

THE INFLUENCE OF  
TEMPORALLY PROJECTED GOALS  
ON PRESENT BEHAVIOR

by

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## CHAPTER I INTRODUCTION AND STATEMENT OF THE PROBLEM

### HISTORY AND GENERAL STATEMENT

Psychologists who work in the field of personality, either normal or abnormal, have become increasingly aware of the necessity of understanding the person's concept of himself and his role in life, not only what he thinks he is now, but also what he hopes to become. This facet of motivation is becoming a focus of interest to clinicians who work psychotherapeutically with patients, and to those who attempt to gain fullest understanding of personality. The recently published papers of Federn ( 5 ), the excellent discussion of the development of the "healthy personality" by Erikson ( 4 ), and the research of the Carl Rogers group (12) confirm this trend. Further examples of the diversity of the writers who are concerned with this aspect of personality, as well as clarifying statements of the problem, are presented in the following quotations:

Goldstein ( 6 ): "As the child grows into the world of the adult, its behavior becomes more even and 'ordered' ...the normal is determined by his urge (already inherent in the child) for new experiences, for the conquest of the world, and for an expansion of his sphere of activity in a practical and spiritual sense ....This tendency towards actualization is primal; but it can effect itself only in conflicting with, and in struggling against the opposing forces of the environment....Normal behavior corresponds to a continual change of tension, of such a kind that over and again that state of tension is reached which enables and impels the organism to actualize itself in further activities, according to its nature."

Angyal ( 1 ): "The tendency of the person to make of his life course a coherent, meaningful whole is experienced as a desire for self-realization...In the course of life, biological determinism and 'pure chance' are intricately interwoven. Biological

determinism has a specific meaning: while physical determinism defines the effect as a range of possibilities. With an increased realization of the life-pattern this range of possibilities decreases, that is, the further the life course proceeds the more deterministic it becomes.... The life history beyond giving a historic understanding of personality is not concentrated in the present but is a whole, the parts of which are distributed along the dimension of time whereby the person extends into the past and into the future."

Sartre (13): "But there is another meaning of humanism. Fundamentally it is this: man is constantly outside himself; in projecting himself, in losing himself outside of himself, he makes for man's existing; and, on the other hand it is by pursuing transcendent goals that he is able to exist; man, being this state of passing-beyond. There is no universe other than a human universe, the universe of human subjectivity. This connection between transcendency as a constituent element of man-not in the sense that God is transcendent, but in the sense that man is not closed in on himself but is always present in a human universe, is what we call existential humanism. Humanism because we remind man that there is no lawmaker other than himself, because we point out that man will fulfill himself as man, not in turning toward himself, but in seeking outside himself a goal which is just this liberation, just this particular fulfillment."

The present study aims to investigate some of personality concomitants of the person who maintains and the person who fails to maintain an awareness of himself as one who is guided by aspirations and expectations which can be actualized only in the future, so that at any time there is a continuity between his past, his present and his future intentions. This self that remains constant and consistent in different situations and at different times, thus providing continuity to life, will be referred to as the transcendent ego or the time-spanning ego. It is this aspect of the personality which is the subject of the present study.

To facilitate the understanding of the transcendent ego, it seemed best to contrast normal subjects with the type of patients who give

the clinical impression of immediacy, i.e., an absence or deficiency of transcendancy; who are characterized by what Henry James has called "incoherency of conduct". Of the patients seen in institutions, one of the most striking and most difficult to help, are those variously diagnosed as psychopaths, Narcissistic character disorders, immature personalities, inadequate personalities, etc. In all of these the time-spanning ego and continuity of life pattern are deficient; there is no other apparent disturbance. These patients do not seem to be able to project their aspirations into the future and to be guided by them. Their lives are lived from day to day, resulting in a nomadic, impulsive and apparently aimless pattern. Unlike the psychotic patients, the actions of these patients are appropriate to the present situation; it is the total life-pattern which lacks coherency. This inability to transcend the moment, which we have referred to as immediacy, is one limit of the personality dimension which is the focus of the present study.

## DERIVATION OF THE BASIC HYPOTHESES USED IN THIS STUDY

Transcendancy, as we define it, ascribes to the future a dynamic role in the present. For this to be true, the future must have some representation in the present. We assume that it has a place in the awareness of the subject, that it exists in his phenomenal world: the future exists in the present as an idea, an image; a plan or a dream which has the potentiality for existence at some hypothesized time and set of conditions. The phenomenal future may be seen more or less clearly, it may be more or less differentiated, may appear to be more or less certain and within the control of the person.

A basic hypothesis and four interrelated hypotheses determined the selection of techniques and analytical procedures. These hypotheses are:

I. The subject who has a structured, realistic conception of himself and his life in the future, will also have:

1. a stable history of work and family which guarantees some security with regard to meeting his vital and recurrent needs;
2. a familiarity with a reflective state as a positive thing, with reflection having some place in his daily life;
3. an ability to delay action and to suspend the immediate demands of the environment;
4. an ability to perceive and initiate responsible action.

These hypotheses are capable of investigation and will provide the major organizing points for the analysis of the data. Because this is essentially exploratory research, we will not restrict the analysis to either the hypotheses, or to the differences between the two groups studied, and will consider any information obtained which seems to further our understanding of transcendancy or immediacy as pertinent

to the final discussion.

The first, and basic, hypothesis, then is the existence in the subject's awareness of a conception of himself and his life in the future, realistically conceived as a continuation of his past and present. In the following section we will discuss the manner in which each of the other hypotheses are related to the basic one.

Hypothesis 1. Stable history of work and family which guarantees some security with regard to meeting and gratifying vital and recurrent needs.

For the future to exist in a dynamic way, present vital and urgent needs must not prevail. Hunger, thirst, fear of injury, etc., can become regnant, removing any other considerations, in the most mature and strongest personalities. This has been shown clearly in the studies of Meerloo and Klauber (11), and in the studies of the conscientious objectors conducted in Minnesota during World War II, among others. In these studies, preoccupation with deprivation superseded or distorted all other concerns, after a prolonged period. Anthropological and historical reports of cultures and times in which deprivation has reached a point at which life has been reduced to a struggle to keep alive from day to day also supports these observations. Normal living in our present culture, however, is rarely concerned with life-and-death conflict or uncertainty. While starvation and genuine deprivation of other vital needs are rare, complete assurance of these gratifications is not guaranteed by the culture, either, and a person is expected to accept his responsibility in gaining security in this aspect of living.

The fact that the immediate, vital needs assume regnancy if not

satisfied, provides the first of the conditions which must be established for transcendency to exist. To this end, most men decide on a particular job or profession which provides relative security, and arranges for the routine satisfaction of vital needs. This is often done within the framework of the family, with the man assuming the responsibility for assuring adequate food, while the woman assumes the responsibility of providing the food in a regular, satisfying way. For neither is a life-or-death conflict involved. Under these conditions of routine, eating may play very little part in experiential awareness when more important issues are under consideration; or it may be a source of genuine pleasure beyond merely alleviating an unpleasant state of hunger. With the emergence of the time-spanning ego, and the consequent "degrading" of the recurrent body needs, by which is meant their loss of primacy resulting from the fact of routine, the body becomes a means rather than an end, becoming a focus only at moments of relaxation or pleasurable interludes which have the character of "asides" to the main course of the life purpose; or, always possible, in times of threat or deprivation.

