CONCEPTUALIZATION AND EMPIRICAL DEFINITION OF TIME PERSPECTIVE

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CONCEPTUALIZATION AND EMPIRICAL DEFINITION OF TIME PERSPECTIVE

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CHAPTER I

INTRODUCTION

Man's interest in time has been long standing.

During the last two or three decades, this interest has increased and broadened. Along with an interest in how the concept of time (or time sense) develops and the processes of time perception and coordination, there is today a new interest in what is most commonly referred to as "time perspective."

In reviewing investigations of time perspective,
Wallace and Rabin (38, pp. 230-31) point out two major
difficulties. The first is a conceptual problem. Such
terms as "time perspective," "time orientation," "temporal
perspective," "temporal orientation," and "temporal horizon"
are often used interchangeably with no definition offered
for any of the concepts. An adequate definition of terms
is necessary to avoid ambiguous interpretations of research
findings and to allow comparability of studies, since
"time perspective" might be conceptualized somewhat
differently by the various researchers.

It is true that the meaning of this concept is restricted somewhat by the methodology used in any study. However, this point leads to the second major difficulty pointed

out by Wallace and Rabin: the diversity of methodology encountered, which itself stems in part from the diversity in conceptualization. What is called for is "systematic research developed from a constant theoretical and methodological point of view" (38, p. 231).

Purposes and significance of this study. -- The purposes of this study are twofold. First, an attempt will be made to integrate previous conceptualizations into a fairly concise statement of the concept of time perspective which will clarify the concept as it will be used in this research.

As Merton (31, p. 339) has pointed out, how one conceptualizes a problem makes a great difference in the way further analysis proceeds. Certain aspects of previous theoretical considerations will not be dealt with in this study, but these limitations will be specifically itemized later in the paper.

The second and primary purpose of this study will be to determine whether or not time perspective can be represented by a relatively simple unitary measure in the form of a questionnaire. More specifically, the aim will be to determine whether or not time perspective can be represented as a scalable attitude in accordance with the Guttman scalogram model.

The importance of developing a method for studying time perspective lies in the fact that all of man's activity takes place within a temporal framework. An individual's

or group's time perspective at any given moment will greatly influence behavior. The study of time by sociologists has been primarily limited to considerations of the temporal ordering of social behavior. That is to say, the focus of attention has been on the synchronization, sequence, and rate of activities (32, pp. 5, 8; 34, p. 626). Moore (32) and Zentner (40) provide extensive bibliographies of studies which emphasize time as a coordinating device.

One aspect of temporal experience which has lately received increasing attention (especially from social psychologists) is time perspective, or the manner in which behavior is oriented in terms of the past, present, and future. The focus of attention in this study is on time as a meaning, value, or reference phenomenon more than as a coordinating one. (The distinction between time as a ccordinating phenomenon and as a meaning and value phenomenon was suggested by Zentner (40, pp. 63-71).) The coordination and value components of time are closely related, but the two functions have often been separated for investigation and such will be the case in this study.

The Concept of Time Perspective

The concept of time perspective refers to the influence past experiences and possible future experiences have on present behavior. This idea is expressed by Fraisse as follows:

Our actions at any given moment do not only depend on the situation in which we find ourselves at that instant, but also on everything we have already experienced and on all our future expectations. Every one of our actions takes these into account, sometimes explicitly, always implicitly (13, p. 151).

This interrelationship of the past, present, and future is what Lewin (28, p. 75) is referring to when he defines time perspective as "the totality of the individual's views of his psychological future and his psychological past existing at a given time." The same idea is expressed by Farber (11, p. 159) when he describes time perspective as "the manner in which the past and the future as seen at the present time influence behavior."

The continuity of the past, present, and future for the individual (or group) is maintained through symbolic processes. Arieti (1, p. 471) notes that psychological continuity between past and present is developed through processes which may be identified as memory, imagination, thought, language, abstraction, and so forth. Continuity between present and future is considered possible primarily through two processes: (1) expectancy or the capacity to anticipate certain events while an external stimulus is present, and (2) anticipation or the capacity to predict future events without the presence of a directly or indirectly related stimulus.

The "binding together of the past, present, and future into a single cognitive structure" (24, p. 102) or

the recognition of temporal continuity is extremely important for emotional security and for giving meaning and value to present experiences (11, p. 208; 24, pp. 102-3; 27, p. 106). As Ketchum (24, pp. 102-3) points out, time extended wholes (that is, activities considered in their entirety—from beginning to end) possess meaning which is not present in the parts experienced separately. An act receives its significance as it relates to a long series of actions. The lack of continuity between the past, present, and future is one of the frequently reported symptoms of various mental disorders (8, p. 7; 14, p. 308; 30, pp. 599, 601; 37, p. 245).

The diversity of time perspectives.—The diversity of time perspectives which has been shown to exist is related to several factors. An individual's time perspective changes with age. The very young child has a time perspective of a fairly limited range while successive age groups generally develop more extensive ranges (13, p. 177; 14, p. 297; 27, p. 105). The broadening of one's time perspective does not vary directly with age, however. The future time perspective becomes shorter with old age and life is oriented more toward the present and past (1, p. 478; 14, p. 297). Fraisse (13, pp. 181-2) indicates that individuals seem to place more importance on the longer portion of their life, "taking into account the average expectation of life, that is, the

unlived portion when he is young and what he has already experienced when he is old." Thor (36, p. 421) has shown that one's time perspective also varies somewhat with the time of day. Past and future events (such as the first atomic explosion or the end of the Cold War) appear less distant at mid-day than in the early morning or late evening.

It is possible that an individual might develop a number of time perspectives, each one applicable to a different aspect of his life (13, p. 170; 14, p. 298). Economic events might be considered from one rerspective, political events from another, social events from another, sexual matters from another, and so on, with little or no apparent conflict (14, p. 298). Development of these various time perspectives is related to the groups to which the individual belongs (13, p. 170). It is also possible that the individual might develop a more or less homogeneous set of perspectives related to the various aspects of his life (14, p. 298).

The influence of the social environment on time perspectives has been a subject for concern by many researchers and variations in such perspectives can be analyzed at various levels. Hallowell (17) concludes from a consideration of cross-cultural studies that temporal frames of reference often vary profoundly from society to society. Individuals acquire these frames of reference from their society and differences in societal time perspectives undoubtedly

imply profound differences in psychological outlook. Frank (14) also recognized that cultural and subcultural variations in time perspective could occur and Bergler and Roheim (4) emphasize that such variations cannot be doubted. Kluckhohn and Strodtbeck (25) in their study of five communities in the American Southwest found a significant similarity within each group and a significant difference between the groups with regard to temporal orientation.

Variation at the group and subcultural level has been noted by several investigators. Frank (14) suggested that time perspectives might vary among social classes. variations would include range of planning, forethought, abstinence, and so forth. Probably the most often cited research regarding the relationship between social class and time orientation is the work of Lawrence LeShan (26). LeShan indicates that different temporal orientations are predominant in the various social classes. He found the lower-lower class to be presently oriented, the upper-lower, middle, and lower-upper classes to be oriented toward the future, and believed the upper-upper class to be oriented toward the past. (It should be pointed out that Greene and Roberts (16) have re-examined LeShan's findings and have concluded that an error was made in determining the significance of the relationship between class and time orientation. They indicate that LeShan's findings should not, therefore, be interpreted as clearly showing a difference in time perspectives between classes, although the study is commonly cited for that purpose.)

Shively (33), in his study of "temporal horizon," found that this aspect of time perspective (what will later be referred to as "extension") varies with social class. Specifically, Shively was concerned with the future temporal horizon—"the distance into the future a person can see clearly" (33, p. 24). Shively's data indicate that future time horizon increases as social position increases.

This relationship clearly parallels what one might expect, and what is already known regarding immediate and deferred gratification patterns. Members of the lower class are pictured as having short time horizons. The lower class sub-culture is also pictured as promoting short-term goals, short-term decision-making, and short-term planning. A great deal of the behavior of the lower class members can be better understood within this frame of reference. Conversely, middle and upper class persons are characterized as having longer time horizons, internalizing deferred gratification patterns, and as making decisions and plans over longer time duration (33, p. 28).

It is suggested that lower class persons having long time horizons are most likely to be upwardly mobile and that upper class persons having short time horizons are most likely to be downwardly mobile (33, p. 30).

Shively's definition of future horizon seems to emphasize the ability to foretell the future ("see clearly" into the future) rather than emphasize hopes or anticipations one might have for the future. According to this definition, one might be expected to have a longer future horizon in a static society than in a dynamic one; events would occur

in much the same manner from generation to generation and one's future activities at any one time, perhaps event until his death, could be accurately predicted or "seen clearly." It would be inaccurate to refer to such a person as "future oriented," however, even though his extension into the future might be quite lengthy. He would, in fact, be past oriented because his future would be defined primarily in terms of the past. (This process will be discussed again when the past time perspective is considered.)

