	2	Medium: 1-3 years	289	40.7
		3	High: 4-12 years	177	24.9
(10)	Functional	1	Low: none	267	37.6
	Literacy	2	Medium: 1-6 words	157	22.1
	·	3	High: 7-8 words	286	40.3

TABLE 4--Continued

NUMBER	VARIABLE	CODE	CATEGORIES	FRE- QUENCY	PERCEN- TAGE
(11)	TV Viewing	1 2	None Some: 1-8 times in last 6 months	622 88	87.6 12.4
(12)	Radio Listening	1 2	None Some: 1-8 hours a day	423 287	59.6 40.4
13)	News Reading	1 2	None Some: 1-8: Actual no. read regularl or occasionally	487 223 y	68.6 31.4
(14)	Importance of Clock	1 2 3	Low: 0-6 rating Medium: 7-8 High: 9-10	209 288 213	29.4 40.6 30.0
(15)	Importance of Calendar	1 2	Low: 0-6 rating Medium: 7-8 High: 9-10	209 303 198	29.4 42.7 27.9
(16)	Perception of Self Future Conditions	1 2	Low: 0-6 self- rating High: 7-10	302 408	42.5 57.5
(17)	Perception of Self as Change- Oriented in Future	1 2	Low: 0-6 self- rating High: 7-10	153 557	21.5 78.5
	INDICES USE	O IN F	INAL ANALYSIS		
(9+10)	Edlit	*1 2 3 4 *5	Low: uneducated, illiterate	197 81 123 191 118	27.7 11.4 17.3 26.9 16.6
		6	High: highly edu- cated and literate	0	20.0
(11+12+13)	Media Contact	*1 2 3 *4 5 6	Low: No use of TV, radio, news High: use TV, radio, and news	316 233 118 43 0	44.5 32.8 16.6 6.1

TABLE 4--Continued

NUMBER	VARIABLE	CODE	CATEGORIES	FRE- QUENCY	PERCEN- TAGE
(14+15)	Time	*1	Low: neither	117	16.5
	Consciousness	2	clock nor cal-	137	19.3
		3	endar very im-	219	30.8
		4	portant	110	15.5
		*5	•	127	17.9
		6	High: both very important	0	
(16+17)	Future Time	*1	Low: low rating	93	13.1
	Orientation	2	of self in	269	37.9
		*3	future	348	49.0
		. 4	High: high rating of self in future	0	
				710 =	Total sample

^{*}Indicates those categories actually employed in chi-square computations for the final analysis.

INTER-ITEM ANALYSIS AND FINAL SELECTION OF INDICATORS OF MIDDLE-LEVEL VARIABLES

The preliminary analytic process was to select those indicators which best represented the middle-level variables. On the basis of a skewed frequency distribution and its consistently low correlation with other variables, marital status was eliminated as a possible measure of interaction within the traditional system. Though certainly related to age, marital statuses were overwhelmingly in the married or free categories (673 of 710), with only 5 single respondents and 32 categorized as separated or divorced.

Two major ecological variables, sex and ethnic group, were eliminated as representatives of rank and esteem in the test of the model,

⁽⁾ Those variables selected to enter into the final analysis.

though they will be used as control variables in later analysis. sample was predominantly female (438:272). Yet the sex variable was not significantly correlated either positively or negatively with any other variable except news reading (-.35). Furthermore, little variation was noted in the row and column percentages of contingency tables with other variables. The males rated themselves slightly higher in importance within the community and are notably the better educated (though cell percentages by row indicate higher rank only in literacy scores). With all three measures of media contact (TV, radio, news), males were the more exposed. But with the four measures of time conceptions, there was striking uniformity. Women appeared only slightly more clockconscious, while males were the more future-change-oriented. This latter relationship may be attributed to the occupational involvement of the male, where change is often first manifested, but one would also have predicted a greater time consciousness among male workers. Besides the small amount of variation explained by sex, this variable is eliminated because of the much greater relative strength of family income as a measure of rank. The relationship between the two possible indicators could not be tested because the measure of family income is based on the husband's income rather than that of the female respondent. If she vicariously shares his rank, the issue of sex as a strong distinguishing factor is further clouded.

The intrinsic theoretical interest in ethnic group has been made known. The sample is quite evenly represented with 372 Ladinos and 338 Indians. It was expected that his variable would strongly differentiate the traditional from the modern. Ladinos are commonly known to be the

most progressive. But in both the correlational analysis and chi-square inter-item analysis, little difference was found between the two groups. The other indicator of esteem - self-perceived importance - seemed more explicit and proved to correlate more strongly with all other variables.

Relative contact was finally chosen as the single measure of interaction within the traditional system because it represented the remaining strength of the kinship system, considered germane to traditional society. Also it appeared possible that in Guatemalan society, contact with friends (especially inter-village contacts) might dissociate one from rather than restrict one to the traditional system.

The process of inter-item analysis may be viewed in summary form in Table 5. The contingency tables offer the distributions as drawn from the extreme cells. The chi-square, its significance level, and the product moment correlation represent the statistical tests that dictated the final selection of empirical indicators for the concepts of concern.

TABLE 5.
INTER-ITEM ANALYSIS

VARIABLE CONTINGENCY TABLE			x ² *	r**	FINAL MEASURE	
INTERACTION		Relative	Contact			
		Often	Never			
Friend	Often	(282) 75%	(12) 3%	65.56	.32	Relative
Contact	Never	(55) 15%	(27) 7%	(p < .001)	. 32	Contact

TABLE 5--Continued INTER-ITEM ANALYSIS

VARIABLE		CONTINGENCY TABLE		x ² *	r**	FINAL MEASURE
ESTEEM		Ethnic	Group			
		Ladino	Indian			
Self-	Low	(92) 19%	(91) 18%	.59	.01	Self- Perceived
Perceived Importance	High	(168) 34%	(144) 29%	(not sig.)	.01	Importance
EDUCATION		Functiona	l Literacy			
		Low	High			
Years in	Low	(197) 56%	(23) 7%	16.58	.57	EDLIT Index
School	High	(13) 4%	(118) 34%	(p < .001)	.5/	bbii index
PSYCHIC MOBILITY		Radio Lis	stening			
		Never	Often			
TV	Never	(393) 88%	(41) 9%	2.64	.12	MEDIA CONTACT
Viewing	Often	(10) 2%	(3) 1%	(p<.20)	, 12	Index
		News R	eading			
		Never	Often			
TV Viewing	Never	(461) 90%	(37) 7%	38.34	77	
	Often	(7) 1%	(8) 2%	(p < .001)	.33	

TABLE 5--Continued

VARIABLE		CONTINGEN	CY TABLE	x ² *	r**	FINAL MEASURE
		News Re				
		Never	Often	•		
Radio	Never	(327) 85%	(23) 6%	303.86	. 22	
Listening	Often	(23) 6%	(13) 3%	303.80	. 22	
TIME CONSCIOUS- NESS		Importance Low	ce of Cal			
Importance	Low	(4) 3%	(1) 1%	83.50	.49	Time Conscious-
of Clock	High	(1) 1%	(127) 95%	(p<.001)	•43	ness Index
FUTURE TIME ORIENTATION		Change Ori	entation			
		Low	High	•		
Conditions	Low	(12) 8%	(18) 12%	24.81	24	Future Time
in Future	High	(7) 5%	(111) 75%	(p < .001)	. 24	Orientation Index

^{*}Chi-square is based upon extreme cells.

Indexing

On the basis of strong association between the other pairs of empirical indicators, indices can be compiled for the middle-level variables of education, psychic mobility, time consciousness, and future time orientation. The results of the inter-item analysis which justify

^{**}Pearson's product moment correlation is based upon total sample.

this move are summarized in Table 5. Both product moment correlations and computed chi-squares attest to the direction and the strength of these relationships.