The general schema presented here is similar to that of Maslow (10), who posits five need levels in all, each succeeding level being attained by securing and losing the previous one, in such a way that the first becomes the means to achieving the second. Essentially, this condition may be summarized by saying that for a man to be free to think in terms of a lifetime, he must be free of the immediate urgencies of life.

Hypothesis 2. Familiarity with a reflective state as a positive thing, with reflection having some place in his daily life.

To maintain a conception of the future which directs present action, the ability and the desire to reflect is essential. The individual must be not only free to think, he must want to think. He must be able to achieve tranquil detachment from the world about him, and want to retire to deliberate on the possibilities which appear before him. This means that he must have some way of relaxing in the world during which he is neither compelled by the environment, nor insensitive to its implications.

In line with the preceding discussion, if the cognitive sphere is too conflictful, if there is too much anxiety or guilt feelings, thoughtful deliberation of the future is not possible, and it has been clinically observed that immediacy is characteristic of extremely anxious neurotics and depressed patients. To maintain transcendency, directed toward eventual action in the world, one must be familiar with and positively oriented toward this kind of reflective state.

Hypothesis 3. Ability to delay action and to suspend the immediate demands of the environment.

The two conditions discussed thus far have dealt with the reflective aspect of the transcendent ego. A temporally remote goal cannot, by definition be reached at the moment. Steps may be taken, but not final action; therefore the ability to wait for something, not simply to sit still, and to tolerate tension are required. This means that the person must be able to continue wanting something which he cannot immediately have.

This hypothesis implies that action which is incompatible with the goal intended, or would discharge the tension system prematurely, must be inhibited. The boy who is saving his money for a bicycle cannot achieve this goal if he spends the money for something else; the boy who wants to go to college cannot achieve this if he quits high school to take a job. (This aspect of choice is by no means always a conscious one; it might even be speculated that the more firm the purpose, and the less appropriate the immediate action course, the more likely it is that it will not be consciously rejected. This same rationale is assumed to apply to perceptual selectivity, in the absence of a pressing vital need, that which is the center of attention is most likely to be that which pertains to be that which pertains to the bound tension systems.)

The ability to refrain from action, or to delay, then, is the third condition for purposeful action. Experientially, this involves the ability to wait, to want, to hope, while denying oneself the satisfactions which might be derived from substitute but incompatible actions, and while avoiding other defenses which counteract this state of present deprivation, such as rationalization of failure or rejection, the "sour grapes" attitude, and degrading or criticizing the desired object or state.

Hypothesis 4. Ability to perceive and initiate responsible action.

To realize his personal aspirations, a person must be able to accept himself as a worthy, responsible person who is able, to some extent, to control or to encroach upon his environment. He must be able, not only to delay inappropriate action, but also to take

positive action. He must feel that he has a right to attain the goals he has set for himself and those for whom he has taken responsibility, and to become what he has committed himself to becoming.

If a person cannot place himself in the position of one who initiates responsible action, he will not be nor feel himself to be responsible for the course of his life. He will see himself as a victim of circumstances; his behavior will be largely dictated by his reaction to the immediate field conditions, and he will be unable to predict with any degree of confidence what his future will hold. Responsible action is not merely aggressive action, and it is not synonymous with independence, which may be only defiance, essentially negative in direction. In terms of the data, it is not easy to discriminate statements of defiance from responsibility, so direct operational criteria for this hypothesis did not seem feasible. Since, in our culture, an adult man is expected to take responsibility for his family as well as himself, this seemed to offer a possible area for investigating this hypothesis with less risk of confusion. In the actual analysis of the data, then, responsibility is defined as positive action taken on someone else's behalf.

The basic hypothesis and the four subordinate hypotheses which have been discussed formed the major framework for the study. In the analysis of the data another aspect of the transcendent ego emerged, which is completely in accord with its other aspects. When we have spoken of the consistent self which pervades all aspects of the transcendent person's life our discussion was largely

concerned with the consistency in a temporal dimension. Examination of the data revealed that the transcendent ego was also consistent from one situation to another at the same time. This will be discussed in more detail in the later chapters.

An analogy may well be helpful in establishing the phenomenal properties of the problem under consideration. Supposing you have a two o'clock appointment with someone who is important in your professional life. This appointment is in a city approximately seventy-five miles from your work and you are not able to leave before noon. A situation such as this may well be planned for in advance, involving such steps as making sure that your gas tank is full so that you will not have to make unnecessary stops, possibly eating early and generally arranging your morning so that the time from twelve to two o'clock is as free as possible. If there are several highways between the two cities, your choice may well be made on the basis of efficiency, you may check with the road conditions and recall what you know of the traffic conditions with an eye toward which of the possibilities will be most likely to result in your arriving in comfortable time, so that the choice will be made in terms of the existing purpose of the trip. This purpose will very likely pervade the entire trip, so that the scenery will be of secondary interest, crossroads will be seen merely as possible danger spots, restaurants will have no particular demand value, since there is not enough time to stop, although you might think in terms of wishing you could. Under the conditions described, while there is a determination to continue a steady pace,

resisting or being unaware of temptations to stop, there is still the realization that there is a comfortable enough margin so that unless something unpredicted comes up, the appointment should be kept on time, leaving you free to think about the contact itself, and what it means to you. The drive itself may become merely the means to accomplish your purpose and have very little phenomenal existence otherwise.

The situation just described contains many of the aspects of a course of action which is directed by a temporally remote goal, as has been described above. If a temporally brief section of this behavior sample were to come under the scrutiny of an independent observer who had no access to your phenomenal life, it would be impossible to predict the course of the trip without positing, from inference and at great risk, the goal area.

On the other hand, supposing on Sunday afternoon the family decides they would like to go out for a ride. Perhaps you had something tentatively planned, but had no particular reason for saying either an enthusiastic "yes" or firm "no" to their suggestion. So, for the afternoon, you give yourself over to the wishes of the family, and start out with nothing more than that in mind. The entire character of the trip will be changed, and from the point of view of the independent observer each choice made may be more predictable from a knowledge of the temporally immediate conditions, while the entire course of the trip would have an erratic, aimless quality. On such a trip, each new crossroad may present the group with many apparently equipotential possibilities, and the choice will be

made on the basis of the present situation. A lane may be regretfully passed by because it looks too muddy, another may be pursued because it promises attractive scenery, etc. Your state of being will have a more fluid quality, changing from disappointment in the developments of one road, to delight in the character of the other, to irritation at finding yourself back on a highway. These experiences will be much more directly referable to each moment of the trip, and there may be no transcendent meaning or unity of experience at all; that is, nothing that characterizes the entire trip when it has become a memory.

In the first instance there is an organizing principle which seems to serve as a framework. This makes a unit of the experience, so that even in memory it is recalled as "the appointment with Mr. X". If the goal is compelling enough, or the route familiar enough, the drive under the first conditions may play almost no conscious part in experience or the memory of the experience. In the other situation, the trip lacks coherence because of the absence of transcendent meaning, and what is remembered is what is most compelling at the time, in terms of the immediate situation. Even in this analogy it is possible to show the ever-potential regnancy of the basic needs, since in either case a really frightening "close-call" will stand out.