Fraisse (13, pp. 169-70) cites the work of Bernot and Blancard (5) who show the importance of the social situation in the development of time perspectives. In a study of a French village in which two different types of populations coexisted (one basically immigrant, the other of long standing in the locality), the two groups were found to have different time perspectives. The native inhabitants were strongly oriented toward the past history of their families. References to the past extended beyond their own generation. The immigrant group did not relate their past experiences to their new environment and were essentially living without a past reference.

In a study conducted in a prison, Farber (11) found that the relative importance of the future dimension and the extension into the past and future seemed to be greatly affected by the prisoner's situation. Farber reports that prison behavior appears to be dominated by the goal of

being released. Immediate daily experiences are not of importance to the prisoner except as they relate to the future goal of release. "The date of release represents the boundary of the effective future time perspective, the date the sentence was imposed the main boundary of the effective past" (11, p. 208).

Kurt Lewin (27) points out the importance of the group in the establishment of individual goals and the close relationship between the establishment of goals and time perspective. The goals of an individual or group necessarily include a consideration of future expectations. Ketchum (24) indicates that all groups are organized around some reference to the future and that this temporal perspective will affect the social values of group members. No value except the satisfaction of immediate bodily needs is considered conceivable without a future reference. Israeli (21) reports that certain anticipations of future events are strongly affected by one's group membership. factors which were considered to be the most important possible causes of the decline of Western civilization varied according to whether students were majoring in psychology, sociology, mental hygiene, or American history. Hulett (18) is concerned with the importance of the group in defining roles. While role content would ideally have a forward reference based upon expectations of the future, it is suggested by Hulett that attitudes related to roles

are derived less from a consideration of what the future may be like and more from the group's and the individual's interpretations of the past.

LeShan (26, p. 592) suggested that delinquents tend to be oriented toward their immediate situation, that is, toward the present. Following this suggestion, Barndt and Johnson (2) sought to test the hypothesis that delinquent boys would have shorter time perspectives than non-delinquent boys. Their hypothesis was confirmed by their research. Differences in perspective were due to something other than social class background since both the non-delinquent and delinquent groups were rated "approximately at the dividing line between the lower-lower and upper-lower classes" (2, p. 344). The groups were also matched on such variables as age, sex, IQ, academic achievement, and urban-rural background. Barndt and Johnson make the important point that, due to the lack of knowledge about the development of time perspective, speculation regarding their findings is hardly possible in terms of cause and effect. They conclude only that a short time perspective is part of the pattern of delinquency, but cannot say which is cause and which is effect (2, p. 345).

A study very similar to Barndt and Johnson's was conducted by Davids, Kidder, and Reich (6) which involved an analysis of time orientation in male and female delinquents. They found that male and female delinquents have similar

time orientations (the two groups received identical mean time orientation scores). Their study is an exact replication of the Barndt and Johnson (2) study in terms of method (the identical story completion technique and scoring procedure was used) and Davids. Kidder, and Reich (6, p. 240) have compared the results of the two studies. They found that the time orientation scores of the delinquents in their study did not differ significantly from the scores obtained by Barndt and Johnson. Both studies report present orientation among delinquents. It is considered noteworthy that the same assessment procedure utilized several years previously with delinquents in the Midwest yielded almost identical findings with a study of delinquents in New England. Davids and his associates conclude that on the basis of the two studies that it appears that non-delinquents adolescents tend to be more future oriented than do male and female adolescents who are considered to be delinquent.

Dimensions of Time Perspective

An individual always exists in the present. There are, however, two ways of doing so.

One consists in being coexistent with the present situation, the other in detaching oneself from it and taking refuge through imagination in the past or the future. In this case the past or the future become a present experience (13, p. 182).

Such activities as daydreaming, reading a novel, and watching a motion picture are occasions when the individual "lives"

in a time other than that of his present, although he may shift back and forth between the various dimensions in the course of any one of these activities. Such transformation is experienced by everyone to some extent (13, p. 191). Extreme examples of continual existence in a time other than the present can be found in mental pathologies. (Examples of time perspectives restricted only to the present can also be found in psychopathology.) Several references to such cases are made throughout this paper. There are two articles which summarize fairly well the main findings regarding psychopathology and time perspectives. One is by Wallace and Rabin (38) and the other is by Israeli (19). References to distorted time perspectives are found in many psychiatric cases and perhaps the best and most extensive effort to psychoanalytically interpret these distortions is made by Meerloo (30).

The present time perspective. -- Some difficulty is encountered in defining the three primary temporal dimensions. The present is that moment in time which separates the past, that which has occurred, from the future, that which has yet to occur. The "real" present, however, as just defined, is instantaneous and somewhat elusive. The present is perhaps best defined by Whitehead (39, p. 69) as "a wavering breadth of boundary between the two extremes" (the past and the future). Mead (29, pp. 19-23) suggests that the temporal

span of the present might vary with the event taking place.

No doubt it has different meanings for different persons.

One individual's or group's "present" might encompass a broader temporal span than another's.

Fraisse (13, pp. 184-7) cites four ways in which the present can become dominant for an individual or group.

(1) Some creatures, such as animals, babies, and the mentally deficient, live only in the present because they are incapable of forming a more extended temporal perspective. (2) Others live in the present because their temporal orientation has shrunk, as with old age, for example. (3) The individual may live in the present as a defense mechanism against dangers from the past or the future which seem to threaten individual integrity. Fraisse (13, pp. 185-6) cites Baruk's description of people who have remained affected by racial persecution and deportation during the war as illustrating the defense mechanism of refuge in the present:

Driven from place to place, oppressed, threatened, terrorized, often faced with an apparently closed and hopeless future, these subjects finally got into the habit of not thinking of the future and also of stifling all memories of their past lives. They now live only in the present and they have destroyed the continuity of the past into the future (3, p. 13).

(4) The present may also become dominant for the individual due to some particularly outstanding characteristic of the situation.

Dominance by the present is characterized by quick sequences of tension and relief. One satisfies his bodily

needs immediately (such as eating whenever one becomes hungry) (24, p. 103; 26, p. 589). The person who lives in the present does not frustrate himself for long periods or plan action with goals far in the future (26, p. 589). With a restricted future extension, life tends to become insignificant, meaningless, and dreary since the present leads to nothing of enduring value (14, p. 309). The future generally becomes an indefinite and vague region and its rewards and punishments are too uncertain to have much influence on behavior (2, p. 345; 14, p. 298; 13, p. 589; 15, p. 249). The attitude develops that one should eat, drink, and be merry, for tomorrow one may die (14, p. 309).

A statement by Meerloo serves as a summary:

There are people who can and dare to live in the present alone, in the shrunken-up time of the immediate present. They are on the lookout for the ecstacy of the short moment. They anxiously avoid the past and all thoughts of the future. To them the world is a static block, every conception of growth is alien to them (30, p. 601).

The past time perspective. -- The past time perspective is a constructed memory, since not everything in one's past is subject to recall. In particular, one remembers what can be expressed in language—names of things, people, and feelings about them. Various memories must be integrated into relationships with other memories or recall is impossible (13, p. 159). Evidence clearly indicates that memories tend to be related to one another in the order

in which they were actually lived. This characteristic of organizing memories in the sequence of their occurrence has been recognized by several investigators and is referred to as "coherence" (13, p. 160; 30, p. 595; 37, p. 240).

A pronounced disturbance of the coherence aspect of time perspective can be found in Korsakoff's syndrome, cases of encephalitis, and in the early stages of senile dementia (13, pp. 163-4; 30, p. 596). Memories lose their order and persons are unable to date experiences by reference to others although they may be able to use objective indicators of time such as clocks and calendars (that is, their subjective experience of time is disturbed but not their objective experience) (13, pp. 164-5; 30, p. 596).

Another aspect of time perspective (both past and future) is what is referred to as "extension" (24, p. 102; 37, p. 240). This concept refers to the length of time which is conceptualized (remembered or anticipated) and is also referred to as "span" (9, p. 51; 26, p. 589) and "temporal horizon" (33, p. 24). An individual's time perspective can extend beyond his own lifetime (13, p. 162; 26, p. 589; 27, p. 105). Fraisse (13, p. 162) states that "we treat the events provided by the history of our social group as we treat our own history."

Restriction of the extension element of time perspective can be found in certain mental disorders in which the lack of ability to remember the past and anticipate the future

results in restriction to the present (1, p. 478; 13, p. 162; 30, p. 601; 37, p. 245). The fact that varying degrees of extension occur and significantly influence behavior has been reported by many researchers (1, 2, 11, 13, 14, 18, 24, 26, 27, 30, 35, 37).