- (1) EDLIT INDEX: Both educational level and literacy could play different yet important and interrelated roles in introducing an individual to the modern social system. A correlation of .57 ($X^2 = 216.58$) indicates a definite relationship between these two indicators of dissociative experiences. It should be noted, though, that the largest cell (197) represents the extreme case of the noneducated and illiterate. Of particular interest, then, are those 13 who have had four or more years of schooling yet remain illiterate and those 23 who have obtained a very high score on the literacy test in spite of no educational training. This latter group may reflect the success of the adult literacy classes held in recent years. Other influences, such as media contact, upon this development will enter into the discussion at a later point. For all further analysis, the composite "edlit" score will represent educational level in its broadest sense.
- (2) MEDIA CONTACT INDEX: The measure of psychic mobility can now be viewed as a composite score of measures of the use of three media forms: TV, radio, and newspapers. The inter-item analysis of these three indicators shows the strongest relationship between TV viewing and newspaper-magazine reading (r = .33) $(X^2 = 38.34, p < .001)$. News exposure is also quite highly correlated with radio listening $(r = .21, X^2 = 303.86, p < .001)$. The use of TV and radio are not as contingent, however $(X^2 = 2.64, p < .20, with r = .12)$. This can be understood in the context of relatively poor Guatemalan communities, where ownership

of either a radio or a television set is rare (622 never watch TV, 423 never listen to the radio, 487 never read the newspaper). Thus, the sample of interest - those who experience some media contact - is quite limited in size. The importance of this exposure, though, has been of major concern to students of modernization and communications (diffusion of innovations) and will receive more attention when tested with other middle-level variables in the Waisanen model.

(3) TIME CONSCIOUSNESS INDEX: Just as the format for the two questions measuring the importance of the clock and calendar is similar, so the two questions appear to be measuring similar dimensions of time. A correlation of .49 is found when the total sample is used. A chi-square analysis of a contingency table of extremes indicates a significant association ($X^2 = 83.50$, p<.001). In a correlation matrix, the variable of clock importance shows a slightly but consistently higher relationship with most other variables (see Table 6). This may be because the calendar was related more to the seasonal conceptions of time known to traditional peasant society. Also the ancient Mayan civilization of Central America was known to have developed a very elaborate and accurate calendar. The introduction of the clock and its increased use, thus, have been much more correlated with the modernization process. Industrialization has been noted as a major impetus in increasing the awareness and the value of clock time.

The index of combined clock and calendar ratings remains a valid measure of time consciousness. They may be considered two different

²Gist, Noel and Sylvia Fava, <u>Urban Society</u>, New York: Thomas Y. Crowell Co., 1933), p. 15.

levels of abstraction, each measuring the value placed upon conventional time units. Increased awareness of minutes and hours measured by the clock and of months and years measured by the calendar indicates the importance of time as a value and a resource to be used as an organizational guideline and a framework for planning. These are notably modern conceptions of the phenomenon.

whether the ladder questions about self conditions and self as changeoriented in the future are actually measuring the dimension of futuristic orientation. Admittedly, they were conceived to measure the more
specific content and to be compared with self-ratings of the present and
the past. But a high rating of self for the future - though it may also
be measuring optimism - should reflect some sense of change taking place
in the individual's future. This change-orientation and riskorientation is best measured by the second question (see Table 6, where
change-orientation is more highly correlated with the other variables
than the self-in-future variable is). But the two tend to hold together
statistically with a product moment correlation of .24 and a X² of 24.81
(p<.001). The combined ratings form an index of future time orientation that will be used for all further analysis.

^{3&}quot;The value of time tends to be judged in terms of its use," according to Wallace Fulton, in "The American Family and Time," <u>Journal of Marriage and the Family</u>, Vol. 26, No. 1, Feb. 1964, p. 9.

Mary Sturt suggests a close relationship between the perceptions of time and change in The Psychology of Time, New York: Harcourt, Brace & Company, Inc., 1925, p. 8. She writes: "We cannot perceive time directly but we do perceive that things change, and this perception of change is our nearest approach to a perception of time."

TABLE 6.
SUMMARY TABLE OF RESULTS
CORRELATIONAL ANALYSIS

VARIABLE	TIME CO	NSCIOUSNESS	FUTURE TIME	ORIENTATION
(Empirical Indicator)	Clock	Calendar	Conditions	Change
TIME (Age)	12	16	10	07
INTERACTION (Rel. Contact)	.02	.02	.07	.06
RANK (Income)	.12	.15	.09	.17
ESTEEM (Importance)	.18	.16	.28	.23
EDUCATION (Yrs. in School)	.20	.15	.20	.18
(Funct. Lit.)	.21	.15	.12	.21
PSYCHIC MOBILITY (TV)	.13	.10	.09	.14
(Radio)	.09	.05	.04	.11
(News)	.11	.12	.12	.21

^{*}The above calculations are based upon the total sample of 710.

CHI-SQUARE ANALYSIS

VARIABLE (Empirical Indicator)	TIME CONSCIOUSNESS	FUTURE TIME ORIENTATION
TIME (Age)	6.0 (p <.025)	14.2 (p <.001)
INTERACTION (Rel. Contact)	.38 (not sig.)	1.4 (p <.250)
RANK (Income)	14.1 (p < .001)	397.2 (p <.001)
ESTEEM (Importance)	12.6 (p <.001)	22.4 (p <.001)
EDUCATION (Yrs. in School + Lit.)	14.5 (p < .001)	20.1 (p <.001)
PSYCHIC MOBILITY (Media)	5.2 (p < .025)	6.2 (p < .025)

^{*}The above calculations are based upon those cases falling in the four extreme cells of contingency tables.

CHAPTER V

RESULTS AND INTERPRETATIONS

TESTING OF SPECIFIC HYPOTHESES

The major analysis will test the association between the modern time conceptions and the middle-level variables which comprise role circumscription and dissociative experiences. The statistical results are summarized in Table 6.

1 a: The less time the individual has invested in the traditional system, the more time conscious he will be.

A negative correlation supports the direction of the hypothesis; time consciousness does appear strongest among the young ($X^2 = 6$, p <.025). Age is also negatively correlated with education and psychic mobility measures; the younger are the more educated and the more mobile.

${}^{1}_{b}$: The less time the individual has invested in the traditional system, the more future-oriented he will be.

The younger Guatemalan population is definitely the more future-oriented ($X^2 = 14.2$, p <.001). Again a negative correlation is supportive. This relationship should be somewhat universal, for the young naturally have more time ahead of them, while the old see most of their lives behind them. The range of expectations is narrowed for the latter, so their orientation is more past-oriented than future-oriented. 5

⁵See also Piaget's theory of the shift in time perspective in the transition from childhood to adolescence to adulthood in Kastenbaum, Robert, "The Dimensions of Future Time Perspective, an Experimental Analysis," The Journal of General Psychology, Vol. 65, 1961, pp. 203,218.

$\frac{2}{a}$: The less interaction the individual has with the traditional system, the more time conscious he will be.

This is hypothesized because much interaction with the traditional system would appear to bind the individual to the system, while fewer ties would allow him more mobility toward the modern system, and thus, toward modern conceptions of time. Relative contact would seemingly perpetuate the traditional kinship structure, which values extended family relations. Modernization theory has emphasized that the conjugal family type tends to free the individual from parent influence and kin line controls. But the correlation between relative contact and time consciousness is positive, even though the association is not significant ($\chi^2 = .38$). It would then appear that time consciousness increases with relative contact. This contradiction is noted by William Goode in the example of the American conjugal family system. Visiting relatives is recognized as one of the most common social occasions even in modern United States. Perhaps this ideal type does not fit reality.

2_b: The less interaction the individual has with the traditional system, the more future-oriented he will be.

This contradictory relationship is even more evident; the hypothesis is negated by a positive correlation and a χ^2 of 1.4 (p <.250). Perhaps the conjugal family system does exist in Guatemala to the extent that the young have the choice of occupation, which would increase their future orientation. This practice evidently coexists with strong

⁶Young, Frank W., "A Proposal for Cooperative, Cross-Cultural Research on Intervillage Systems," <u>Human Organization</u>, 1966, no. 25, p. 46.

kinship ties.⁷

Another explanation can be offered but not clearly supported without further knowledge of the geographical spread of kinship systems. It is likely that relative contact may take the individual away from the physical traditional village system. In this case, he becomes more physically mobile, and may, at the same time that he maintains kin relations, be exposed to other more modern or variant practices. The Guatemalan culture has a long social history of inter-village contacts. Frank Young in his communications research has considered these intervillage systems as crucial units in certain types of social change.

Another unique feature of Guatemalan culture enters into the question of the relationship between interaction and the development of modern concepts. Sol Tax has discovered a persistent contradiction between world view and social relations in Guatemala. Disproving the theory that a civilized social system would necessitate the development of a civilized world view, Guatemalans have always maintained widespread social and economic relations with a minimum of the kind of intimate contacts through which new conceptions are best transmitted. This "commercial spirit" even seems to have entered into family relations.