In most men's lives many things that they do seem to carry a minimum of implication for the future. These are the moments of relaxation, of "Sunday driving", in which they seem to give in to the moment, contrasting with their other activities which are

considered the work of life. This is the irresponsible, as compared with the responsible, the immediate as compared with the remote, and are the moments when one is able to suspend up the control of one's actions and the concern with the future. To the normal person these moments are often pleasant and are an experience of temporarily giving up and relaxing, without threatening the long-range aspirations. It must be kept in mind that it is probable that the pleasure rests in the fact of relaxation or "letting go", and is known only by virtue of contrast with its opposite. If one has not experienced striving toward some goal, one cannot experience giving up. To know the feeling of giving up, one must have something to give up, and, if one does not have the contrast, then any feeling of pleasure becomes impossible. This may be why immediate persons so often describe their lives, as it appears to them, as driven and ungratifying, and are so often described by others as carefree and pleasurable.

## CHAPTER II POPULATION

### RATIONALE FOR EXPERIMENTAL POPULATION

Immediacy is observed in many patients with a variety of symptoms, and a variety of character structures. While there are many other differences in the form of the illness, a common feature of many kinds of mental illness is a temporal foreshortening. In the cases where this is a symptom, immediacy usually appears as part of the change occurring with the onset of the illness.

Because it is not easy to determine the relative role played by immediacy in the behavior of these patients who have undergone a personality change, who have lost contact with reality or who are experiencing acute psychic stress, it seemed best to use another type of patient for this exploratory study. The patients diagnosed variously as Narcissistic character disorders, psychopaths, inadequate personalities, immaturity reactions, etc. characteristically present a history in which there is no evidence of sudden personality changes, and they show no neurotic or psychotic problems. If they seek help, it is most often because of some environmental pressure (family, legal, etc.) or, less often, because they are seeking an escape from the aimless, driven, unrewarding quality of their lives. Rarely is there a sincere desire to change themselves or to work through disturbing problems; usually they consider themselves "cured" when the environmental pressure is reduced.

The most frequent presenting symptom from these patients in a VA hospital setting is chronic alcoholism, and it is from this group that the experimental population for this study was selected. Since

the implications derived from this study will be intentionally generalized to all patients of the larger diagnostic category, regardless of symptom, some justification for this other than our own clinical impressions seems to be in order. That chronic alcoholism is one of the symptoms presented by this broader category of character disorders, and that the personality structure presented by this group is similar in all the essentials is emphasized by most of the clinicians who have worked closely with them, as indicated by the following quotations:

Schilder (15): "My own studies and those of Curan have led me to the conclusion that the alcoholic has a psychological structure very similar to the structure of the cases with social neurosis." (Social neurosis is the term used by Schilder to describe the psychopathies.)

Buhler (2): "In the case of primary alcoholism.....he seems to resemble the individuals who are usually classified as psychopaths or character problems rather than psychoneurotics."

Schaefer (14): "According to our experience the test results of patients who approximate the above descriptions pertaining to Narcissistic character disorders."

With this type of patient, the unstable quality of their lives, and the absence or deficiency of the quality of transcendence as we have defined it, seems to be the major distinguishing feature. It is precisely the dimension in which we are interested which has been most often used to describe the deviations of this group, as seen in the following quotations:

Buhler (2): "In fact, in some cases of primary addiction it seems that the individual has, constitutionally, environmentally, and in his life history, every chance for favorable development. He seems not to be emotionally disturbed as is the psychoneurotic; he does not seem to have conflicts, guilt feelings, anxieties or any of the expressions of inner restlessness that are so characteristic of neurotics...Quite

often he seems to be just too lazy or too weak to make the effort that everyday life requires...(his) predicament seems to be related not to his early history, but rather to the period when he should begin to live life responsibly and on his own...In other words, he has no objectives in life that are strong and interesting enough to induce him to make an effort...Absence or ineffectiveness of the life objectives for which the average person makes average efforts seem to be the problem of the alcoholic...the deficiency seems to consist of: (1) a tension intolerance or an excessive need for relaxation, and (2) an incapacity to conceive objectives so that they become functional as incentives."

Schafer (14): "The essential alcoholics are unreliable, irresponsible, insincere persons, who begin drinking in their teens without significant precipitating factors in reality, never demonstrate sufficient perseverance and desire for mastery to accomplish anything worth while, seldom maintain friendships over long periods of time, are predominantly dependent and demanding in their interpersonal relationships."

Cleckley (3): "The psychopath shows a striking inability to follow any sort of life pattern consistently, whether it be one considered as good or evil. He does not maintain an effort toward any far goal at all...this skein of apparent madness has been woven by a person of (technically) unimpaired and superior intellectual powers and universally regarded as sane..."

To summarize these impressions, and stress those which are most pertinent to this study, the following commonalities may be abstracted:

1. No obvious precipitating cause for either the excessive use of alcohol or the irresponsible, useless pattern of living is observed in the history of alcoholics. This inconsistent pattern is a life-long one, rather than a reaction to later, observable stress.
2. There is an absence of anxiety, or evidence of inner conflicts. By definition, anxiety or guilt feelings are related to those areas in which one feels personal responsibility, not to situations which are perceived as having locus in the outside world; so, while these patients appear to experience tension and appropriate fear, self-localized conflicts are not observed in them.

3. Transiency pervades all aspects of their lives. Almost all descriptions of psychopaths and alcoholics abound with such terms as emotional instability, impulsiveness, tension intolerance, etc. Very often their life pattern is described in terms of easy, unenduring and superficial personal relationships, of nomadic tendencies, and a general absence of persevering behavior. Occasionally this characteristic is directly related to a lack of the capacity for delay.

4. Closely related to the third point, but worthy of separate consideration, is the apparent inability to be organized by the life objectives which give direction to the lives of normal people in our culture. This aspect, emphasized by Charlotte Buhler, is of primary importance for the present study. She states that the problem appears to be related primarily to the period when a person should begin to live life responsibly and on his own. Rather than the beginning of the problem, this is the time at which the difference in personality organization becomes manifest, the time at which the normally developing child begins to assert himself in terms of the person he wants to become, and the kind of life he perceives as desirable and possible, giving up unfeasible dreams which now become a part of childhood.

As mentioned before, immediacy is observed clinically in many patients, in a variety of diagnostic categories. The Narcissistic character disorders, including the alcoholics, however, characteristically present histories which indicate that transcendancy in the terms in which we have described it has always been deficient, while many of the patients in the other categories present histories which suggest that immediacy appeared as a symptom at the time of the onset of their particular illness. Since the four subordinate hypotheses are derivations from the major hypothesis, it follows that if the first and basic hypothesis is negatively demonstrated in the data from the experimental group, the other four will also be negative. The developmental rationale for this assumption will be presented in the final chapter.

The choice of alcoholics for this study was determined, then, by two major considerations: (1) these patients are apparently in good contact with reality, and do not present complicating psychotic or neurotic problems; (2) they appear to represent one extreme of the dimension we are studying, namely, the temporal limits of their effective worlds.

The major difficulty in selecting the experimental subjects for intensive study, was that of securing essential or chronic alcoholics, and avoiding reactive alcoholics. This problem will be discussed in the next section.