It has been pointed out that the past is a constructed memory. Fraisse elaborates on this point as follows:

This construction is not uniform, however. If I look at my past, my memories do not come with regularity. In this past perspective there are knots. formed by crucial events—a death, success in some competition, a war—which break the continuity and play the same part as planes in spatial perspective; we locate occurrences according to whether they came before or after these breaks in our existence. The distance between these planes is also not regular. Certain periods appear far longer than others although we know that, according to the calender, they were of the same duration. It was first observed some time ago that this relative duration depends on the number of memories: in retrospect a period seems longer the richer it is in memories (13, p. 167).

A similar effect can be found in collective as well as in personal representations of time.

Astronomical time is uniform, homogeneous; it is purely quantitative, shorn of qualitative variations. Can we so characterize social time? Obviously not—there are holidays, days devoted to the observance of particular civil functions, "lucky" and "unlucky" days, market days, etc. Periods of time acquire specific qualities by virtue of association with the activities peculiar to them. We find this equally true of primitive and more complex societies (34, p. 621).

Zentner (40, p. 63) distinguishes between two broad types of coordinating devices: physical time, based on natural phenomena, and social time, based on social phenomena.

Such references as "since mother died," "after work," and "shortly after the war" are expressions of social time (34, p. 618; 40, p. 64). Such references are much more expressive than equivalent physical or calendrical references (such as "July, 1942" or "five P.M.") and the "calendrical reference becomes significant only when it is transformed into social time" (34, pp. 618-19). Activity, not only in the past, but also in the present and the future, can be and is probably most often organized in terms of social time references (40, p. 65).

Present behavior always involves past experiences. However, just as is the case with the future, the role of the past varies depending on the value placed upon it (13, p. 193). One's past may simply be used as a means for realizing the future or it may be referred to as a norm in which case the present situation is defined entirely by the past (13, p. 193; 14, p. 308). LeShan (26, p. 589), for example, hypothesizes that members of the upper-upper class are past oriented and tend to view themselves as part of a sequence of several generations. They therefore tend to live according to the traditions set up by their families in the past. The past may also become dominant for the individual as a result of feelings of anxiety or guilt related to past events (30, p. 601).

The future does not necessarily "close up" when the past becomes dominant, but it does not play a large part in

defining one's present activities (13, p. 193). Often, however, the past becomes dominant because the future does seem "closed" and unpromising (due to such factors as age, illness, and personal failure). The future might also be closed by the individual as a defense against some threat it seems to contain (13, p. 193).

The future time perspective. -- The future time perspective consists of one's expectations or anticipations (1, p. 471). Probably the best general description of the future time perspective is offered by Fraisse:

The future perspectives of an individual depend . . . on his capacity for anticipating what is to come. This anticipation is a form of construction determined by the individual. It borrows from his past experience but it is prompted by his present desires and fits into the framework of what he considers to belong to the realms of possibility (13, p. 176).

During the whole of our life, our future perspectives remain fairly similar to those of a child for whom the entire future is located in the indeterminate domain of tomorrow. We can, of course, date our projects, thanks to our schemes of time and to logical constructions, but on the plane of experience there is practically nothing but the projection of desire or fear, and from this point of view our perspectives depend to a great extent on the present state of our emotions. We feel a bit tired, and immediately our projects seem unattainable, the future seems blocked. On the other hand the state of our emotions depends on the temporal distance between the present moment and the future situation (13, p. 174).

Generally speaking, one's future perspective is considered to be extrememly important in determining certain attitudes and feelings. An individual's mood (including such things as morale and happiness) tends to be determined

less by his present situation or activities than by his future perspective (11, p. 208; 12, pp. 256-7; 28, p. 75) although, as Fraisse has pointed out above, this relationship is reciprocal. Arieti (1, p. 475) points out that future anticipations occupy the greatest part of one's thoughts and determine the greatest number of actions for most adults. He states that "it is in this process of anticipation that such phenomena or institutions as religion, life insurance, armament, etc., owe their origin and development" (1, p. 475).

Present activites are normally oriented toward the future. "The future is, however, of greater or lesser importance according to the link it keeps with our present activity" (13, p. 192). The future may be the goal of one's activity or it may serve only as a means of escape from the present. Generally, escape through such a means as daydreaming is not a danger to mental health. Building "castles in the air" implies that the present situation is not entirely satisfying or absorbing (7, p. 303; 13, pp. 192-3) and that past experiences are either denied or considered somewhat unimportant. Desire for change (as manifested in daydreaming) also involves a belief that the future may hold something different from the past (13, pp. 192-3). Such activity becomes pathological when one

In contrast to those living dominantly in the present, those individuals who are primarily future oriented exhibit longer tension-relief sequences. One learns to inhibit activity leading to the relief of basic tensions (such as food-getting to relieve hunger) until the "proper" time. Deferred gratification is more acceptable. The future oriented person or group plans further into the future and acts on these plans (26, p. 589). Setting up goals implies a temporal orientation that is geared to the future since a person's goals imply expectations and anticipations of future success (27, pp. 113-4; 35, p. 379). There is the danger, however, that goals may be set up too far in the future. whereby the present becomes valueless and dreary because nothing which would yield satisfaction is allowed (14, p. 309). The most successful individual typically sets subgoals for himself along a time line which extends to his ultimate goals (27, p. 113; 35, p. 380).

The Measurement of Time Perspective

<u>Direct measures.</u>—Both direct and indirect measures of time perspective have been utilized. In 1933, Israeli (23) proposed ten types of experiments measuring attitudes and reactions to the future. Four or five of those experiments have been carried out and reported in several articles (20, 21, 22). Two of Israeli's experiments are particularly relevant to this study. The first experiment involved

the comparative rating of the past, present, and future as to their importance and the second was a study of emotional reactions to these three dimensions on the part of college students (20). Direct methods of measurement were used in both experiments.

The first experiment involved answering "yes" or "no" to the following questions:

Is the past more important than the present?

Is the past more important than the future?

Is the present more important than the past?

Is the present more important than the future?

Is the future more important than the past?

Is the future more important than the present? (20, p. 209)

The relative importance of the three dimensions was determined by totalling the percentages favoring each dimension in the six different comparisons. For example, the total percentage of answers "yes" in questions one and two and "no" in questions three and five measures the importance of the past relative to the other dimensions. From the ratios of these percentages, Israeli determined that the subjects of his experiment regarded the present as 1.2 times as important as the future and 12.7 times as important as the past (20, pp. 210-12).

Israeli's second experiment was performed at the same time as the first, used the same student subjects, and involved answering "yes" or "no" to nine questions of which the following are examples:

Do you worry much about your past misfortunes? Do you regret the good old times?

- Do you think often about the future?
- Do you worry about present problems?
- Do you believe that it is worth while to daydream about the future?
- Do you prefer to look to the past rather than to the future? (20, p. 210)

Percentages of "yes" and "no" responses were presented in tabular form. Percentages of "yes" answers to questions favoring the past were the lowest, those for the future were the highest, with the percentages favoring the present in between the past and future figures (20, p. 213). second experiment in particular seems to be somewhat unsystematic and very little analysis of data is offered other than the statement that the subjects "are definitely set for the present and the future, and are hardly disturbed over the past" (20, p. 212). It is interesting to note that Israeli concludes from both of these experiments that the future is the most important dimension and the past the least important dimension for the subjects although the results of the first experiment indicate the present to be more important than the future (20, p. 212). No explanation for this apparent contradiction is offered.

A direct measure of the relative importance of the past, present, and future was also used by Kluckhohn and Strodtbeck (25) in their study of five rural communities. Five questions related to time were included in an interview schedule regarding several values. A typical question was the following:

Some people were talking about the way children should be brought up. Here are three different ideas.

- A Some people say that children should always be (past) taught well the traditions of the past (the ways of the old people). They believe the old ways are best, and that it is when children do not follow them too much that things go wrong.
- B Some people say that children should be taught (pres) some of the old traditions (ways of the old people), but it is wrong to insist that they stick to these ways. These people believe that it is necessary for children always to learn about and take on whatever of the new ways will best help them get along in the world of today.
- Some people do not believe children should be taught much about past traditions (the ways of the old people) at all except as an interesting story of what has gone before. These people believe that the world goes along best when children are taught the things that will make them want to find out for themselves new ways of doing things to replace the old.

Which of these people had the best idea about how children should be taught? Which of the other two people had the better idea? Considering again all three ideas, which would most other persons in (your community) say had the better idea? (25, p. 81)

Each question allowed a rank ordering of the three time dimensions with regard to value or importance. The level of consensus within each group regarding the rank ordering of these dimensions was determined by using Kendall's <u>S</u> (25, pp. 124-7) and distinct patterns for each group were identified (25, p. 169). It seems highly possible that these questions might not be unidimensional, that is, they may be measuring attitudes other than those toward time.

Shively defines time horizon as "the distance into the future a person can see clearly" (33, p. 24). This

aspect of time perspective was measured by first defining the concept for the respondent and then asking him to estimate his own time horizon. The specific question used was the following:

People differ as to how far into the future they can see clearly. Some people can see farther than others. Speaking generally, how far into the future do you believe you personally can see clearly, as to the kind of world you will be living in? Please check the appropriate space below.