Although there may be continuous intercommunication with modern systems,

Richard Adams would agree that the view of declining kin relations is misleading. In The Second Sowing: Power and Secondary Development in Latin America, San Francisco, California: Chandler Publishing Company, 1967, he writes:

[&]quot;Kinship is proving to be as viable as any human social structure and it is adapting to the new demands of an urbanized and industrialized age. If it is declining in importance, it appears to be doing so in parts of the middle-income group in which individuals seeking prestige and power find many kinsmen of no help, and in some cases, obstacles."

the Guatemalans see no particular reason for adoption of new cultural traits as a result of these contacts and are content with their primitive world view. 8

3a: The lower the individual's rank in the traditional social system, the more time conscious he will be.

Implicit in this hypothesis and in the next three is the more general hypothesis that high rank and esteem tie the individual more closely to the traditional system, circumscribing him so that he is less likely to be mobile outside his community. It is commonly assumed in sociological literature that the marginal men, those who for some reason are blocked from close identification with the traditional system, are the most open to change. The entrepreneurs were definitely willing to risk community disapproval to undertake modern enterprise. And in their efforts they were quite aware of time as a resource and the future as a reality.

The important question is: in the traditional society are the positions of rank and esteem actually accorded to the most tradition-bound individuals? Few communities today adhere to the ideal type of traditionalism. And even in most peasant-type communities, the occupational structure and social structure have undergone great changes.

Greater differentiation of labor and mechanization of agriculture have transformed the traditional community into a more modern economic system, often stratified according to economic and occupational position.

⁸Tax, Solul'World View and Social Relations in Sustemate, yin Heath, Dwight and Richard N. Adams (eds), Contemporary Cultures and Societies in Latin America, New York: Random House, 1965, pp. 487-502.

It has already been noted that Guatemala has a very civilized structure of social relations and a well-developed inter-village system. Another trait of Guatemalan society has been that historically the local communities have maintained contact with commercial and political centers. Bespecially among the Indians, travel and trade have been common. Thus, from a more ecological viewpoint, the Guatemalan village has always reflected the influence of the national political and social system. In a symposium on political change, Richard Adams described the effect that recent political action, initiated from outside, had upon the community: "It brought about a destruction of or violent alterations in the socio-political structure." John Kunkel notes a parallel change in the economic structure: "As small agricultural, economically autonomous villages begin to participate in the economic system of the nation, their social organization becomes consistent with that of the nation."

Recognition of the Guatemalan villages, then, as structured socially and economically after a more modern system would lead one to expect opposite relationships than the hypotheses predict. And because none of the next four hypotheses are supported within the context of the traditional system described in the model, rank and esteem will be

Adams, Richard, Political Changes in Guatemalan Indian Communities: A Symposium, reprinted from Publication No. 24, pp. 1-54, Middle American Research Institute, Tulane University, New Orleans, 1957.

¹⁰ Ibid.

¹¹ Kunkel, John H., "Economic Autonomy and Social Change in Mexican Villages," Economic Development and Cultural Change, 1961, p. 55.

considered in terms of their relevance to the more modern context within which they are accorded. (Rather than explain why the hypotheses weren't supported, discussion will focus upon the results as supporting hypotheses rephrased in the context of a "transitional" system rather than a traditional one.) This is not a negation of the Waisanen model; it is merely a recognition that the traditional system we are dealing with is really more of a transitional society. It is in this way that the sample studied deviates from the ideal type described by Waisanen.

Viewing the results in this context, mank is positively correlated with time consciousness (.12 and .15) and a chi-square of 14.1 is significant beyond the .001 level. The choice of the empirical indicator used to measure rank (income level) might also account for this unexpected relationship. Income, as well as affording the individual a higher status, would allow him more economic opportunities. Both education and media contact are highly correlated with income level and these dissociative experiences will be shown to increase time consciousness.

3b: The lower the individual's rank in the traditional system, the more future-oriented he will be.

A chi-square of 397.2 (p <.001) attests to a strong relationship between income and future orientation. The positive product moment correlation again does not support the hypothesis but suggests the wealthier are also more futuristic. This would not agree with Leslian's hypothesis that the orientation of the upper class is backward to the past. But the Guatemalan villagers with higher incomes cannot be

¹² Leslian, L. L., "Time Orientation and Social Class," Journal of Abnormal and Social Psychology, Vol. 47, 1952, pp. 589-592.

compared to the American upper class. They more likely resemble the "nouveau riche" or emerging "masa media." In comparison to most penniless peasants, they can be optimistic about a future because they have the means to begin to mold it.

4a: The lower the individual's esteem within the context of the traditional system, the more time conscious he will be.

Again because the present context is not purely traditional, this hypothesis is not supported. There is a positive correlation between an individual's self-perceived esteem within the community and his time consciousness. The strength of the relationship is supported by a χ^2 of 12.6 (p <.001).

This result suggests that there are few marginal men in our sample. Those who hold more modern time conceptions are praised rather than scorned by other villagers. If these individuals have subjectively judged their importance on the more objective basis of the power they control in the political or economic hierarchy, the variable esteem should correlate highly with rank. The correlation, though positive, is not high (.08) and the relationship is not strong ($X^2 = 2.70$, p < .10). Again there is the possibility that educational level and/or media use are becoming new criteria for according rank and esteem.

4b: The lower the individual's esteem within the context of the traditional social system, the more future oriented he will be.

Future-orientation is even more strongly associated with esteem

¹³Gillin, John, "Cultura Emergente," in Jorge Luis Arriola (ed), Integracion Social en Guatemala, Guatemala: C. A., 1956, pp. 435-457. When speaking of this new group, the "masa media," with respect to rank and esteem, it "attribuye al modo o nivel de vida cierto minimo de lo que se suele llamar 'decencia."

 $(X^2 = 22.4, p < .001)$. But the positive correlation (.28 and .23) reinforce notions about the greater mobility of the important community members. Orientation to the future and toward change is often strongly related to an individual's perceptions of his life conditions and of the control he has over them. On the basis of the confidence he can draw from his present status, the more esteemed individual can plan for a more promising future.

$_{a}$: The higher the educational level the individual attains, the more time conscious he will be.

The effect of education - both school training and literacy skills - as an agent of social change is little doubted. Though from a historical perspective, it has been rather a device for perpetuating the current structure of society in Guatemala, 14 it is seen more and more by the culture as a major means of social mobility. The education of the backward highland Indians has been all but nonexistent and was not considered important for rural dwellers, but national and local programs in adult literacy are influencing the contact and exposure that breed psychic mobility in the context of a changing society. This impact upon the Guatemalan villagers is well demonstrated by the correlational and chi-square analyses summarized in Table 6.

Of present interest is the relatively high correlation between EDLIT scores and TIME CONSCIOUSNESS ($\mathbf{r}=.21,.20$) and the supporting chi-square test ($\mathbf{X}^2=14.5,\,\mathbf{p}<.001$). The segmentation of the school day and the establishment of a routine schedule to which educational

Adams, Richard, The Second Sowing: Power and Secondary Development in Latin America, San Francisco, Calif.: Chandler Pub. Co, 1967, p. 147.

institutions adhere can be a major source of the development of time consciousness. Accompanying this psychological growth is the pressure for accomplishment within a certain time span and the importance of punctuality in school attendance and in assignment deadlines.

TABLE 7.
RELATIONSHIP OF EDUCATION TO OTHER VARIABLES

VARIABLE	EMPIRICAL INDICATORS	CORRELATION	χ^2 - sig.
TIME	Age	25	32.2 (p <.001)
INTERACTION	Relative Contact	05	2.0 (p <.250)
RANK	Family Income	.15	15.6 (p < .001)
ESTEEM	Importance	.15	5.4 (p <.025)
	TV Viewing	.25	
PSYCHIC MOBILITY	Radio Listening	.15	95.1 (p <.001)
	News Reading	.46	
TIME	Importance of Clock	.21	
CONSCIOUSNESS	Importance of Calendar	.15	14.5 (p <.001)
FUTURE	Self-perceived life conditions in future	. 20	
TIME ORIENTATION	Self-perception of change-orientation in future	.18	20.0 (p <.001)

In our particular sample, we cannot overlook the role that adult literacy classes may play. Even though over a third have neither educational nor literacy training, those with some skill appear to be the highest ranking and the most mobile. Literacy is now valued as an aid in social and economic improvement. Contact with urban centers and

modern ideas thus becomes more direct. ¹⁵ The learning of the national language itself may be a major factor in the increased awareness of a time-conscious society. Spanish is the single, official language of government, schools, and churches. ¹⁶ The Indian dialect that is the only language for one third of the sample may not even exist in written form.