## SELECTION OF THE EXPERIMENTAL POPULATION

Admission to the alcoholic program at Winter VAH is determined solely by the patient, or admitting agencies' request. If alcoholism is presented as his problem, treatment is requested, and the patient is willing to accept the terms of treatment as they are presented, he is admitted to the alcoholic ward with no further evaluation until he has become part of the alcoholic program. The application may be voluntary, a legal referral, initiated by the family, or a transfer from another section of the hospital or another hospital.

The alcoholic program at Winter VAH evolved after a two-year research program, during which two hundred patients were studied. When a patient signs for the program, it is with the understanding that the period of hospitalization ends ninety days from the time he enters. As soon as is possible after his arrival, each patient is interviewed, a case history is taken, psychological tests are administered, and physical examinations are given. After all the material is gathered, each patient is presented to staff and a diagnostic impression is reached.

Throughout the three-month treatment, the patients are required to participate as a group in the milieu program set for the ward, which is one of the closed wards, including occupational therapy, gym, library time, scheduled time spent in the canteen, and group therapy. Four treatment modalities are used in the program, and the selection for the patient depends on the diagnosis reached in the staff meeting. Depending on this decision, the patient

may be given antabuse, a drug treatment; hypnotic suggestion; aversion, conditioned reflex type of therapy; or he may receive only the group and milieu treatment. In order to receive other treatment, or longer hospitalization, the patient must be transferred to another ward. This occurs infrequently, and generally where the problem appears to be something besides alcoholism.

From the group of patients who applied and were accepted for admission to this ward after the date this study was initiated, the first fifteen were included in this study, excepting two who were older than fifty. The selection was made prior to the staff conference, so the diagnosis was made, actually, by the patient or the admitting agency. Participation in this research was presented to the patients as optional. There were no refusals.

Table 1 summarizes the pertinent historical material and clinical impressions; it shows that this diagnosis was considered adequate for thirteen of the fifteen subjects, while two appear to fall into the category of reactive alcoholics, with some other problem as a precipitating factor. These two subjects have been retained and are specifically mentioned where their performance differs from the experimental group, and their results are discussed separately.

The ward consisted of twenty-six patients, of which fifteen were the subjects used in this study. This group was described by the personnel working with them as younger, more active and more gregarious than most of the previous groups. They were more friendly, more verbose and more quarrelsome. The relationships formed among the patients seemed to be consistently superficial,

and the staff felt that none of the contacts formed by the patients during this period would continue in a meaningful way after the group left the hospital. During the three months period several incidents of violations of the ward rules occurred, and the patients involved were sent for short periods of time to other, more restricted, wards on the same section of the hospital. Few of the patients in this total group were considered to have received lasting therapeutic help, and in most of the cases the prognosis was poor or guarded.

## CHARACTER OF THE EXPERIMENTAL GROUP

The pertinent case history material obtained from the experimental group has been summarized in Tables 1 and 2. Additional information which seems important will be discussed separately in this section, and used to augment the tables.

The age range of the experimental group is, with two exceptions, between 27 and 39. This age range was chosen deliberately, since it was hoped that within this range would be found the optimum balance between the stability expected in the older persons, and the striving, purposefulness expected in younger men, and keep to a minimum the "might-have-been" kind of thinking.

All of the subjects except Wi finished grade school, five of them completed high school, and three probably had some college education. This supports the clinical impression that all of the subjects were of average intelligence or better.

Only two of the alcoholic group can be considered to be stably married at the present time (Bri and Gra). Many of these patients came to the alcoholic treatment program after having family difficulties, expressing the hope that they could return to their families on the basis of being "cured". Three of the subjects have never been married, and three have been married twice. Generally, the table reveals extreme instability in this area, compared to the normal subjects. The impression the investigator formed of most of the patients is that marital instability is one manifestation of a more general instability, and that it is paralleled in the other areas of life. In the case of Ce, one of those diagnosed as reactive

alcoholism in a depressed personality, the loss of his family appears to have precipitated or greatly exacerbated his neurotic problem.

Instability is seen in the work history. Nine of the alcoholics show a history of many and highly varied jobs. Ca boasts of having obtained over two hundred jobs in the last few years, and of being fired only once. Sh has held an average of ten to twelve jobs a year since his release from the army, including such diverse work as farming, mechanic, laborer and short order cook. Of the four who state their intention to return to the same job they had before entering the hospital, three will return to work which is itinerant and independent. Six of the subjects have a history of professional stability, the others have held a wide range of jobs.

The results of the combined clinical impressions presented in conference are important, particularly in certain of the cases. Table 2 summarized those which are important and pertinent. Two of the subjects, as mentioned, were considered reactive alcoholics rather than essential (Ce and Heaf). Six of the others had a history of other kinds of antisocial behavior, and this number is minimal since it depends entirely on the patient's own account of his history, unless he had been previously hospitalized.

## SELECTION OF THE CONTROL POPULATION

The control subjects were selected from the surgical and medical patients at Winter VAH. The following criteria were used in their selection:

1. The patient must fall within the age range of 20-40, and be of at least average intelligence.
2. The patient should be in a position to anticipate release from the hospital in approximately three months, at least.
3. No patients with severe, chronic, or permanently disabling illnesses were used. One patient (Bu) was accepted despite a mildly handicapping arthritic condition, because it was felt by the physician in attendance and by the experimenter that his condition was not disabling.
4. No patients with illnesses likely to have psychosomatic involvements were included; no ulcer, colitis or diabetes cases were used, and only the single, mild, arthritic patient.
5. The patient should not impress the physician as having any severe psychiatric problem. Since none of the patients were seen by psychiatrists and only limited medical histories were taken by the staff, this had to be left to the judgment of the internist or surgeon in charge. As a consequence, two of the patients disclosed, during the brief history taking which preceded the testing situation, previous psychiatric treatment, but these two cases (Ha and Pa) were included because of the difficulty of obtaining control subjects, and because they seemed to fall roughly within the normal range at the present time.
6. The structure of the research provided a final criterion. Because these patients were in the hospital for medical reasons only, and no recompense was offered for their participation, cooperation was entirely voluntary. Many subjects who satisfied the other criteria, declined, and this refusal was honored without further urging.

The first two criteria were an attempt to match roughly the experimental group. The others were an attempt to obtain a relatively stable, productive group of normal subjects. Less rigid standards of

selecting control subjects were used than we had hoped to use, but it was felt that the comprised would in all cases tend to skew the results towards an elimination of differences rather than increasing them. What implications these differences may be assumed to have will be considered in the discussion of the character of the subjects who cooperated.

## CHARACTER OF THE CONTROL POPULATION

Table 3 summarized the case history material which is pertinent for this study. This material was gathered by the examiner, since no psychiatric histories were available for these subjects. The control subjects were hospitalized for the following reasons: tonsillectomy, wrenched shoulder, appendectomy, hemorrhoidectomy, infectious mononucleosis, and arthritis (1). Most of the patients were convalescing from their illness at the time of testing.

As a group, the control subjects are slightly younger than the experimental subjects. All of the control subjects fall within the range of 24 to 37 years, with only one subject older than thirty-five. Ten of the alcoholics fall within the range of 25 to 35 years; the other five are older than 35. This difference was an unintentional result of the patients who were available during the period of testing.