Can't see clearly at all		From 3 to 5 years	
Up to two weeks		From 5 to 10 years	
From 2 weeks to 6 months		From 10 to 20 years	
From 6 months to 1 year	i	Further than 20 years	
From 1 year to 2 years	i	(33, p. 25)	
		(77) 8. 67/	
From 2 to 3 years		Y.	11

The fact that Shively seems to be measuring one's ability to foretell the future rather than the length of time about which one might have hopes or anticipations has already been pointed out.

As Shively was interested in variations among social classes with regard to time perspective, each individual was asked to place himself in one of the following classes: upper-upper, lower-upper, upper-middle, lower-middle, upper-lower, and lower-lower (33, p. 26). To overcome the difficulty involved in dealing with college students who were pre-dominantly middle class, the questionnaire included a series of questions asking each respondent to evaluate lower, middle, and upper class people in terms of what their time horizons might be. A positive relationship between social class and time horizon was found to exist (33, p. 27). Respondents

were also asked to assign a desirable time horizon to several occupations and a direct relationship between occupational prestige (as determined by North and Hatt) and length of time horizon was also found to exist (33, p. 28).

Indirect measures. -- It appears that indirect measures of time perspective are more often used than direct measures. These indirect methods are attempts to obtain data which might be less subject to conscious control and are characterized by the presentation of relatively unstructured or projective stimuli. Extensive in-depth interviews were conducted by several investigators from which inferences related to time perspective could be drawn (1, 8, 11, 15, 30). This method is used most often by psychiatrists and is somewhat limited in terms of the number of cases which can be studied at one time.

In studying differences in time perspective as related to social class, LeShan (26) examined stories of middle and lower class children which were told in response to the stimulus "Tell me a story." The stories were examined in terms of the period of time covered by the action of the story. As it was hypothesized that the middle class group would be oriented toward the future and the lower class group would be oriented toward the present, it was expected that the action time of the stories told by middle class children would be longer than that of the lower class

children's stories. Such differences were found to exist (26, p. 591). The evaluating intervals used by LeShan were the following:

Under one hour 1 to 12 hours 12 to 24 hours One day to seven days

One to two weeks Two weeks to one year One year plus (26, p. 592)

No indication is given of how social class was determined. It is interesting to note that this method does not allow for a test of past orientation, at least not as it was used by LeShan. Perhaps this shortcoming was recognized in that LeShan hypothesized that upper-upper class members would be past oriented and the study was limited to middle and lower class subjects.

The story completion method of measuring time perspective was first used by Barndt and Johnson (2) and subsequently employed by Davids, Kidder, and Reich (6) and by Davids and Parenti (7). Barndt and Johnson found that most delinquent boys were unable or unwilling to respond to the stimulus "Tell me a story." The instruction eventually given the respondents (which allowed personal projection) was as follows:

I want to see what kind of a story you can tell. I'll start a story and then let you finish it any way you want to. You can make it any kind of story you wish. Let's see how good a story you can tell. I'll start it now. About three o'clock one bright, sunny afternoon in May two boys were walking along a street near the edge of town. Now you start there and finish the story any way you want to (2, p. 344).

If no time or time interval was indicated in the story,

the investigator would ask the following question: "How long was this from the start of the story?" It was then possible to score specific time intervals beginning at three o'clock. A rating of one to six was used based on the following system:

- Under one hour
- One hour or more but less than five hours 2.
- Five hours or more but less than twelve hours
- Twelve hours or more but less than one week
- One week or more but less than three months Three months or more (2, pp. 344-5)

Stories were independently rated by three judges and they agreed on the rating in every case (2, p. 345). Note that this method is another which does not allow an indication of past perspective but is only a measure of extension into the future. This method and the one employed by LeShan would seem to be somewhat restricted as to the age of subjects who could or would satisfactorily respond to the stimulus (a problem which Barndt and Johnson point out). range of the subjects in the studies mentioned which employ this method is from seven to seventeen years of age (2, 6, 7, 26).

Epley and Ricks (9) have used the Thematic Apperception Test to elicit stories which were then analyzed in terms of their orientation, whether forward into the future or backward into the past, and their span, the amount of time covered by the stories in either direction (9, p. 51). Stories were scored only if they featured a hero or group

who performed or planned realistic action. "Prospective span" was the length of time from the present (usually the event in the picture) to the end of the action. "Retrospective span" was the time covered in the story from the beginning and leading up to the present (also the action in the picture). Scoring the time span was based on the following scale:

- less than an hour
- greater than an hour, less than a day 2.
- greater than a day, less than a week
- greater than a week, less than a month
- greater than a month, less than a half-year
- greater than a half-year, less than a year greater than a year, less than four years
- greater than four years, less than a decade
- greater than a decade, less than a life (usually 9. career)
- life span (9, p. 52) 10.

Two sets of TAT pictures were used to obtain stories from the respondents (who were college students). Stories were scored independently by two judges to estimate scoring reliability (which was fairly high) (9, p. 52). One advantage of this method as compared with the other projective or indirect techniques which have been described thus far is that a test of past orientation is allowed. However, the procedures for scoring time span in TAT stories (9, pp. 57-9) is fairly complicated.

Teahan (35) combined several techniques to study time perspective among seventh and eighth grade boys. TAT cards, two story completion tests, and a method devised by Eson (10) were employed. Eson's method requires the

subject to record twenty-five things he thought about or talked about in the past two weeks and to rate each item according to whether (at the time he talked or thought about it) it referred to something in the past, present, or future (35, p. 379).

Wallace (37) employed a four part test of time perspective using schizophrenic subjects. Specifically, Wallace was testing the extension and coherence aspects of time perspective. In the first part of the test, the subject was instructed to "Tell me ten events that refer to things that may happen to you during the rest of your life." Each event was recorded on a separate card. After each response, the experimenter asked "And how old might you be when that happened?" Responses to this question were recorded, but not on the cards. After the second and third parts of the test were completed (see below), the ten cards were returned to the subject and he was instructed to "Arrange these cards in the order in which they might occur." These two tests measured both extension (the range of years between the subject's actual age and the most distant event named by him) and coherence (the correlation between the ranking of events based on age of occurence given in the first part and the order of events given in the last part) (37, p. 241).

The second part of Wallace's test involved four story completion tasks similar to the one used by Barndt and Johnson (2). The third part of the test involved fifteen

statements describing common life events. The instructions were as follows:

I'm going to read to you a series of events which happen to a lot of people. I want you to tell me how old you might be when the event described might happen to you (37, p. 241).

Before each statement, the experimenter said "How old will you be when . . . " Some examples of the events in question are the following:

- 1. your first grandchild is born?
- 2. you die?
- 3. you lose interest in sexual activities?
- 4. you are too old to be physically active?
- 5. your son achieves his greatest success in life?
- 6. you retire? (37, pp. 241-2)

After answering these questions, the subject was given fifteen cards, each with one of the items written on it. The following instructions were then given:

Here is a group of cards upon which the events I just asked you about are typed. Arrange these cards in the order that they might happen in yourlife. Place the event that might happen first, first; the event that might occur next, second, and so on, until you have finished with all the cards (37, p. 242).

The aspect of coherence was measured by the correlation between the order of events based upon the ages of occurrence associated with them and the sequence of events resulting from a chronological ordering of those same events (37, p. 242). Both Teahan's (35) and Wallace's (37) methods were fairly involved (consisting of several parts and of a variety of procedures) and would require more time for administration than the other methods discussed (with the exception of

extensive in-depth interviewing).

Summary and Conclusion

past and possible future experiences have on present behavior) have been distinguished: (1) continuity of the past, present, and future; (2) coherence or the organization of events in the sequence of their occurrence; (3) extension or the length of time which is conceptualized; and (4) what might be referred to as orientation, that temporal dimension which is of primary importance in defining one's present activities.

of day, perhaps with regard to different aspects of one's life (economic, political, and so forth), and at the cultural, subcultural, and group levels. General characteristics of the past, present, and future time perspectives have been presented as well as a consideration of dominance by each of these dimensions as an orientation for the group or individual.

After considering the limitations in terms of scope and ease of administration of a number of direct and indirect measures of time perspective, it was decided that a relatively simple and direct measure of that phenomenon would be desirable. The development of such a unitary measure is the primary purpose of this research project.

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CHAPTER II

DESCRIPTION OF THE STUDY

Limitations of the Study

As the primary purpose of this study is to determine whether or not time perspective is a scalable attitude dimension, several limitations have been accepted. (1) No attempt will be made to determine psychopathological disturbances in time perspective. More specifically, the question of whether an individual lives almost entirely in a fantasy world defined either by his past or imagined future will not be dealt with. (2) Although extension and orientation will be measured, the aspects of continuity and coherence will be excluded from consideration in this study. (3) It has been suggested (1, p. 170; 2, p. 298) that time perspective might vary with regard to different aspects of an individual's life. Previous studies of time perspective have not attempted to measure these various dimensions (such as economic, sexual, political, and so forth) but have focused attention on the individual's or group's general or over-all time perspective. This study will also be limited to a consideration of general time perspective. Once the scalability of this attitude has been determined, more detailed analysis in terms of subscales related to various specific areas would no doubt

prove to be necessary in providing a more complete analysis of time perspective. It might be that even if time perspective in general does not prove to be a scalable attitude, more specific and narrowly defined time perspectives could be scalable in themselves.