Of course, besides the increased awareness and mental exposure afforded by the educational experience, the educated individual has opened to him greater economic opportunities and possibilities for social prestige. Both economic and social mobility would tie him into a more sophisticated and modern sub-culture that has already proven to be the most time-conscious segment of Guatemalan society. We cannot overlook the fact, however, that education is still underdeveloped in the villages. Even though 138 of the respondents were under 25, only 20 went beyond primary school.

5b: The higher the educational level the individual attains, the more future-oriented he will be.

This dimension of the modern time conception holds an even stronger association with educational experience ($X^2 = 20.1$, p <.001). The product moment correlations are higher also, especially noted among the literates who are the most change-oriented (r = .21).

¹⁵For a more extensive discussion of the effect of literacy upon the interrelations of subcultures, see Wagley, Charles and Marvin Harris, "A Typology of Latin American Subcultures," in Heath, Dwight and Richard Adams, Contemporary Cultures and Societies in Latin America, New York: Random House, 1965, pp. 47-53.

Tumin, Melvin, Caste in a Peasant Society: A Case Study in the Dynamics of Caste, Princeton, New Jersey: Princeton University Press, 1952, pp. 772380.

The belief in the educational process itself represents a futuristic orientation. Schooling is a definite investment and it is expected to reap benefits in the future. Such training would seem quite irrelevant to a present-oriented society. Guatemalans appear to be looking ahead - and finding the ways to get there.

The importance of the national culture in instilling a sense of futurity cannot be overestimated. Unable to isolate themselves from a modern future-oriented international scene, the political and economic leaders are recognizing the need for penetrating local change to deepen their efforts at development. The massive literacy programs have become part of a large-scale readjustment. From the standpoint of national leaders, the introduction of an ideology is much easier with the use of literacy (e.g. written propaganda). With such movements, there can be no doubt that education is dissociating the villager from a local and traditional way of life.

6a: The more psychic mobility the individual experiences, the more time conscious he will be.

It is both logically and statistically valid that educational experience increases psychic mobility. But it is also possible that media contact can have some of the same effects on modernizing mentality that formal training has, yet independently of education.

As a second measure of experiences that dissociate the individual from the traditional system, media contact doesn't correlate quite so

Many governments haven't yet realized how they could use literacy in political communication, except Castro. Richard Adams pursues this issue further in op. cit., pp. 144-146.

strongly with time consciousness as edlit does, but the correlation is positive and the association significant ($X^2 = 5.2$, p <.025). Of the three components of media contact, exposure to modern values through reading of the newspaper and magazines appears to be most influential in increasing time consciousness. Regular readers rate especially high in their future change-orientation (r = .22).

The fact that television and radio have had little effect upon the peasant communities of Guatemala is easily explained. The purchase of either instrument of media is dependent upon the economic status of the individual. The vast majority of the sample studied can still be classified as poor (602 making less than \$10 a week!). Thus the sample of media users is limited to less than 200. And it is possible that for many wealthy owners of TV's and radios (only 3 respondents made regular use of both), the information-giving device is more valued as a status symbol.

Nonetheless, there is a definite effect upon those few who do make use of modern communications. The regulated publishing of news, the time schedules adhered to by radio and TV stations, the constant mentioning of the "time" over the air - all would certainly increase the user's awareness of time. Beyond this effect of the media themselves, the content can have tremendous effect upon the development of modern cognitions. Among communications theorists, the importance of the manipulation of symbols and the ability to abstract is stressed. Exposure

¹⁸Waisanen, Fred, et. al., "Symbolic Systems and Change Orientation," unpublished research proposal, Programa Interamericano de Informacion Popular, San José, Costa Rica, June 15, 1964.

to a more modern way of thinking and expressing could have the effect of changing time perspectives so that this abstraction is seen as a resource to be manipulated.

6b: The more psychic mobility the individual experiences, the more future-oriented he will be.

Following the same pattern discussed above, media contact is correlated with future time orientation ($X^2 = 6.2$, p <.025). Radio and TV programs as well as newspaper articles can increase expectation of future events or of future programs themselves. The content is certain to reflect national sentiments and perspectives, which are more naturally futuristic, as explained earlier.

Though institutions can bank on their static structures and cling to the past, they have often been the agents of change, introducing modern conceptions to their members. The restructuring of the family, religious, and political systems in Guatemala all illustrate the role these institutions are playing. And internal institutional growth appears to be identical with the external elaboration of communications. The process of restructuring also represents an investment in a future and the new tasks of the renovated systems are oriented toward change. The network of institutions is often equated with the network

Frank Young, op. cit., also recognizes the role of symbolic interactions and transformations in social change - and sees the important variables in understanding the dynamics of social change as the information-processing capacities of the communities and the communication strategies they use.

¹⁹ Young, Frank W. and Ruth C. Young, "Toward a Theory of Communications Development," in Richard J. Ward (ed), The Challenge of Development, Chicago: Aldine Publishing Co., pp. 456-59.

of communications. 20

their conceptualization."

TESTING OF THE GENERAL HYPOTHESES

To carry the analysis to a more abstract level, I shall draw upon the conclusions made from the specific hypotheses. The focus is now upon three major concepts: role circumscription, dissociative experiences, and modern time conceptions. The middle-level components of each of these must be examined to see if they hold together before conclusive generalizations can be drawn about the relationships of the broader concepts. The results of testing both the specific and general hypotheses are summarized in Table 8.

(1) ROLE CIRCUMSCRIPTION: This concept remains the most vague. In the sample studied, the components of rank and esteem proved to be more positively correlated with modern conceptions rather than with a traditional perspective. We must conclude that the Guatemalan villages represent a changing society and that modern traits overlap with traditional features of the social structure. Historically, social relations have maintained a character that is associated with modern systems of interaction, while a primitive world view has persisted among Guatemalans. It appears now that even that view - at least in the specific area of time conceptions - is being modernized.

²⁰Berkley Spencer equates social structure with information. In a published Ph.D. thesis, "Stability and Change in an Intervillage System of Highland Guatemala," Sept. 1967, Cornell University, he concludes: "To view differentiation of social structure as a diversification of information processors, to see solidarity as a special kind of communication strategy which conveys a unified image, to conceptualize relative centrality as access to information, all of these definitions of old concepts in new structural-symbolic terms, add new dimensions to

TABLE 8.
RESULTS OF TESTING OF HYPOTHESES

SPECIFIC HYPOTHESES	SUPPORTED (+) or REJECTED (-)
The MORE TIME CONSCIOUS the individual is, the MORE FUTURE ORIENTED he will be.	+
The LESS TIME the individual has invested in the traditional system, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	+
The LESS INTERACTION the individual has with the traditional system, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	-
The LOWER the individual's RANK in the traditional system, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	-
The LOWER the individual's ESTEEM within the context of the traditional system, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	-
The HIGHER the EDUCATIONAL LEVEL the individual attains, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	+
The MORE PSYCHIC MOBILITY the individual experiences, the MORE TIME CONSCIOUS and the MORE FUTURE ORI-ENTED he will be.	+
GENERAL HYPOTHESES	
The LOWER the individual's ROLE CIRCUMSCRIPTION in the traditional social system, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	-
The GREATER the DISSOCIATIVE EXPERIENCES of the individual, the MORE TIME CONSCIOUS and the MORE FUTURE ORIENTED he will be.	+

An adaptive kinship structure has also made the variable interaction (relative contact) misrepresentative of a tradition-bound practice. The only variable delineated in the Waisanen model that truly

circumscribes the individual in the sense that it binds him most tightly to tradition is the age variable. It may be, however, that the differentiation of time perspective found among the young and the old is not really resultant of the time invested in a particular traditional system. It can be seen as a natural phenomenon of the psychological growth of the individual's perceptions as he grows older.

upon the <u>process</u> of change that weakens identification with one social system and its world view and strengthens identification with another. The process finds its concrete form in educational experiences and physical and psychic mobility. These links prove to be interrelated aspects of dissociation from one system and initiation into another. The two indices of Edlit and Media Contact form the contingency table found in Table 9, which results in a chi-square of 118.36 (p <.001).