As seen in the table, most of the control patients had finished grade school, and only one gave any indication of schooling beyond high school. As a group, the alcoholic subjects have a higher incidence of high school graduation and some college attendance. This is in line with the impression of the experimenter that, of the two groups, the alcoholic subjects have the higher intellectual level.

A comparison of Tables 1 and 3 reveal that the control subjects had much greater marital stability. All but three of the subjects are married, with established families to which they expect to return. Of the three exceptions, the youngest has not yet married, but hopes

to soon, one is temporarily separated from his wife, and the other, divorced, hopes to remarry soon.

The tables also reveal much greater stability in the occupational area for the control subjects. Ten of these patients expect to return to jobs they held for years. Seven of the subjects are independent, either farming or owning their own business, but none of them are itinerant. Of the four alcoholic subjects who indicate their intentions to return to the same job they held before coming in to the hospital, three hold itinerant jobs. The greater stability of the normal subjects is also reflected in the comparison of the number and range of jobs held in the past by the patients in the two groups. As will be discussed in greater detail in the section on the Future Autobiography, those of the normal subjects who indicated their plans to change jobs had definite ideas about what they intend to do, and showed a stable work history.

Subject	Age	Educ.	Present Status	Number Mar.	Dur- ation	Children p	a	Plans
An (c)	27	11	sin	0	0	0	0	get m.
Bra	33	12	div	2	6	0	0	ind
Bri	28	11	mar	1	6	3	0	ret
Ca	30	8	sep	1	1	0	0	ret
Ce	32	9	sep	1	5	0	5	ret
Gra	44	14	mar	1	20	2	0	ret
Heaf	37	9	sep	2	1	0	2	ret
Hen	29	11	mar	1	3 days	0	0	ret
Jo	37	8	sin	0	0	0	0	get m.
Kel	58	12	div	1	35	0	2	ind
Lam	30	12	sep	1	7	0	1	ret
Sh	30	9 $\frac{1}{2}$	sin	0	0	0	0	get m.
St	39	10	div	2	2	0	3	indef.
Th	30	16	sep	1	6	0	1	indef.
Wi (c)	30	7	sep	1	1	0	1	ret

A. Table of the marital situation and family associations of the Alcoholic subjects.

Subject	Present job	Status	Plans	Duration	Average tenure
An	laborer	emp			brief
Bra	com. art	ind			six mos.
Bri	mach. retail	mgr	ret.	7 yrs.	long
Ca	bridge	itin	ret.		brief
Ce	laborer				brief
Gra	linotype	itin	ret.	by job	by job
Heaf	laborer	emp		7 yrs.	
Hen	farmer	emp		brief	brief
Jo	const	itin			
Kel	roofer	itin	ret.		stable
Lam	lumber retail	mgr		7 yrs	stable
Sh					3 mos.
St					1-2 yrs.
Th	electronics foreman			2 yrs	
Wi	laborer				brief

B. Table of the job history and present status of the alcoholic subjects.

Table 1. Summation of the material from the case history material of the alcoholics which was felt to be pertinent to the study.

Subject	Age	Educ	Present Status	Number Mar.	Dur- ation	Children p	a	Plans
Bro	29	12	mar	1	5 yrs.	2		same
Bur	24	11	mar	1	2 yrs.	1		same
Cam	31		mar	1	5 <sup>1</sup> / <sub>2</sub> yrs.	3		same
Co	26		mar	1	4 yrs.	1		same
Har	32		mar	1	12 yrs.	2		same
Hei	24	8	sin	0	0	0		get m.
Jo (o)	33	12	mar	2	1	1		same
Leo	32	12	mar	1	9 yrs.	2		same
Par (c)	29		sep.	2	3 yrs.	1		reunion
Pot	27	12	div.	1	7	1		same
Ul	31	13	mar	1	2	1		same
We	37		mar	2	3	1		same
Yo	34	11	mar	1	13	1		same
Zw	25	12	mar	1	5	0		same

A. Table of the marital status and family associations of the Normal subjects.

Subject	Present job	Plans	Duration	Status
Bro	hosp. aide	ret	7 yrs.	employee
Bur	electrician	change	15 mos.	employee
Cam	cook	ret	7 yrs.	employee
Co	barber	ret	4 yrs.	emp
Har <sub>1</sub>	farmer	ret	7 yrs.	independent
Hei	farmer	change	3 yrs.	independent
Jo (o)	beef caser	ret	9 yrs.	employee
Leo	farmer	ret	5	independent
Pa (o) <sub>2</sub>	fireman	ret	1	employee
Pot	factory	ret	7	emp
Ul	farmer	change	1	independent
We	farmer	ret	3	independent
Yo	cafe	change	6	owner
Zw	feed store	return	5	owner

B. Table of the marital status and family associations of the Normal subjects.

1 - Ha had a history of having once received electrotherapy for a depressed episode.

2 - Pa had received treatment for alcoholism when he was in the Navy.

Table 2. Summation of the material from the case history material of the normal subjects which was felt to be pertinent to the study.

Subject	Diagnostic Impression where pertinent	Other symptoms	Precipitating Incident
An (c)			
Bra			amnesic episode
Bri		addiction	
Ca			
Ce	depressive		transfer from hosp,
Gra			arrested for alc.
Heaf	pre-psychotic		had been drinking at time he applied for help
Hen		check forging	threat of life sent
Jo			
Kel		legal brushes	
Lam			wife left
Sh		suicidal attempt	
St			
Th		suicidal attempts	
Wi	schizoid	legal brushes	

Table 3. Information from the diagnostic conferences on the individual alcoholic subjects which was felt to be pertinent to the present study.

## CHAPTER III PROCEDURE AND METHOD

### Rationale of Method and Procedure

In selecting the techniques to be used in this study, economy of statement and objectification of data was deliberately sacrificed in favor of a less rigorous and more frankly exploratory approach. Since there was little experimental precedence for the kind of study proposed, it was not possible to make use of well-standardized techniques. Because of the difficulties inherent in presenting qualitative material simply and clearly, and because of the breadth of the problem being considered, it seemed best to focus on the major differences between the immediate and transcendent attitudes, in the present study this means a focus on the differences between the two groups. It is hoped that the implications of the specific findings might be more thoroughly studied in subsequent work.

Another general bias which helped to determine the final selection of techniques used, was an emphasis on informality and freedom in gathering the data. Because the goal was to attain as complete and candid a picture as was possible of the patient's world as he saw it, it was felt to be very important to keep the interview and the tests as informal and accepting as possible. An attempt was made to achieve maximum rapport with the patient after which the same interview or test procedure was adhered to in each case. The variations as well as the more rigid aspects of each of the situations will be described in more detail in the following discussion of the rationale and final form of each of the

final study.

Essentially, the design was to select a group of patients in whom immediacy appeared to be a major clinical characteristic and contrast the performance of these subjects with a comparable group of normal subjects in as wide a sampling of situations as seemed feasible within the scope of one study. All of the techniques used were chosen in accordance with the original hypotheses; they were adjusted for administration on the basis of experience in a preliminary pilot study. A more detailed description of each of the four techniques that were used, and the reasons for using them, follows.