One of the problems in the conceptualization of time perspective is the relationship between concern and planning. Concern about what may happen in the future (or may have happened in the past) and planning for the future (either in terms of future anticipations or past experiences) appear to be somewhat related and yet this relationship is not at all clear. Previous studies appear to have treated these two processes as being one and the same or as one necessarily leading to the other. However, it is quite possible that an individual or group might be quite concerned about the future and yet make no plans for the future. The exact relationship between these two processes is in need of clarification and should be the subject for further research. For this study, attention has been directed primarily at the planning aspectthe influence the past and future have for individuals in making decisions or planning ahead (although one or two of the items in the questionnaire do involve concern more than action).

Che limitation of the present study is that it will not be possible to determine a rank ordering of preference or importance of the three temporal dimensions for individuals

or groups. It is possible to assign a future scale score and a past scale score to each respondent (if time perspective is scalable) but direct comparison between these scores is extremely risky. For example, if an individual has a future scale score of seven and a past scale score of four, it would be invalid to state that the future is more important for that individual than the past because questions relating to the future and past have not been matched in intensity and a future score of seven and a past score of four might therefore indicate equal degrees of importance. Direct comparison of scores would be possible if future and past items could be matched in intensity, but this is a rather delicate process and as the emphasis here is on determining scalability, the matter was reserved for later research. Correlation between past and future scores is possible, however, and this in itself should prove instructive. Does the importance of the past decrease as the importance of the future increases or does it increase?

As indicated, this study is concerned with measuring the importance or influence of the future and the past at a given time (the present). The major assumption underlying the measurement of only two dimensions is that if the future and the past are both of little importance in defining behavior, activities will be guided in terms of the present situation. The difficulty of defining the present (and from that reference defining the past and future) is again pointed

out. It is recognized that respondents might have varying definitions of when the present begins and ends and when the past and future become the appropriate time categories. While the problem of varying subjective definitions of these dimensions would be the subject of interesting additional research, it is beyond the scope of this study.

Population and Sample

The population for this study was the senior class at Denton High School, Denton, Texas, which was composed of three hundred and forty-four students. It was decided to test the scalability of time perspective of this population because of the greater chances of heterogeneity within the population as compared with college respondents. The high school was also chosen as the site of the study due to the greater accessibility of subjects as compared with a community or other equally diverse population. The population was limited to the senior class in order to more easily control the age factor (1, p. 177; 2, p. 297).

Three primary factors were involved in the selection of a sample consisting of one hundred and nine students. Rather than attempting to contact specific individuals who might have been randomly chosen, it was decided that it would be considerably easier and just as effective (or even more so in terms of percentage of response) to select classes in which the questionnaire would be distributed.

In order to draw a representative sample, it would be necessary to sample classes which all seniors were required to take. It was therefore decided to select an adequate number of senior English classes to yield a sample of between one hundred and one hundred and twenty-five students. The final selection of classes in which the questionnaire would be distributed was based on the time of day factor (6). Those senior English classes occurring in the early morning and late afternoon were excluded such that a clustering around mid-day occurred with regard to the hour at which classes were sampled.

Specific sections were selected at random until the desired sample size was attained. Questionnaires were distributed to the various teachers whose classes had been selected and the questionnaires were administered to the subjects by the teachers.

The Questionnaire

The questionnaire can be analytically broken down into at least three major parts: (1) information about the respondent, (2) questions to be used in testing the scalability of the influence of the future and the past, and (3) questions to measure the extension element of time perspective. The questionnaire in its entirety is reproduced in the Appendix. As presented to the respondents, the questionnaire consisted of three pages which were eight-and-one-half by thirteen inches. Questions were not continued

from one page to the next as occurs in the Appendix.

Information about the respondent .-- The primary purpose of these questions was to collect data from which each respondent's social class position could be determined. Hollingshead's Two Factor Index of Social Position (3) was used for this purpose and required the knowledge of the number of years of school completed and the occupation of the head of the household. Since the mother might be the head of the household in some cases, information was gathered concerning both parents. The determination of which parent was the head of the household was made on the basis of the question regarding provision of most of the family income. Questions other than those needed to determine social position were included in order that possible implications of the relationship between time perspective, group membership, and occupational choice might be indicated. These implications are of secondary concern in this study, however. Specifically, the questions included in this first section were as follows:

Age)	Sex	Race		
	nool assificatio	on: Sophomoi	re () Jur	nior ()	Senior ()
To	school or	s or organiza rganizations church groups	and extract	ou belong urricular	(including organizations
Нач		e any choice oursue? If s			

Years of school comp your father your		
()	()	Professional degree (MA, MS, MD, PhD, etc.)
()	()	Four year college graduate (BA, BS, BM, etc.)
()	()	Some college or business
()	()	school but no degree High school graduate
()	()	Some high school but did
()	()	not graduate 7 to 9 years of school
()	()	Under 7 years of school
Father's occupation	(be spec	ifie)
Mother's occupation	(be spec	ific)
Which parent provide	s most o	f the family income?
Father ()	Mother	()

Past and future scale questions. -- Fourteen questions were chosen to test the scalability of time perspective—seven for the past and seven for the future. This number allows scale scores of from zero to seven for each dimension.

Regarding the selection and wording of questions, the following statements regarding scalogram analysis are pertinent:

An important consideration of the present theory of scales becomes that of the sampling of items. In studying any attitude or opinion, there is an unlimited number of questions or question wordings which could be used. Any question asked in an attitude or opinion survey is ordinarily but a single sample of indefinitely many ways the question could be put. It is well known that changing the wording of the questions, changing the order of presentation of questions, changing order of check lists of answers, etc., can yield apparently different results in the responses.

Scalogram theory shows that if the universe contains but a single variable, that is, if all questions

have but a single content ordering, then the same rank order of the individuals upon this content will be obtained regardless of which sample of questions is selected from the universe. The problem of sampling of items thus has a simple solution for the case of a scalable universe (5, pp. 80-1).

The specific questions included in the questionnaire were the following:

9	the following:
	Do you generally do things the way they have been done in the past? 1. Yes, nearly always 2. Yes, most of the time 3. Some times, but not often 4. Very seldom or never
	Do you consider how your present activities will affect your future? 1 Yes, always 2 Yes, usually 3 No, not usually 4 No, not at all
	Do you plan for the future? 1 Always 2 Usually 3 Not usually 4 Not at all
	Do you think it is to your advantage to plan for the future? 1 Definitely 2 It might be 3 Not especially 4 Not at all
	How important is your past in determining your present activities? 1 Of great importance 2 Of some importance 3 Of some importance, but not much 4 Of little importance
	Do you believe that your past experiences are the best guide for your present and future activities? 1. Yes, always 2. Yes, most of the time 3. No, not usually 4. No, not at all

It is probably a waste of time for me to plan for the future because too many unforeseen events might interfere with my plans. 1 I strongly agree 2 It depends, but generally I agree 3 It depends, but generally I disagree 4 I strongly disagree
Does your past strongly influence your present decisions? 1 Nearly always 2 Most of the time 3 Some times, but not often 4 Not at all
Do you think it is to your advantage to consider how things have been done in the past? 1. Yes, always 2. Yes, most of the time 3. Some times, but not often 4. No, not at all
Do you have some goal toward which you are working? 1 Always 2 Most of the time 3 Some times, but not often 4 Seldom or never
Is what might happen in the future important to you when you make decisions? 1 Of great importance 2 Of some importance 3 Of some importance, but not much 4 Of little importance
The way things may be in the future is the best guide for my present behavior. 1 I strongly agree 2 It depends, but generally I agree 3 It depends, but generally I disagree 4 I strongly disagree
My past is over and can more or less be forgotten when I make decisions. 1 I strongly agree 2 It depends, but generally I agree 3 It depends, but generally I disagree 4 I strongly disagree
I probably would be wasting my time by thinking about the past. 1. I strongly agree

2. ____ It depends, but generally I agree
3. ____ It depends, but generally I disagree
4. ____ I strongly disagree

Measurement of extension. -- Three questions were included to measure extension or the length of past and future time which is remembered or anticipated. (The question regarding the importance of the past was included in order that the relationship between past extension and the length of past time which is considered important could be investigated. A similar question regarding the future was not included as this is only a minor concern of investigation in this study and it was believed on the basis of a pretest that virtually all of the respondents would indicate that the rest of their life was important to them.)