Controls for Education and Media

It has become evident that these variables are also the most salient in changing time conceptions. One can then question if the other relationships established would hold up if the analysis controlled for education and media contact. In a control for the edlit variable, correlations were maintained between time and the other variables. But the associations were significantly weakened. Unfortunately, when divided into the five categories, the sub-samples were limited in size, and the cells were even smaller. Among the uneducated illiterates, chisquares significant beyond only the .10 level were found for the variables of age and esteem. The most educated and literate group, however, showed significant strength (p < .001) of association between time and

all the variables tested. Future time orientation appeared more prevalent than time consciousness among the uneducated, which suggests that the latter is definitely increased in the educational process.

TABLE 9.
INTER-VARIABLE ANALYSIS

VARIABLE		CONTINGE	NCY TABLE	CHI-SQUARE
DISSOCIATIVE EXPERIENCE		Media'	Contact	_
EXI EXILICE		Low	High	_
EDI IT	Low	(128) 61%	(10) 5%	118.36
EDLIT	High	(13) 6%	(58) 28%	(p <. 001)
MODERN TIME CONCEPTIONS			sciousnes	<u>s</u>
CONCELLIONS		Low	High	•
Future Time	Low	(21) 14%	(33) 22%	14.96
Orientation	High	(11) 7%	(83) 57%	(p <. 001)

A control for media contact produced similar results. Those who had no exposure to TV, radio, or news were future-oriented anyway if rated high in rank and esteem (p <.025). A relationship between other variables and time consciousness, though, appeared washed out among these people. The sample of those with some exposure to media was too small to draw reliable conclusions. In all cases, however, a control for media did little to weaken the effect of education upon changing

time conceptions. We can conclude that of the two dissociative experiences entering into the analysis, education and literacy make the greatest difference.

(3) MODERN TIME CONCEPTIONS: Though both time consciousness and future time orientation were tested separately with all other variables, the resulting relationships were strikingly parellel. It was possible to propose different influences of these two conceptions in interpreting the data, yet it must be concluded that they are often the result of the same experiences (or aspects of the same result). An increased awareness of time often comes in the form of the recognition of a future. When one recognizes that he can manipulate time to his advantage, he manipulates it to mold his own destiny. Organization and planning, based on the rational distribution of time as a resource, represent an act of looking ahead. Certainly a prerequisite of deferring immediate gratification is a belief in the future and an ability to see something better in that vague beyond. And oftentimes futurism can be equated with optimism. Yet a society can operate with a future-orientation and maintain a fatalistic perspective.

The more time conscious an individual is, the more future oriented he will be.

In the present analysis, this close association between the two time conceptions of interest is borne out (see Table 9). A chi-square of 14.96 was significant beyond the .001 level. But here it must be noted that, among this sample of extremes, high time consciousness and high future orientation are more common than low ratings in either area. This fact is reconfirmed by reference to the preliminary frequency distribution of the total sample. Over 70% of the Guatemalan peasants

rated the clock and calendar higher than "6" on a 1 - 10 ladder scale of importance. Similarly, 60% and 80% rated themselves as above 6 in future orientation and future change-orientation respectively. If the measures are considered valid, it appears that the Guatemalan villagers have developed (or maintained) what are here considered modern time conceptions, while remaining relatively more backward in other areas. Recognizing the possibility that these orientations are not totally determined by modernizing influences, we can still find conclusive relationships between the sociological determinants of modernization and the socio-psychological conceptions of time.

I_{A&B}: The lower the individual's role circumscription in the traditional social system, the more time conscious and the more future oriented he will be.

This general hypothesis was not supported in the present analysis. There are several possible explanations: (1) The choice of empirical indicators to measure role circumscription was limited by the nature of a secondary analysis. Less time invested in the system is correlated with greater time consciousness. But relative contact (representing interaction) may give the individual broader contacts, making him more susceptible to modernizing influences. Also, the kinship structure appears to be adapting to modernization and is even viewed, along with other institutions, as an agent of social change. Rank and esteem (with empirical referents of family income and self-rated importance) also appear to broaden the horizons of the individual, giving him more opportunities for the kind of dissociative experiences which might weaken rather than maintain his identification with the traditional system.

- (2) The particular social system studied may be a poor representative of the traditional ideal-type society described by Waisanen. With primary schools in all five villages and the introduction of adult literacy classes, the sample population appears very much in a transitional state. The recognized tradition of inter-village contact in Guatemalan social history also suggests that the particular systems in question are areas of overlap of traditionalism and modernity. Also the long-established influence of the national economic and sociopolitical structure upon even the smallest hamlets may account for the ill-fit of the traditional label.
- (3) The traditional-modern dichotomy has met with severe criticism. Ethnocentric western social scientists have been too willing to consider advanced American society as the model of modernity and to lump all systems of opposing features into the traditional category. Variation within cultures is often slighted. 21

The Waisanen model was conceived with such a recognition of the inadequacy of the dichotomy. It stresses a movement <u>away from</u> the traditional without designating one final state of perfection toward which the modernizing world is moving. It is most commendable in that it is driving at the <u>process</u> itself, i.e. the dynamics of social change, that should fit any system, departure points and end goals disregarded. It may be that the traditional-modern labels in the model are only ideal-type tools or anchoring devices. But they must not be taken too seriously. For it is questionable if they fit any reality.

²¹Kluckhohn, Florence and Fred Strodtbeck, <u>Variations in Value</u> Orientations, Evanston, Illinois: Row, Peterson, and Company, 1961.

The emphasis placed upon the process, then, as manifested in dissociative experiences of education and media exposure gives the model its viability. And this aspect of the theory is well-supported by the data, as explained in detail in the preceding analysis.

 $II_{A\xi B}$: The greater the dissociative experiences of the individual, the more time conscious and the more future oriented he will be.

This most valuable conclusion can have theoretical and practical implications far beyond the realm of the present study.

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APPENDIX I

CODE BOOK

MEANING OF LITERACY - GUATEMALA - VILLAGES

CARD 0

Q	Column	
1.	1, 2, 3	Project number
2.	4, 5	Literacy Center Number (or block No.)
3.	6, 7	Case number in the Center (or house No. in block)
4.	8, 9	Community (or Zone)
5.	10, 11	Blank
6.	12, 13	Number of members in the family 99 N
7.	14	No. of children 5 years or under 9 N
8.	15	Marital status 1. married 2. single 3. free union 4. separated 5. divorced 6. widow (er) 9. no information
9.	16	Interviewer No.
10.	17, 18	Age (exact years) 9 N
11.	19	Ethnic group Lad. 2 Ind. 9 N
12.	20	Main occupation 1. non-specialized: farmers, laborers, housewives 2. semi-specialized: small artisans, merchants 3. specialized workers: artisans, electricians, mechanics 4. merchants, industrialists 5. bureaucrats, office clerks, secretaries 6. semi-professionals: nurses, teachers, extension agents 7. professionals: lawyers, doctors 8. no occupation 9. no information

₹**3**₹ (,) (

Q	Column	
13.	21	 Level of Main Occupation lowest level: non-proprietors, laborers, street sweepers, peddlers low level: small proprietors, small store proprietors, small cloth factory, chauffeurs middle level: medium proprietors, middle sized stores, teachers high level: big proprietors, large stores, mayor, governor, engineer, large garage owners, cloth factory, etc. no information
14.	22	Second occupation 1. non-specialized: farmers, laborers, housewives 2. semi-specialized: small artisans, merchants 3. specialized workers, artisans, electricians, mechanics 4. merchants, industrialists 5. bureaucrats, office clerks, secretaries 6. semi-professionals: nurses, teachers, extension agents 7. professionals: lawyers, doctors 8. no occupation 9. no information
15.	23	 Level of second occupation lowest level: non-proprietors, laborers, street sweepers, peddlers low level: small proprietors, small store proprietors, small cloth factory, chauffeurs middle level: medium proprietors, middle sized stores, teachers high level: big proprietors, large stores, mayor, governor, engineer, large garage owners, cloth factory, etc. no information
16.	24, 25	Years of school: (exact yrs.) 99 N
17.	26	Origin: 1 community 2 small village
18.	27, 28	Name of village of origin:
19.	29, 30	Total number of years lived outside your community
20.	31	1 Small village 2 Main village

.