Future Autobiography: This technique appears to have been introduced by Israeli (8), and was used to investigate the conceptions of the future held by patients of various nosological categories. Our pilot study using this technique indicated that a more structured approach than his yielded more information from our patients. As a result of this study, a set of directions was evolved which seemed to elicit more comprehensive data without interfering with the subject's spontaneity, and which provided data which could be more readily analyzed. The subject was asked for a verbal description of his life in the future at five specific dates (1955, 1957, 1959, 1963 and 1967), and to include comments on his family, his occupation, his financial situation, his social life, and his hobbies at each date. Each complete protocol contained twenty-five response units. It is not easy to determine the influence of this increased structure on the responses in comparing

them to the results obtained by Israeli, but as the instructions were consistent throughout this study, these changes make no difference in comparing the results of our two groups. A sample protocol from each of the two groups has been included in the appendix (p. 180), and reference to this material may make more clear the nature of the data obtained.

This material was analyzed in a number of ways. (1) A comparison of the protocols was made in terms of the number of response units contained in the complete description, thus affording a measure of the quantity and differentiation of description offered, (2) those remarks which seemed to indicate the groups' attitude toward the task presented were abstracted and compared, (3) four rating scales were devised, (4) the instances of responsible action on another's behalf which occurred in the protocols were tabulated and compared, (5) the amount of interrelationship among the response units, measured by the instances of plans occurring in more than one context. (For example, if a subject replies, regarding the area of finance, simply that he hopes to have saved more money by that time, no interrelationship is evident. If he replies that certain improvements regarding his work will allow him to put aside more money toward his son's education, the area of finance is apparently and specifically interrelated with both occupation and family.)

These methods of analysis will be described in more detail in the data chapter, and the further discussion here will be limited to a description of the rating scales.

The four rating scales were devised on the assumption that normal subjects have a conception of the total pattern of their lives that can be described in specific, realistic detail, and that the description will have the quality of continuing logically from the history and present situation, and will develop throughout the temporal span. The immediate subjects, on the basis of the hypotheses, should be much less able to give this kind of description. Their protocols should be characteristically more vague and less realistic, and they should express their perceptions of the future either in terms of nonchanging extensions of the present, since the immediate is real and known, or in terms of many equipotential possibilities. A further assumption, since we are investigating what we assume to be accepted ways of life which are not questioned by the subjects, is that an investigation of the verbalized uncertainty of their responses regarding the future would show little group differences.

Following the above reasoning, the four scales were devised. The scales are given in detail in the data chapter, and in the appendix (p. 49), and to avoid repetition, they will be described here in general terms.

The first scale was designed to give a quantitative statement of the amount of change and of the amount of continuity expressed in the protocols. The scale was graded from maximum change to maximum stability (or, from minimum stability to minimum change), so that the middle scores were given according to the amount of development or changes which are delineated within a stable framework.

The extreme scores represent either a break in the continuity, or statements of static continuation.

Because this scale is the most complex, and the experimenter experienced more uncertainty in scoring this scale, it was selected for a reliability study. A comparison of two independent raters, on the basis of twenty-five judgments of the normal group and twenty-three judgments of the experimental group yielded a chi square correlation of 129, which is significant on the .01 level of confidence. The detailed reliability study is given in the appendix,

The second scale was designed to give a quantitative statement of the amount of uncertainty expressed by the subjects as they verbalized their descriptions. This score was given entirely according to the patient's statements, and involved the judgment of the examiner to a much lesser degree than did the scale of change. The scale ranges from statements of complete confidence through the more usual remarks of probability (such as, if nothing happens that I can't anticipate, I will....., etc.) to complete uncertainty (such as, I haven't any idea, I have no way of telling).

The third scale, of specificity or detail, ranged from extremely elaborate descriptions (in terms of details given) to global, undifferentiated statements. This dimension is somewhat involved in the first scale, but the overlap is not complete, since it is possible to be highly specific without the quality of development.

The fourth, and final, scale used in this part of the analysis was designed to quantify the degree of reality which characterized

the descriptions of the subjects. This scale required a judgment of the probability of the future occurrences which the subjects described. This judgment was based on what was known of the patient's history and present situation, and upon the inclusion of reasonable steps or plans. As an example, the statement, "I shall be financially secure by then" would be judged less realistic than the statement, "I should have some money in reserve by then. I make a deposit each month, and will still be doing that.", etc.

In addition to the rating scales, and the other methods of analyses mentioned before, each of the areas suggested (finance, family, occupation, social and hobby) are discussed separately, with many quotations from the protocols. This discussion seemed pertinent because this technique has been used little, and the data seemed to produce a great deal of information and insight into the roles played by these areas in the lives of the individuals, as well as the ways in which the two groups differ. This treatment also offered an opportunity to study the temporal development of each of the areas apart from the whole, and the integration and organization of the areas within the whole.

The analysis of the data obtained in this study was at all times directed by the problem under investigation; many aspects of the data, important in other contexts, have not been analyzed. For this reason, one complete protocol from each group of subjects is presented in the appendix. These protocols will indicate to the reader the richness of the data provided by the future autobiography technique.

Inquiry into Reflective Thinking: Originally, this part of the procedure was an attempt to investigate differences in the groups with reference to the hypothesis which predicts a difference in the role of reflective thinking in the daily lives of the subjects. In the pilot study it became apparent that the Inquiry, produced data that was applicable to the problem in many other ways. The final form of the interview was structured around four questions which were kept in mind by the interviewer, and asked when they were not answered spontaneously by the subject.

One question, asked all subjects, concerned the kinds of thoughts which occurred to the subject when he was not active with anything else; another asked whether he preferred thinking or acting; a third question asked for an example, from his own thinking, of worry, plans, and daydreams (after these had been defined); and, finally, the subject was asked to indicate which of the three kinds of thinking he thought was most characteristic of his thoughts.

The assumptions behind these questions were that reflection, particularly of the daydreaming kind, and motor action are anti-thetic, that the immediate personalities do not reflect and tend to be unable to delay action. The pilot studies and our own thinking suggested that worry, planning, and daydreaming have different future reference points. It was hoped that by obtaining specific examples of each from each subject it would be possible to determine the temporal dimension of each of these in the subject's phenomenal world. It was hoped, further, that the statement with regard to

which of the three kinds of thinking the subject felt was most characteristic of him would indicate the dimension with which he felt most comfortable.

Work with the data of the Inquiry suggested two other analyses which yielded results applicable to the problem under investigation. One pertained to the hypothesis regarding responsible action on another's behalf. Since this was not probed directly, reference to it seemed to assume increased importance, and to add supportive evidence regarding the subject's views of his responsibility in the area of the family in the Future Autobiography. Analysis which yielded further information was based on the fact that many of the examples given in the Reflective Thinking protocols reappeared at different temporal intervals in the Future Autobiography, in many instances being actualized at temporally distant points. Investigation of this provided additional evidence regarding the temporal implications of worrying, planning and daydreaming, and regarding the degree of integration and organization among the areas of the Future Autobiography.

Because the data are not lengthy, and it is felt that the protocols resulting from this inquiry give a very interesting picture of the differences between the two groups, as well as interesting sidelights on the ego processes, the protocols resulting from the Inquiry into Reflective Thinking are included, in toto, in the appendix (p. 135).