The future extension question is patterned after a question used by Shively (4) although the emphasis was shifted from "seeing clearly into the future" to expectations and anticipations for the future. The specific questions pertaining to extension were the following:

People often differ with respect to the length of time into the future for which they have expectations or anticipations. Generally speaking, for what length of time into the future do you have anticipations or expectations? Please check the appropriate space below.

no anticipations or expectations as up to two weeks	all
from 2 weeks to 6 months	
from 6 months to 1 year	
from 1 year to 2 years	
from 2 to 3 years	
from 3 to 5 years	
from 5 to 10 years	

further than 20 years	
People may also differ w of their past life they can re speaking, how far back can yo past? Please check the appro	emember clearly. Generally u clearly remember your
one year two years three years four years five years six years seven years eight years nine years how far back is your pasyou? Please check the appropri	
one year two years three years four years five years six years seven years eight years nine years	ten years eleven years twelve years thirteen years fourteen years fifteen years sixteen years seventeen years eighteen years or more

Pretest.--The questionnaire was pretested in a college introductory sociology class which was composed primarily of freshmen. After completing the questionnaire, the group was asked to indicate any instructions or questions which might not be clear. No verbal instructions were given as the questionnaire was eventually to be given by high school teachers who would have to rely primarily on the instructions included in the questionnaire. The instructions and questions seemed to be quite clear to the pretest group. An analysis of scalability of the responses of this group indicated that

time perspective was a scalable attitude for the group (the future scale had a coefficient of reproducibility of .92 and the past scaled yielded a .90 coefficient of reproducibility).

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CHAPTER III

FINDINGS OF THE STUDY

General characteristics of the sample. -- The sample of one hundred and nine white high school seniors consisted of fifty-four females and fifty-five males. Ages ranged from sixteen years to nineteen years, with a modal age of seventeen years and a mean age of seventeen and one-half years.

Classification of each respondent in terms of Hollings-head's Two Factor Index of Social Fosition (2) revealed a fairly adequate sampling of five social categories (with some underrepresentation of the lowest class). The highest class is designated as class one and the lowest class as class five. Thirteen respondents were not classified due to two factors: (1) inadequate information in some question-naires (either no response or a response which was too vague to accurately classify), and (2) some occupations declared by respondents had not been classified by Hollingshead.

Distribution of the sample in terms of social class position is presented in Table I.

The future scale. -- The importance of the future for the individuals in the sample proved to be a scalable dimension. A coefficient of reproducibility of ninety percent has been somewhat arbitrarily established by Guttman

TABLE I

SOCIAL POSITION DISTRIBUTION
OF SAMPLE

Soc		l ra			.ti	.01	a							Nι			of Sample trata
I.		•				•	٠.			•	•	٠	•				18
II	•		•	•	•	•	•	٠	٠	•	•	٠	•	•	•		29
III												•	•	•	•		30
IV																•	15
٧.	•	•				٠	•		٠	•			٠		٠	•	4
Not			នន											•	•	•	13
Tot	al	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	109

as an acceptable approximation of a perfect scale. If reproducibility is at least ninety percent, then the standard error of reproducing individual responses to specific questions is very low (6, p. 77). The coefficient of reproducibility for the future scale in this study is ninety percent. The specific questions (with identification numbers and weightings indicated) which comprised the future scale are the following:

- F1: Do you consider how your present activities will affect your future?
 - (4) Yes, always
 - (3) Yes, usually
 - (2) No, not usually
 - (1) No, not at all
- F2: Do you plan for the future?
 - (4) Always
 - (3) Usually
 - (2) Not usually
 - (1) Not at all
- F3: Do you think it is to your advantage to plan for the future?
 - (4) Definitely
 - (3) It might be
 - (2) Not especially
 - (1) Not at all

F4: It is probably a waste of time for me to plan for the future because too many unforeseen events might interfere with my plans.
(1) I strongly agree

(2) It depends, but generally I agree (3) It depends, but generally I disagree (4) I strongly disagree

F5: Do you have some goal toward which you are working? (4) Always

(3) Most of the time (2) Some times, but not often

(1) Seldom or never

F6: Is what might happen in the future important to you when you make decisions?

(4) Of great importance

(3) Of some importance 2) Of some importance, but not much

(1) Of little importance

F7: The way things may be in the future is the best guide for my present behavior.

(4) I strongly agree

(3) It depends, but generally I agree (2) It depends, but generally I disagree

(1) I strongly disagree

Figure 1 is a graphic representation of the "perfect" future scale ("perfect" as defined by Guttman) based on the questions in this study. Response categories were combined in such a way that a dichotomous favorable-unfavorable response distinction could be made for each question. some cases, the dividing point was between the extremely favorable and favorable responses so that the "favorable" dichotomized response was the original extremely favorable response (that response having a weight of four) and the "unfavorable" dichotomized response included the original favorable, unfavorable, and extremely unfavorable responses. Such combinations are permissible according to Guttman (6, p. 16). Favorable responses to future scale questions

<u>F1</u>	F <u>5</u>	F7	F4	F3	F2	F5	Ty pe
x	×	X X X	X X	X X X	X X X X X	X X X X X	7 5 4 3 2 1
							0

Fig. 1--Model of perfect future scale

An analysis of the future scale is presented in Table

II. "Perfect types" in the table refers to individuals

TABLE II
ANALYSIS OF FUTURE SCALE

Scale Type	Number of Perfect Types	Number of Imperfect Types	Total Scale Types	Errors
7	13	. 7	20	9
6	26	9	35	14
5 .	10	18	28	24
4	2	15	17	18
3	0	0	0	0
2	1	3	4	. 4
1	0	3	3	5
0	1	1	2	1
Total	53	56	109	75

whose response patterns conformed exactly to one of the scale types represented in the model. "Imperfect types" refers to individuals fitting particular response patterns closely but not perfectly—that is, they did not conform exactly to the perfect scale type model. Those responses which did not fit the model were counted as errors. (The capital \underline{x} 's in Figure 1 represent favorable responses.)

There were two questions of particular interest in this series in that most of the respondents checked the extremely favorable responses in both cases. In answering question F3 ("Do you think it is to your advantage to plan for the future?), ninety persons checked the response "Definitely." Sixty-eight persons checked the response "Of great importance" in answering question F6 ("Is what might happen in the future important to you when you make decisions?"). None of the questions in the past scale received such overwhelming response agreement. In nearly all cases, responses highly favorable to the future were checked by larger percentages of the respondents than responses highly favorable to the past, suggesting that the future is generally considered more important or influential than the past.

The past scale. -- With a coefficient of reproducibility of eighty-nine percent, the importance of the past also proves to be a scalable attitude. While the coefficient of

reproducibility is not quite ninety percent, it is close enough to the criterion for scalability to indicate a useful The questions comprising the past scale are as follows: scale.

- Do you generally do things the way they have been done in the past?
 - (4) Yes, nearly always
 - (3) Yes, most of the time
 - 2) Some times, but not often
 - (1) Very seldom or never
- P2: How important is your past in determining your present activities?

 - (4) Of great importance (3) Of some importance
 - 2) Of some importance, but not much
 - (1) Of little importance
- P3: Do you believe that your past experiences are the best guide for your present and future activities?
 - (4) Yes, always
 - 3) Yes, most of the time
 - 2) No, not usually
 - (1) No, not at all
- P4: Does your past strongly influence your present decisions?
 - (4) Nearly always
 - (3) Most of the time
 - (2) Some times, but not often
 - (1) Not at all
- P5: Do you think it is to your advantage to consider how things have been done in the past?
 - (4) Yes, always

 - (3) Yes, most of the time (2) Some times, but not often
 - (1) No, not at all
- P6: My past is over and can more or less be forgotten when I make decisions.
 - (1) I strongly agree
 - (2) It depends, but generally I agree (3) It depends, but generally I disagree (4) I strongly disagree
- P7: I probably would be wasting my time by thinking about the past.
 - (1) I strongly agree

- (2) It depends, but generally I agree(3) It depends, but generally I disagree(4) I strongly disagree

The model of the perfect past scale based on the above questions is presented in Figure 2. Eight scale types are possible as was the case with the future scale. An analysis of the past scale is presented in Table III. Responses to questions in the past scale were distributed from extremely favorable to extremely unfavorable in all questions with a clustering of responses at the dividing point between favorable and unfavorable (between responses number two and three in all cases). This pattern is in contrast to the skewed patterns of responses to future scale questions in which responses tended to cluster at the highly favorable and favorable points. The same general clustering and distribution patterns can be seen in Tables II and III

in the "Total Scale Types" columns (although the clustering

is not as apparent as when total responses are compared.