Q Spouse	Column	
21.	32	Ethnic group: 1 Lad. 2 Ind. 9 No Inf.
22.	33	Main occupation: 1. non-specialized: farmers, laborers, housewives 2. semi-specialized: small artisans, merchants 3. specialized workers: artisans, electricians, mechanics 4. merchants, industrialists 5. bureaucrats, office clerks, secretaries 6. semi-professionals: nurses, teachers, extension agents 7. professionals: lawyers, doctors 8. no occupation 9. no information
23.	34	 Level of Main Occupation: lowest level: non-proprietors, laborers, street sweepers, peddlers low level: small proprietors, small store proprietors, small cloth factory, chauffeurs middle level: medium proprietors, middle sized stores, teachers high level: big proprietors, large stores, mayor, governor, engineer, large garage owners, cloth factory, etc. no information
24.	35	Second occupation 1. non-specialized: farmers, laborers, housewives 2. semi-specialized: small artisans, merchants 3. specialized workers: artisans, electricians, mechanics 4. merchants, industrialists 5. bureaucrats, office clerks, secretaries 6. semi-professionals: nurses, teachers, extension agents 7. professionals: lawyers, doctors 8. no occupation 9. no information
25.	36	 Level of second occupation lowest level: non-proprietors, laborers, street sweepers, peddlers low level: small proprietors, small store proprietors, small cloth factory, chauffeurs middle level: medium proprietors, middle sized stores, teachers high level: big proprietors, large stores, mayor, governor, engineer, large garage owners, cloth factory, etc. No information

```
Q
        Co l umn
26.
        37. 38
                       Years of school completed (exact yrs.) 99 N
        39, 40
                       Years lived outside the community (exact yrs.) 99 N
27.
        41 - 47
                       Blank
        48, 49
                       Family income for seven days (No. of Q's)
33.
34.
        50
                       Main wage earner in the family
                           Father of children
                           Mother of children
                        3. Older brother of children
                           Older sister of children
                        5. Other brothers or sisters
                           Grandfather (Grandmother) on father's side
                        6.
                           Grandfather (mother) on mother's side
                        3. Others
                       Other income from:
                                             0 = not applic.
35.
        51
                        1. Father
                                                   4. Older sister
                                                       Other brothers
                           Mother
                        3. Older brother
                                                   6.
                                                       Others
36.
                       Years of school completed by the father of the children's
        52
                        father (or the father of the children's mother if
                        respondent if feminine)
                        (exact number thru 7)
                                                 (8 \text{ or more} = 3)
                                                 (0 = none)
37.
        53
                       Years of school completed by the mother of the
                       children's father (or the mother of the children's
                       mother if respondent is feminine)
                        (exact number thru 7)
                                                 (8 \text{ or more} = 8)
                                                 (0 = none)
38.
        54
                       How many times have you watched TV during the last six
                       months?
                        1. 1-2 times
                                                                   7. 41-100
                                               4.
                                                   11-20
                                               5. 21-30
                       2. 3-5
                                                                       Nearly
                                                                       every day
                       3. 6-10
                                               6.
                                                   31-40
                                                                   9N
39.
        55
                       How many hours a day do you listen to the radio?
                       hours
                                                   (8 \text{ and more} = 8)
                                                   (0 = none)
                        (exact number thru 7)
40.
        56
                       What magazines or newspapers do you read requiarly or
                       occasionally?
                        (0 = none) (exact number thru 8)
                                                              9 = No info.
41.
        57
                       Total words read correctly (functional literacy)
                       0 can't read
                                        5 6
                                                    8
                           2 3 4
                                                7
                                                        9
                                                             No information
```

Q	Column	
42.	53	Grade pronounciation 1 S 2 s 3 ? 4 n 5 N 9 N
43.	59	What language do you usually speak with your wife (husband)? 1 E 2 L 3 both 9 N
44,	60	What language do you speak to your children? IE 2L 3 both 9 N
45.	61	What language do you use most in your conversations with the people from the village that you meet on the street? 1 E 2 L 3 both 9 N
46.	62	Were your parents Ladinos or Indian? 1. both Ladinos 2. father Ladino 3. mother Ladino 4. both Indian 9. no information
47.	63	Do you think that any of your children will become Ladino or almost Ladino? (If respondent and spouse are Ladinos answer is automatically 1) 1 Yes 2 Maybe 3 Almost Ladino 4 No 9 N
48.	64	Do you think that any of your grandchildren will become Ladino or almost Ladino? (If respondent and spouse are Ladinos answer is automatically 1) Observe your respondent's clothes:
49.	65	Uses trousers below the knee (men), sleeveless blouse and piece of material which the Indian women use as wrap-around skirts (women) I Never 2 sometimes 3 always 9 no information
50.	66	Uses regular coat (men) or blouse (women) 1 Never 2 sometimes 3 always 9 no information
51.	67	Uses hat other than straw hat or uses hair oil (men) combs hair every day or uses hair oil (women) l Always 2 sometimes 3 never 9 N
52.	68	Uses shoes other than "sandals" (for men and women) 1 Always 2 sometimes 3 never 9 N
53.	69	Uses socks (men) sweater (women) 1 Always 2 sometimes 3 never 9 N
54.	70	Has used dark glasses sometimes (men), uses lipstick or rouge (women) 1 Always 2 sometimes 3 never 9 N

Q	Column	
55.	71	Uses necktie (men) or had a permanent (women) or uses a brassier 1 Always 2 sometimes 3 never 9 N
56•	72	How many of the following things do you use or have used? latrine or toilet (exact number used) Flashlight Watch Radio Fork No
57.	73,74,75	"internal change" TOTAL
58.	76	Sex 1 = male 2 = female
59.	77	Card number
60.	73-80	Other identification

CARD NO. 1

Columns 1 to 9, see card No. 0

1.	ladder represents your <u>greatest</u> hopes for this village; that is, on this step are the villages that have everything you would like your village to have and be. The <u>bottom</u> represents your <u>worst fears</u> for this village; that is, all the things that you would not like your village to have.					
		On what step do you think this village is right now?	Col.	9-10	Step number99 N	
		On what step was your village <u>five years ago?</u> On what step of the lad-	Col.	11-12	Step number99 N	
		der will your village be				
		five years from now?	Col.	13-14	Step number99 N	
			COI.	15	Difference 1-2 9 N	
			Col.	16	Direction 1-2 IP 2n 9 N Difference 1-3 9 N	
			Col.	17	Difference 1-3 9 N	
			Col.	18	Direction 1-3 1P 2N 9 N	
2.	liv is		ons a	nd at	o step stands a person who is the <u>bottom</u> stands a person who	
		would you say you are right	Col.	19-20		
		now?		_	Step number99 N	
	ь.					
	•	would you say you were				
		five years ago?	Col	21-22	Step number99 N	
	_	On what step of the ladder	••••	2, 22	ocep name	
	.	do you think you would be				
			Col	22-24	Stop number OO N	
		five years from now?	Col.	25-24	Difference 1-2 ON	
			Col.	25	Direction 1.2 IP 20 ON	
			Co1.	20	Difference 1.2 IF Zn 9 N	
			COI.	2/	Step number 99 N Difference 1-2 9 N Direction 1-2 1P 2n 9 N Difference 1-3 9 N	
			COI.	25	Direction 1-3 IP 2n 9 N	
3.		pose that at the <u>top</u> of the la e from worry about the future				
		other words secure. At the be				
		tle or no security.		OI CIN	e ladder is a person with	
	a.	What step do you stand on				
	a.		Col	20-20	Step number 99 N	
	L	the ladder right now?	coi.	29-30	step number99 N	
	b.	What step would you say				
		you stood on five years				
		ago regarding your feel-				
		ings of security?	Col.	31-32	Step number99 N	
	c.	What step do you think you				
		will be on five years from				
		now?			Step number99 N	
			Col.		Difference 1-2 9 N	
			Col.	36	Direction 1-2 1P 2n 9 N	
				37		
				38		
				-	- <u> </u>	