When Questions: In both of the preceding techniques the investigator directed the subject's attention to the subject's

own behavior. In asking the subject to make up ten questions beginning with "When" or "How long", the investigator allowed the subject to choose "personal" or "impersonal" questions. In the analysis, the frequency of occurrence of these two references was determined. Each subject was asked to estimate the probable time of occurrence of the event or state of affairs to which each question referred. These times were used without any changes throughout the tabled results. The subject was also asked to estimate the degree of certainty he felt regarding the answer to the question he had asked. He was asked whether he felt "positive, moderately sure, or not at all sure"; these responses represented points 1, 3, and 5 on a five point scale evolved to quantify the data. The other two points on the scale were, for the most part, used for compromises made by a subject between two of the three alternatives. Finally, the subject was queried regarding the amount of control he felt he had over the issue of the question he had raised, and the answer he had given. He was asked whether he felt that it was completely in his control, moderately in his control, or not at all in his control. The answers were rated, accordingly, 1, 3, or 5; or if they were obviously a compromise between two clear ratings they were rated 2 or 4.

In the analysis of the questions, the number of spontaneous past tense questions was counted, and the incidence of past reference for the two groups compared.

Stroop Test: This perceptual test requires, in the final situation, that the subject ignore the color-word as it is written,

and respond orally with the different color of the ink in which the word is printed.

(In this test the subject is asked to (1) read rapidly through a sheet of typed color words (2) name rapidly the names of colors in which X's are printed, and (3) read rapidly the names of the colors in which different color words are printed.)

One sample of comparative data which was on a different level than those described thus far was needed to achieve the goal of obtaining as complete a sample of responses as was feasible within the scope of one study: By using the Stroop test, we were able to secure data on the flexibility of the subjects in a relatively peripheral aspect. Our thinking was that the immediate personalities, who bring the least amount of "self" to any situation, should be better able to perform in a situation demanding that they adopt a new "set" which conflicts with an old, well established one.

Case History: The material gathered in the initial interview combined with that from case histories taken by the psychiatrists, and the conference decisions has already been presented in the chapter describing the population.

This material provides some basis for judging the stability and consistency of the patient's adult life, and the continuity of his present and future plans.

In summary, each subject's cognition of some phases of his past, his present, and his future were obtained from the case history material, the Inquiry into Reflective Thinking, and the Future Autobiography, respectively. The When Questions allowed the patient

to indicate his preference for the past or the future, and the Stroop test provided data on his way of coping with a conflict between stable, persisting modes of behavior and opposing influences in the immediate situation. This by no means exhausts the approaches possible, but does offer the opportunity to study the immediate and transcendent aspects of personality in a variety of situations.

## Administration

The procedure with each subject was as uniform as the situation would allow. Initially, it was explained to all subjects that this was a research project, and that it involved answering a lot of questions which were difficult to explain in advance, but that it differed from the usual psychological testing. Often this explanation was given in response to the subject's questions.

To the experimental subjects, who were psychiatric patients, it was explained that any impression which the psychologist felt would be helpful in understanding his problem would be communicated to his doctor. This seemed the best approach, since the experimenter was also one of the clinical psychologists working with these patients during their treatment period subsequent to the gathering of the data. To the control subjects it was explained that in psychological research it was usual to obtain comparable data from normal subjects which would serve as a baseline for the group which was being studied. In all cases it was explained that while cooperation would be appreciated, the choice remained with the patient, and that it would not effect his course of treatment in the hospital. Also, it was mentioned that if he had any questions or objections to any of the questions that he should feel free to mention them at any time. In brief, an attempt was made to make the patient feel free to object at any point, or to reverse his initial decision to participate, since the nature of the questions asked required genuine cooperation and ease in order to obtain the material sought.

None of the foregoing comments on the part of the examiner were stereotyped. For the most part they were inserted as naturally as possible in the beginning of the interview, and adjusted to any doubts or questions the patient expressed.

With the exception of two of the control subjects, whose therapeutic schedules conflicted, the tests were administered in two appointments, each lasting between an hour or an hour and a half, depending on the patient's pace.

First Session: After the patient's cooperation was obtained, a brief period of questioning him about himself and his history was inserted before the testing situation itself. This served three purposes: a) it allowed the examiner the opportunity to establish a comfortable relationship, b) it provided an easy way of obtaining the case history data, c) it allowed the examiner to obtain an impression of the patient's reticence or candor in the situation, and the attitude which he expressed toward the questioning, so that maximum rapport could be established in the testing situations.

Following the history taking, nine TAT pictures were administered. The standard instructions were given, and presented to the patient in typed form to serve as a reminder. The standard inquiry followed the spontaneous story. This material was not used in this study, and is included here only in order to present as accurately as possible the sequence followed in the total testing period.

The final part of the first testing session consisted of asking the subject to make up ten questions beginning with "when" or "how long". In reply to questions, it was added that the questions

could be about anything at all, and that the patient did not have to use the adverbs equally frequently. After the patient had given the ten questions, if he had given some that referred to the past, he was asked to give as many more as needed to total ten questions which referred to the future; for example, if the question was "When was this hospital built", he would be asked to make up another question which referred to the future, to replace it. After all the future questions had been obtained, the subject was asked to estimate; (1) in terms of time, an answer to his questions, (2) indicate how sure he was of the answer, (3) and whether or not he felt that he had any control over the action implied in the question. Often a subject's answers did not correspond to the examiner's impression of the situation, as when a subject answered that he had no control at all over when he would leave the hospital, but this was not raised unless it was felt that the patient did not understand what he was being asked to do.

Second Session: The second appointment usually began with a brief conversation, generally directed by the questions or comments the patient volunteered. The topics varied widely from a discussion of a subject's "scores" to comments on pictures of his children.

The testing situation started with an informal inquiry into the characteristics of the subject's thinking during inactive periods. The inquiry was initiated with a deliberately unstructured question, phrased in more or less the following manner; "Usually, when people are sitting around not doing anything, thoughts go through their minds. For example, before going to sleep at night

there is usually a period during which you lie awake thinking. I would like you to give me a general description of the kinds of thoughts that go through your mind at those times." The patient was encouraged to give as complete a spontaneous report of his thinking as possible, before more direct questions were asked. In general, the following questions were kept in mind, and asked unless they were answered spontaneously: (1) Are you the kind of person who feels he must keep busy most of the time, or do you sometimes like to just sit around thinking? (2) Thinking can be arbitrarily classified into three kinds; (a) planning, the kind that occurs when there is something you intend to do and you plan how you will do it; (b) worrying, bothersome thoughts that go through your mind, about which you can do nothing; (c) daydreaming, pretending, imagining the world as you would like it to be? An example of each from the subject's own thoughts was secured whenever possible. (3) Finally, the subject was asked which of the three kinds of thinking he thought he did most frequently, or what was most characteristic of his thinking. All the answers were recorded as completely as possible, without interfering too much with the spontaneity of the answers.

The next test administered was the modified form of the Future Autobiography technique. The directions given to the subject were: "Now I would like you to describe yourself and your life in the future, as you see it. On this card (presented at this point) are the dates I would like you to consider. First, 1955, which is two years from now, then 1957, two years after the first date and four

years from now, and so on. In this description, I would like you to mention the aspects which are listed on the card. It isn't necessary to mention each of these for each date, but keep them generally in mind during your description." The directions were repeated or paraphrased if the patient did not seem to understand, or asked questions.