Scale P6 P2 P4 F7 P3 P1 P5 type X X X X X X X X 7 X X X X X X 5 5 X X X X X 3 4 X X X X 3 X 2 X X X X 1 0	pas	t s	cal	e qi	ues	tion	ឧន	
X X X X X X 5 X X X X X 5 X X X X 3 X X X 2	<u>P6</u>	P2	P4	P7	P3	Pl	P5	Scale type
•	Х		X	X X	X X X	X X X	X X X X	5 4 3 2

Favorable responses to

Fig. 2--Model of perfect past scale

TABLE III
ANALYSIS OF PAST SCALE

Scale Type	Number of Perfect Types	Number of Imperfect Types	Total Scale Types	Errors
7	8	5	13	6
6	9	8	17	11
5	3	21	24	22
4	6	20	26	27
3	4	0 1	4	0
2	5	5	10	6
1.	0	. 3	3	5
0 .	5	7 .	12	8
Total	40	69	109	85

Scale relationships. -- There appears to be a relationship between past scale scores and future scale scores in that the gamma correlation for the two is .37 (n equals 109). (Correlations of the data in this study are very low in almost all instances. However, they are suggestive of the directions of relationships, that is, whether relationships are direct or inverse.) One might expect that as the past increases in importance the future would decrease in importance. However, such is not necessarily the case. In this study, a direct relationship between the importance of the

two dimensions has been found. This finding is in keeping with theoretical suggestions by several investigators.

Lewin (4, p. 105) suggests that an individual may be strongly oriented toward both the future and the past in that he may plan into the future on the basis of an awareness of an equally distant past. LeShan (3, p. 589) and Frank (1, p. 303) suggest much the same thing.

There seems to be a relationship between social position and both future and past scale scores. Future scale scores and social position (gamma equals -.032, n equals 96) and past scale scores and social position (gamma equals -.016, n equals 96) are related in that the higher the social position, the higher one's scale scores. (Correlations have a negative sign due to the fact that the highest social position is designated "one" and the highest scale scores are designated "seven.") This finding is in keeping with other research (3, 5) in that the future (and the past) are of relatively greater importance to upper class members, of lesser importance to middle class members, and of very little importance to lower class members. ("Importance" here refers to the subjective evaluation of the individuals; the past in an objective sense is perhaps of equal importance in all social settings.) As both the past and the future are of little importance to lower class members, the assumption is that they are oriented toward the present which is a conclusion that is also in keeping with previous research.

Future and past extension .-- Future scale scores and past scale scores are used to indicate the degree of importance or influence of those dimensions for individuals at a given time (the present). "Future extension" refers to the length of future time for which the individual has anticipations or expectations. "Past extension" refers to the length of past time which the individual clearly remembers. "Past importance" refers to the length of past time which the individual considers important or influential.

In evaluating future extension, the following scale was used:

- O. no anticipations or expectations at all
- up to two weeks
- 2. from 2 weeks to 6 months
- 3. from 6 months to 1 year
- from 1 year to 2 years from 2 to 3 years
- .6. from 3 to 5 years
- from 5 to 10 years from 10 to 20 years
- further than 20 years

It is important to note that past extension and importance are scaled in terms of the number of years the respondent indicated when answering the relevant questions. For example, if an individual checked "five years" as the length of his past that he clearly remembers, he was given a score of five. Therefore, scores of five on future extension and five on past extension and/or importance are not equal.

In the majority of cases, future extension was less than past extension. In seventy-nine cases, future extension was less than past, in nine case future extension was more than past, and in nineteen cases future extension was equal to or included the past value (n equals 107). There appears to be a relationship between past and future extension (gamma equals .076, n equals 107). Such a positive relationship is in keeping with theoretical suggestions by Frank (1, pp. 297, 303) and Lewin (4, p. 105). However, an apparent contradiction to this relationship can be found in further analysis. There appears to be a direct relationship between social position and future extension (gamma equals -.023, n equals 95) and an inverse relationship between social position and past extension (gamma equals .046, n equals 95) and yet if past extension and future extension vary directly with one another, one would expect them to vary directly with social position. (Figure 3 graphically indicates this contradiction and its resolution.)

This contradiction is resolved somewhat if the relationship between future extension and past importance rather than past extension and future extension is considered. The data in Table IV allows a comparison of future extension, past extension, and past importance. Future extension for the sample studied was shorter than both past extension and past importance. In sixty cases, past extension was lengthier than past importance; in only twenty-two cases was the magnitude of past extension less than that of past importance, and in twenty-five cases, past extension and

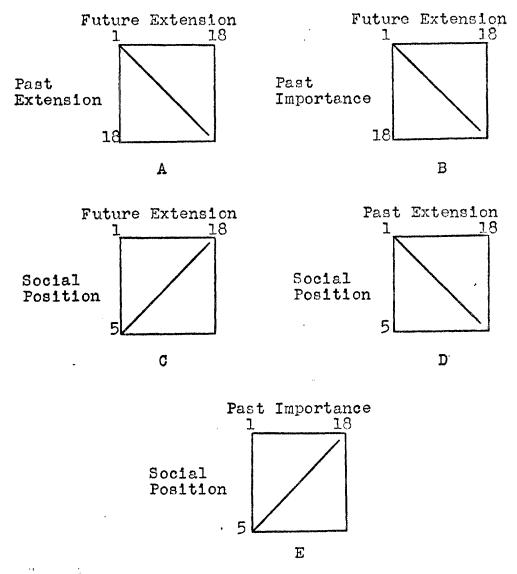


Fig. 3--Relationships between future extension, past extension, past importance, and social position. Both future extension and past extension and future extension and past importance are directly related (the longer one, the longer the other) as indicated in A and B above (diagrams indicate direction of relationships only—not the strength). Future extension and social position are directly related as indicated in C (the lower one's social position, the shorter his future extension). The contradiction is between diagrams C and D. In D, one finds that past extension is inversely related to social position and yet future extension and past extension should be similarly related to social position. The contradiction is resolved somewhat (compare diagrams C and E when the relationship between past importance (rather than past extension) and social position is considered.

past importance were equal in magnitude or within two years of one another (n equals 107). In sixteen cases, past importance was equal to the age of the respondent (plus or minus two years) and in only six cases was past extension equal to their age (plus or minus two years). Clearly, more research is needed to determine the exact relationship between past extension and past importance.

There appears to be a direct relationship between future extension and past importance (gamma equals .13, n equals 107) just as there was between future extension and past extension. Also, there is a direct relationship between social position and past importance (gamma equals -.069, n equals 95). The inverse relationship between social position and past extension is not in keeping with the direct relationships between future extension and past extension and between

TABLE IV

COMPARISON OF FUTURE EXTENSION, PAST EXTENSION, AND PAST IMPORTANCE

	Future Extension	Past Extension	Past Importance
Mean	5.4 (2-3 years)	9.7 years	7.4 years
Mođe	6.0 (3-5 years)	12 years	6.0 years
n	95	95	95

social position and future extension. Because the direct relationship between social position and past importance is in keeping with the latter two relationships (see Figure 3), it is suggested that past importance rather than past extension may be more meaningful in terms of analyzing time perspective. One may remember a great deal of his past but that fact alone may have little or no influence on his present activities.

Summary. -- A scale indicating the degree of importance or influence of the future for individuals in a sample of high school seniors has been found to have a coefficient of reproducibility of ninety percent. A similar scale related to the past has yielded a coefficient of reproducibility of eighty-nine percent. The orientation component of time perspective is therefore a scalable attitude for this sample.

There appears to be a direct relationship between the influence or importance of the past and that of the future—as one dimension increases in importance, so does the other. Orientation appears to be related to social position in that the higher one's social position, the higher one's past and future scale scores.

A direct relationship was found between future extension and both past extension and past importance. A direct relationship was found between social position and both

future extension and past importance, and an inverse relationship was indicated between social position and past extension.
These findings suggest that it is more meaningful to
consider the length of past time which is considered important
than the length of the past which can be clearly remembered.
A distinction between past extension of importance and past
extension of remembrance seems to be meaningful.

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CHAPTER IV

SUMMARY AND DISCUSSION

Behavioral scientists are becoming increasingly interested in time as a component of value orientation (6, p. 61). general influence of past experiences and possible future experiences on behavior is referred to as "time perspective." Four components of time perspective have been distinguished: (1) continuity of the past, present, and future; (2) coherence or organization of events in the sequence of their occurrence; (3) extension or the length of time which is conceptualized; and (4) orientation or the most influential temporal dimension in defining present behavior. Various investigators have conceptualized time perspective in various ways but have in most instances been concerned with several (and occasionally all) of these components. While there is a need for further research centered around a consistent theoretical and methodological orientation, some general conclusions regarding time perspective can be drawn from previous studies.

Time perspective has been found to vary with age, time of day, and in terms of cultural, subcultural, and group distinctions. It has also been suggested that variation in the personality system may occur with regard to time perspective; the individual may develop several time perspectives, each related to specific activities. An

extensive discussion of orientation toward the past, present, or future for individuals and groups is presented in Chapter One.