4.	by the people of the village, an important person whose opinion valued by others, those who work with him, his neighbors, frier all the people of the village. At the bottom stands a person who important, who is never consulted by others.				
	a. On what step do you think you are now?b. What step would you say you stood on <u>five years</u>	Col. 40-41	Step number99N		
	ago regarding the amount of influence you had?	Col. 42-43	Step number99N		
	 What step do you think you will stand on <u>five years</u> 				
	from now?	Col. 44-45	Step number99N		
		Col. 46	Difference 1-2 9N		
		Col. 47	Direction 1-2 IP 2n 9N		
		Col. 43	Difference 1-3 9N		
		Col. 49	Direction 1-3 IP 2n		
		CO1. 43	Direction 1-3 IT ZII		
5.	At the top of the ladder stands much. He is very friendly and c who doesn't like other people, he by the people of the village. a. On what step of the ladder a you now? b. What step would you say you stood on five years ago? c. What step do you think you will stand of five years from now?	harming. At as very few re Col. 50-51 Col. 52-53 Col. 54-55 Col. 56	the bottom is a person friends and is not liked Step number99N Step number99N Step number99N Difference 1-2 9N		
		Col. 57	Direction 1-2 IP 2n 9N		
		Col. 58	Difference 1-39N		
		Col. 59	Direction 1-3 1P 2n 9N		
	6. At the top of the ladder stand those persons who think times have changed and like to do things differently from the way their pare did them. They like to try out new things to see which is better though sometimes they may not work out. At the bottom are those persons who prefer to do things the way their parents did them be they believe it is better not to take chances. a. On what step of the ladder				
	do you stand right now? b. On what step would you say	Col. 60-61	Step number99N		
	you stood <u>five years aqo!</u> c. What step would you be on	Col. 62-63	Step number99N		
	five years from now?	Col. 64-65	Stan number 00M		
	Tive Years Trom now	_	Step number 99N		
		Col. 66	Difference 1-2 9N		
		Col. 67	Direction 1-2 IP 2n 9N		
		Col. 63	Difference 1-39N		
		Col. 69	Direction 1-3 IP 2n 9N		

7.	At the top of the ladder stands religion is an important part of stands a person whose religion deveryday life. a. On which step of the ladder	his everyda	y life. At the bottom
	do you stand <u>now</u> ?	Col. 70-71	Step number 99N
	b. On which step of the ladder		-
	did you stand five years		
	ago?	Col. 72-73	Step number99N
		Col. 74	Difference 1-29N
		Col. 75	Direction 1-2 IP 2n 9N
3.	At the top of the ladder stands all the opportunities; at the boluck and can't do anything he was. Where do you stand on the ladder right now, are you lucky or not?	ttom stands ints to do.	someone who hasn't any
	really of moe.	0011 /0	Step number 9N (8 and more = 8)
9.	Col. 77 Number of Card		

10. Col. 78-80 Identification

: .

CARD NO. 2

Col. 1-9. See card number 0

١.	If the top represents things mor	e important than you	and the <u>bottom</u> has
	things less important than you a	nd you are in the mid	ldle:
	a. What about your family?		
	How much more important or		
	less important than you?	Col. 9-10 Step numb	er99N
	b. Where would you place your		
	community? More important		
	or less important than you?	Col. 11-12 Step numb	er99N
	c. And your country? Where	·	
	would you place it?	Col. 13-14 Step numb	er 99N
	d. Where would you place your	•	
	field of work, or job?	Col. 15-16 Step numb	per 99N
	, e. ,		
2.	Doctors say that if you add cert	ain chemicals to drin	king water it will
	result in fewer decays in people		
	cheaply here in the village, wou		
	drinking water?	it you be all thing to	200 (110.11 to 7001
	Col. 17	Yes	1.
	001. 17	Could be	1
		Probably not	2
		No	3
		Don't know	4
			5
		Depends	6
		No information	9
3.	Some people feel that in bringing should be tried whenever possible methods is dangerous. What is your feeling on the state "New methods of raising children."	e. Others feel that ement which I will no	trying out new ow read to you?
	possible?"	<u> </u>	
	Col. 18	Strongly agree	1
		Slightly agree	2
		Don't know	3
		Slightly disagree	4
		Strongly disagree	5
		No information	9
		tto tittotiligeton	<i>-</i>
4.	Running a village is an important is doing very good things. Do y period is over in order to give he should be re-elected if he is	ou think he should be opportunity to others	changed when his
	Col. 19	He should definitely	•
	-	be changed	1
		Strongly agree	2.
		Don't know	3
		Slightly agree	4
		Strongly disagree	5
		No information	9
			• ·

5.	If you could send your you more, would you do		school even though	it would cost
	Col. 20		.1	
	CO1. 20		ly agree 1	
			ly agree 2	
		Don't		
			ly disagree 4	
		Strong	ily disagree 5	
		No inf		
6.	People change and are rate yourself?	less conservative	e as time goes by.	How would you
	Col. 21	1 find	lit very easy	
			it somewhat	
			o change my	
		•	2.	
		ways.		
			it somewhat	
			lit very dif-	
			know 5	
		No inf	ormation 9.	
_				
7.	"Importance" rating of			
		Col. 22-23	Step number	99N
	b. Getting ahead	Col. 24-25	Step number	99N
	c. Calendar	Col. 26-27	Step number	99N
	d. Business	Col. 28-29	Step number	99N
	e. Incaparina	Col. 30-31	Step number	99N
	f. Knowing how to			
	read and write	Col. 32-33	Step number	99N
	g. Money	Col. 34-35	Step number	99N
	g. Moneyh. Travelling	Col. 36-37	Step number	99N
8.	If you receive a money in your present work, Col. 38		•	whole year
		business wit		
		but chance of	-	
		profit?	, great	
		b. Put most of	· · · · - · · · - · · · · · · · · ·	
	· ·			
			est the rest	
			s with very	
		low risk but		
		little profi		*************************************
		c. Save all of	it? 3	
		d. No answer	9	

9.		elong (have belonged) to any a its purpose some form of progr		tion,	clu	b, committee	whic	h
	Col. 39	Labor organization	15	2N	3	Director	9 N	
	Co1. 40	Agricultural or commercial	IS	2N	3	Di mantan	9 И	
	Col //1	organization Associations, committees	13	211)	Director	3 N	
	CO1. 41	for progress or entertain-						
		ment	IS	2N	3	Director	9 N	
	Col. 42	Political organism-	• •				•	
		administrative	15	2N	3	Director	9 N	
	Col. 43	Health organization	15	2N		Director	9 N	
		Sports organization	15	2N	_			
		Religious organization	15	2N	_	Director		
	Col. 46	Others	15	2N	3	Director	9 N	
10.		n do you get together with any	y of yo	ur ne	i ghb	_		
	Col. 47	At least once a week				1		
		A few times a month				2		
		About once a month				3		
		A few times a year Never				4		
		No information				5 9		
11.		isit or are you visited by any	y of yo	ur re	lati			
	Co1. 48	At least once a week				1		
		A few times a month About once a month				2		
		A few times a year				3		
		Never				4 5		
		No information				9.		
12.	as if yo as many Taking a	this question of yourself, "were giving them to yourself statements as you can in answellttle time, to think about in important statement about you	f, not er to t it, ple	to me he qu ase m	or a estic ake n	anyone else. on,"Who Am I	Mak 	е
	Col. 49-	50 1				<u>Numbe</u> r	99	N
	_							
		what you consider the next me t about yourself.	ost imp	ortan	<u>t</u>			
		52 2					99	N
		what you consider the next mo	ost imp	ortan	t			
	statemen	t about yourself.						
	COI. 53-	54 3					99	N
		e any other statements you cou in answer to the question, "h			ut			
	Col. 55-	56 4		• •			9 9	N
	Col. 57-	58 5				-	رر 96	N
	Col. 59-	60 6					99	N
	Col. 61-	62 7					99	N
	CO1. 63-	6 4					99	N
	COI. 65-	66 9					9 9	N
	A-1 /7	68 10						

Column

13. 69 Sometimes I feel all alone in the world.
YES yes ? no NO 9 N
1 2 3 4 5

Real friends are as easy as ever to find.
YES yes ? no NO 9 N
1 2 3 4 5

People's ideas change so much that I wonder if we'll ever have anything to depend upon.

YES yes ? no NO 9 N
1 2 3 4 5

16. 72 I often wonder what the meaning of life really is.
YES yes ? no NO 9 N
1 2 3 4 5

17. 73 There is little chance to get ahead in this life unless a man knows the right people.