Various direct and indirect measures of time perspective have been described. For the most part, these measures are limited in scope (few methods consider the influence of the past, for example) and are in several cases difficult to administer and interpret. The lack of consistent conceptualization becomes somewhat apparent on examination of previous methods of measurement. Several investigators (1, 2, 3, 4, 5) have measured extension and treated this as though it were a measure of orientation, but there seems to be a clear need to keep the two components separated. One might have a very lengthy future extension and still be oriented toward the past, in which case his expectations and anticipations for the future are largely defined in terms of his past experiences. Due to the fact that several investigators fail to measure the relative importance of the three temporal dimensions (especially ignoring the past) and define time perspective in terms of extension only, their conclusions are subject to reinterpretation.

For example, Barndt and Johnson (1) conclude that delinquent boys have shorter time perspectives than non-delinquent boys. While their primary concern was with "time orientation," they in fact limited themselves to measuring extension. Definite conclusions regarding the

relative importance of the past and future or concerning past extension can not be derived from the data which they collected. Their conclusions suggest that delinquent boys are not as oriented toward the future as non-delinquent boys because the former have "shorter time perspectives" than the latter. However, it is possible that the nondelinquent boys, even with lengthier future extensions, may be less oriented toward the future than the delinquents. Drawing conclusions regarding orientation on the basis of measures of extension seems a bit risky, and yet this apparently is not uncommon. On the basis of the story completion technique of measuring future extension, Davids, Kidder, and Reich (2) also conclude that non-delinquents are more future oriented than delinquents. LeShan (4) and Shively (5) similarly reach conclusions regarding temporal orientation and its variation by social class from measurement of future extension.

The primary purpose of the present study was to determine if orientation and extension could be measured in a relatively simple and direct manner. An attempt was made to determine whether or not the subjective importance or influence of the future and past at a given time (the present) could be represented as a scalable attitude in accordance with the Guttman scalogram model. On the basis of questionnaire responses by one hundred and nine students of the senior class at Denton High School (a thirty-two

percent sample of that population), it was concluded that this attitude was scalable for that group. The importance of the past and the importance of the future were found to be directly related for the population studied, that is, there was a tendency for the past and the future to be symmetrical in importance—as the future increased in importance, the past also increased in importance. While some theoretical suggestions have been made which are in keeping with this finding, related empirical research is not available. Therefore, such a relationship might not be consistent for all groups. Certainly one could imagine a group for which the future might be extremely important and the past of little or no subjective importance at all. Would such a group be less conservative and more dynamic than a group for which the future and past were of equal importance? When the future and past are of symmetrical importance, does this mean that the future is necessarily defined in terms of the past or can the past be redefined in its meaning and value in terms of the future? Such questions are the basis for further research.

Social position of respondents and both the importance of the past and the importance of the future were directly related for the group studied—the higher one's social position, the more important or influential the future and the past. An inverse relationship with social position was found when future extension and length of the important past

were considered: the higher one's social position, the lengthier his future extension and the greater the amount of past time which is considered important. It has been suggested that a distinction between past extension of importance (the length of past time which is subjectively considered important or influential) and past extension of remembrance (the length of past time which is clearly remembered) is a necessary and meaningful consideration in that while one may remember a great deal of his past, much of that time may have little or no influence on present behavior. A similar issue is raised when considering future extension in relation to general concerns and life planning. One might be concerned about the future and yet make no plans for the future. It is suggested that further research is needed to clarify the relationships between past extension of importance and past extension of remembrance and between concern about the future and planning for the future. Research regarding subjective definitions of the present, past, and future would also be extremely interesting.

As Barndt and Johnson (1, p. 345) point out, so little is known about the development of time perspective that it is difficult to speak in terms of cause and effect when considering the relationship between time perspective and group membership. Do members of a group adopt the time perspective of that group or are they attracted to and become members of the group as a result of having a time

perspective similar to that of the group? No simple answer for this question is available. In the process of socialization, children may acquire the time perspective of their parents and consequently of their social strata or subculture. However, it is also possible that parents may encourage a different time perspective in their children than that characteristic of their subculture. Lower class parents, for example, may encourage long range planning and emphasize the future for their children in which case the children may acquire a temporal orientation similar to middle or upper class members. Shively (5, p. 24) suggests that such a divergency in time perspective can occur for members of all classes.

Certain time perspectives may be conducive to membership in particular groups, and this component of the individual's value system may play a role in inducing membership in those groups. The process of anticipatory socialization might very well bring about changes in one's time perspective. The individual could adopt the time perspective of some group to which he aspires to belong. In such a case, a particular effort is made to change one's values in order to change one's group membership. Thus, a high school boy from a lower class family background may join a school club whose members are primarily from middle and upper class backgrounds. In the course of interaction with club members (casual conversation regarding plans for college, for example),

the individual may develop a time perspective different from the one predominant in his home environment.

It therefore seems possible that an individual may be drawn into certain groups because he has acquired a time perspective similar to that found in the group, and also that an individual's time perspective may be affected by the time perspective of a group to which he aspires to belong. The chief distinction between these processes appears to be that in one case the individual accepts his time perspective and joins groups having similar values and in the other case the individual modifies his time perspective and joins groups with different values from those which he originally held.

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APPENDIX

ATTITUDE SURVEY QUESTICNNAIRE

You are being asked to participate in an attitude survey of high school students. This is not a test; there are no "right" or "wrong" answers. The "correct" answers are how you feel about each of the questions presented below. You are not required to sign this questionnaire and individual results will be kept confidential. Thank you for your participation.

Age	Sex	Race
School Classification:	: Sophomore	() Junior () Senior ()
To what clubs of organization church grow	ons and extra	ons do you belong (including school curricular organizations such as
Have you made a	any choice as If so, what	to what occupation you would like is your occupational choice?
Years of school your father	completed by your mother	У
()	()	Professional degree (MA, MS, MD,
()	()	PhD, etc.) Four year college graduate (BA,
()	()	BS, BM, etc.) Some college or business school
()	()	but no degree High school graduate
()	()	Some high school but did not
()	()	graduate 7 to 9 years of school
()	()	Under 7 years of school

Father's occupation (be specific)
Mother's occupation (be specific)
Which parent provides most of the family income?
Father () Mother ()
Please check the one blank which best indicates your answer to each of the following questions. Please answer all of the questions. If you are not sure about an answer, check the response which is closest to what you tend to usually feel or do.
Do you generally do things the way they have been done in the
past? 1Yes, nearly always 2Yes, most of the time 3Some times, but not often 4Very seldom or never
Do you consider how your present activities will affect your future?
Yes, always Yes, usually No, not usually No, not at all
Do you plan for the future? 1 Always 2 Usually 3 Not usually 4 Not at all
Do you think it is to your advantage to plan for the future? 1 Definitely 2 It might be 3 Not especially 4 Not at all
How important is your past in determining your present activities? 1. Of great importance 2. Of some importance 3. Of some importance, but not much 4. Of little importance
Do you believe that your past experiences are the best guide for your present and future activities? 1. Yes, always 2. Yes, most of the time

3 No, not usually 4 No, not at all
It is probably a waste of time for me to plan for the future because too many unforeseen events might interfere with my plans. 1.
Does your past strongly influence your present decisions? 1 Nearly always 2 Most of the time 3 Some times but not often 4 Not at all
Do you think it is to your advantage to consider how things have been done in the past? 1. Yes, always 2. Yes, most of the time 3. Some times, but not often 4. No, not at all
Do you have some goal toward which you are working? 1 Always 2 Most of the time 3 Some times, but not often 4 Seldom or never
Is what might happen in the future important to you when you make decisions? 1 Of great importance 2 Of some importance 3 Of some importance, but not much 4 Of little importance
The way things may be in the future is the best guide for my present behavior. 1 I strongly agree 2 It depends, but generally I agree 3 It depends, but generally I disagree 4 I strongly disagree
My past is over and can more or less be forgotten when I make decisions. 1 I strongly agree 2 It depends, but generally I agree 3 It depends, but generally I disagree 4 I strongly disagree

I probably would be wasting my ti l I strongly agree 2 It depends, but gener 3 It depends, but gener 4 I strongly disagree	
People often differ with resinto the future for which they hapations. Generally speaking, for the future do you have anticipaticheck the appropriate space below	ve expectations or antici- what length of time into ons or expectations? Please
no anticipations or expect up to two weeks from 2 weeks to 6 months from 6 months to 1 year from 1 year to 2 years from 2 to 3 years from 3 to 5 years from 5 to 10 years from 10 to 20 years further than 20 years	ations at all
People may also differ with past life they can remember clear far back can you clearly remember appropriate space below.	
one year two years three years four years five years six years seven years eight years nine years	ten years eleven years twelve years thirteen years fourteen years fifteen years sixteen years seventeen years eighteen years or more
How far back is your past of Please check the appropriate spac	
one year two years three years four years five years six years seven years eight years nine years	ten years eleven years twelve years thirteen years fourteen years fifteen years sixteen years seventeen years elghteen years or more

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