YES ves ? no NO 9 N

YES yes ? no NO 9 N 1 2 3 4 5

13. 74 Sometimes I have the feeling that other people are using me.
YES yes ? no NO 9 N
1 2 3 4 5

19. 75 It really doesn't matter what an individual believes about religion as long as he is happy with it.

YES yes ? no NO 9 N
1 2 3 4 5

20. 76 Some people think that some things are good and that other things are bad. Do you believe everyone should think the same about things?
YES yes? no NO 9 N

YES yes ? no NO 1 2 3 4 5

- 21. 77 Card No.
- 22. 78-80 Identification

CARD NO. 3

	Column 1-9	See car	d No. 0						
۱.	9	people	had the i	religio	us belie	fs which	I hav		more
		YES	yes	?	no I	МО	9 1	Ţ	
		ı	2	3	4	5			
2.	10	l belie	ve there	is a d	evil who	tries t	o make	men sin.	
		YES	yes	?	no	NO	9 1	1	
		1	Ź	3	4	5			
3.	11	To me t	he most i	importa	nt work	of the c	hurch	is saving	people's
		YES	yes	?	no	NO	9 1	ı	
		i	2	3	4	5		•	
		•	-		•				
4.	12	We show		helpfu	l to peo	ple we d	on't k	know as we	are to
		YES	yes	?	no	МО	9 N	1	
		1	2	3	4	5			
5.	13	Whateve	rwedo.	it is	necessar	v that o	ur les	ders outli	ne
٠.	• •							v to go abo	
		YES	yes	?	no	NO	9 1	_	
		1	2	3	4	5			
		·	_		·				
6.	14	to do t		be tau	ght that			one right	way
		YES	yes	?	no	NO	9 N	4	
		1	2	3	4	5			
7.	15	ls it a	nood thi	ina for	compani	es and b	usines	ss firms fr	om other
, .	• •							in our cou	
		YES	yes	?	no	NO	9 1		
		1	2	3	4	5		•	
				•					
3.	16	other o	ountries?	?	our you			marry peopl	e from
		YES	yes	?	no	NO	9 N	4	
		1	2	3	4	5			
			Conceptua	al <u>Fram</u>	ework Di	mens i ons			
9.	17	A. In 0.	your opin		hat is G	od like?			
		١.	a person	า			age	sex	
		2.	a spirit	t			age	sex	
		3.					-		
		4.	everyth	ing tha	tlives				
		5.	the who	le univ	erse				
		6.	not cert	tain He	exists				
		7.	does not	t belie	ve in Go	d			
		9.	no info	rmation	1				

COTONIA	Co	1	umn
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- 10. 18 B. About how many years would you say the world has existed?
 - 1. 100
 - 2. 1000
 - 3. 10000
 - 4. 100000
 - 5. 1000000
 - 6. 10000000
 - 9. no information
- 11. 19 C. How many years would you say man has existed?
 - 1. 100
 - 2. 1000
 - 3. 10000
 - 4. 100000
 - 5. 1000000
 - 6. 10000000
 - 9. no information
- 12. 20 D. How big do you think the stars are?
 - 1. an inch in diameter
 - 2. half yard
 - 3. one yard
 - 4. five yards
 - 5. ten yards
 - 6. one hundred yards
 - 7. one thousand yards and more
 - 9. no information
- 13. 21 E. Why do you think the moon doesn't fall down?
 - 1. because it is tied to the sky
 - 2. the clouds hold it up
 - 3. the air holds it up
 - 4. because it travels.
 - 5. because God put it there or holds it up
 - 6. don't know
 - 7. other
 - 9. no information
- 14. 22 F. Do you believe there are little animals, so, so small that they can't be seen even if one gets close and tries to get a look at them?
 - 1. no
 - 2. so they say
 - 3. they are the ones that produce illness
 - 4. some of them produce illness
 - 9. no information

		3-3
	Column	
15.		If one looks toward the horizon, the sky and the earth seem to meet. If one were to walk and walk for a long time, do you think one could reach the place where the sky and earth meet? 1. yes 2. maybe 3. no 4. no because the sky will always be above 5. no because the earth is round and so is the sky, and the sky is around the earth 6. other 9. no information
16.	24 H.	 How does sound get into the radio l. do you think they have a small gadget inside where the music is? (if not) If the music and sound come from far away, how does it travel. 2. through the wire 3. through the air 4. other 9. no information
17.	25 1.	How do airplanes manage to fly? 1. don't know 2. the wind blows them 3. same as the birds 4. because they have a motor 5. because they have a motor that makes them travel rapidly 6. other 9. no information Parents' Expectations
18.	(have like 26 E 28 M 30 Y	tances permitted, how many years of school would you like d) that your sons and daughters complete? ldest son 9 N Col. 27 l Yes 2 No 9 N iddle son 9 N Col. 29 l Yes 2 No 9 N oungest 9 N Col. 31 l Yes 2 No 9 N aughters 9 N Col. 33 l Yes 2 No 9 N
19.	34 W 1 2 3 4 5	Semi-specializedSpecializedSemi-professional

20. 35 Do you think that a good son should work in the same village even though he were offered a good job in some other place far away from his parents? He must take the better job no matter where it is YES ? no NO 9 N yes

No information

	Column	
21.	36	Do you think that the best way to get ahead in life is by studying? YES yes ? no NO 9 N 1 2 3 4 5
22.	37	Do you check your children's lessons? 1 Yes 2 No (or would you check them? 3 Yes 4 No) 9 N
23.	38	Do you frequently ask them to tell you what they have been taught in school? I Yes 2 No (would you ask them? 3 Yes 4 No) 9 N
24.	39	Do you explain to them how work should be done and why it should be done that way? I Yes 2 No (would you explain? 3 Yes 4 No) 9 N
25.	40	Do you frequently talk to them about things you know and that they should learn? 1 Yes 2 No (would you talk to them? 3 Yes 4 No) 9 N
26.	41	Some people in the villages tell their children to beware of strangers because they might eat them up. Do you believe its a bad thing to tell them this? YES yes? no NO 9 N 1 2 3 4 5
27.	42	Do you think its a good thing for children eighteen years old to know how to do some things better than their fathers? YES yes ? no NO 9 N 1 2 3 4 5
28.	43	Suppose the mother of an eight year old sent him to the store to buy 2 ¢ of bread and he lost the money playing on the way. If you were the child's mother what would you do? 0. not applicable 1. would spank 2. would scold 3. would not let him play for a time in punishment 4. combination of either 5. would tell him not to worry 9. no information
29.	44	Grade of punishment O. not applicable 1. Severebeating 2. Moderate(yelling, insults, several days without playing) 3. Light(mild spanking, scolding, 1 day without playing) 4. No punishment 9. No information

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Column
30.
              Do you try to teach the very small child:
      45
              To walk
                            S
                                    n
                                        N
                                            N 9
                                S
                             1
                                2
                                    3
                                        4
      46
             To talk
                             S
                                        N
                                            N 9
                                    n
                                2
                                    3
                                        4
      47
              To play
                             S
                                        N
                                S
                                            9 N
      48
              To recognize
              people
                             S
                                            9 N
      49
              Toilet train-
              ina
                            S
                                            N 9
31.
             At what age should children:
      50-51
                                               99 N
              Sit alone
      52-53
              Walk without difficulty
                                               99 N
              Run without difficulty____
      54-55
                                               99 N
      56-57
              Eat alone
                                               99 N
      58-59
              Talk well
                                               99 N
      60-61
              Have sphincteral control (be able to warn about bowel movements)
                                               99 N
                  (stool)____
      62-63
              Go to the store alone to buy bread
                                                  (if store is around
                  3 blocks away)
                            (0 = not applicable)
                            (9 = no information)
      64-65
              (if girl) take good care of her small siblings (0 = not
                                                                       applic)
                                                                  (9 = no inf)
      66-67
              (if girl) start a fire___
                                                 (0 = not applicable)
                                                    (9 = no information)
      68-69
              (if boy) get firewood
                                                    (0 = not applicable)
             At what age should they start school?
      70-71
                                                         (0 = not applicable)
32.
      72-73
             At the top of the ladder are those persons who had all the
              opportunity and also the capacity to make their life happier.
             At the bottom stand those who have not been able to do anything
              to make their life happy.
              Where on the ladder are you now?
                                                    Step number 99 N
33.
      74-76
              Blank
34.
      77
              Card No.
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35.

78-80

Identification