The card presented to the subject contained the following information:

1955	occupational
1957	family
1959	financial
1963	friends and social groups
1967	extra-vocational activities (hobbies)

Any questions the subjects asked were answered where there was no direct suggestion as to content involved. If the subject was extremely hesitant, or apparently unable to comply with the directions, as in the case of many of the experimental subjects, some questioning or urging was included, after the spontaneous description had been finished.

The final testing situation consisted of the Stroop test. In the three parts of this experiment the subject is instructed: (1) to read rapidly and steadily through a page on which are type-written, in random order, the names of colors; (2) to read rapidly and steadily through a page of randomly distributed, differently colored X's, by naming the colors; (3) to look at the final sheet which consists of the words from the first page printed in the colors of the second page, and to read the name of the color, not the word, as rapidly as possible. The time was recorded for all three

performances, and the patient was asked to describe his experience in reading the final page, with particular regard to whether he experienced the task as getting easier as he proceeded, or continuing to present as much of a problem at the end as it did at the beginning.

## CHAPTER IV PRESENTATION OF THE DATA

The data obtained from the patients with regard to their histories has been presented in Chapter II, because it seemed indispensable in the description of the population selected for this study. With this exception, all the data gathered in this research will be presented in summarized form in this chapter. The raw data from the Reflective Thinking Inquiry, and two samples of the Future Autobiography protocols are included in the appendix.

This chapter contains the data from the Future Autobiography, the Inquiry into Reflective Thinking, the When Questions and the Stroop test, presented in that order. The primary emphasis throughout the presentation is the comparison of the normal subjects and the experimental subjects with regard to each aspect of the data studied. The data from all the techniques is summarized and integrated in the final chapter, and the conclusions and implications which have emerged are discussed there.

## CHAPTER IV PRESENTATION OF THE DATA

### Future Autobiography

#### PRODUCTIVITY

From analyses of the data from the Future Autobiography, the most apparent difference between the alcoholics and the control subjects was the presence or absence of a conception of their lives in the future, which was consistent with the prediction from the basic hypothesis. Figures **I** and **II** present graphically the difference between the two groups, in the amount of data about the future which is produced by the two groups. In these figures, any material which was elicited from the subjects, no matter how sparse, is presented in the appropriate response unit.

The absence of ideas of the future in the majority of the alcoholic subjects is striking. More than half of the alcoholic subjects do not show any reference to any of the response units beyond the first temporal period, and the productivity of those who went beyond decreases rapidly through the following periods. While several of the control subjects failed to give all twenty-five response units, none of them failed to give some picture of his life in each of the temporal periods suggested.

#### ATTITUDE

The attitude of the alcoholics when asked to describe their lives in the future is, perhaps, best presented in their own words:<sup>1</sup>

1. In each of the quotations cited throughout this section, the first few letters of the subject's name will be used for identification, and the date of the temporal period quoted.

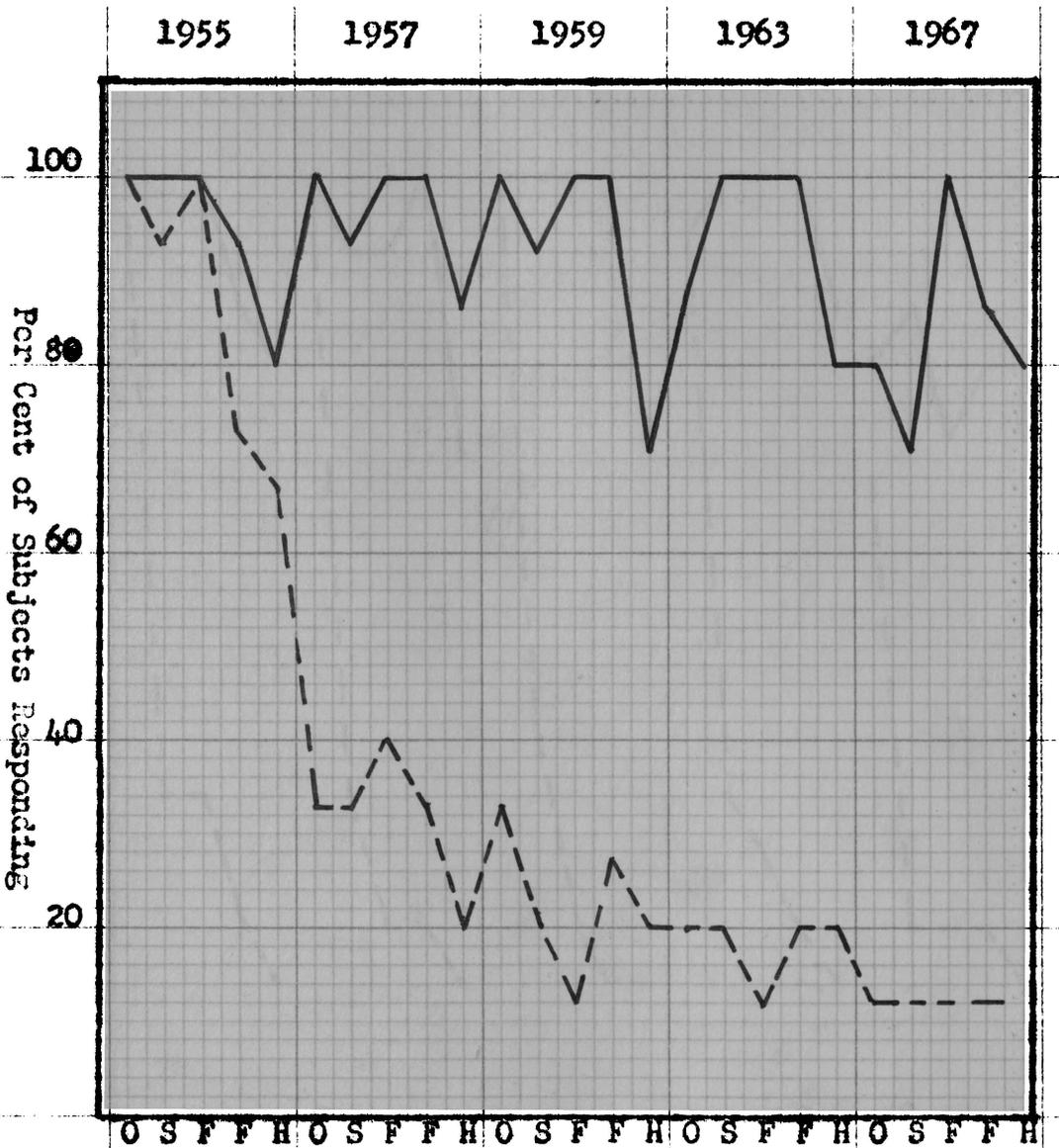


Figure I Compares the productivity on the Future Autobiography in terms of the per cent of each group who described each of the five areas (Occupation, Social, Family, Finance, Hobby) in each of the temporal periods, over the entire fourteen year period. The percentage of Normal subjects is shown in the solid line, the Alcoholic in the dotted line.

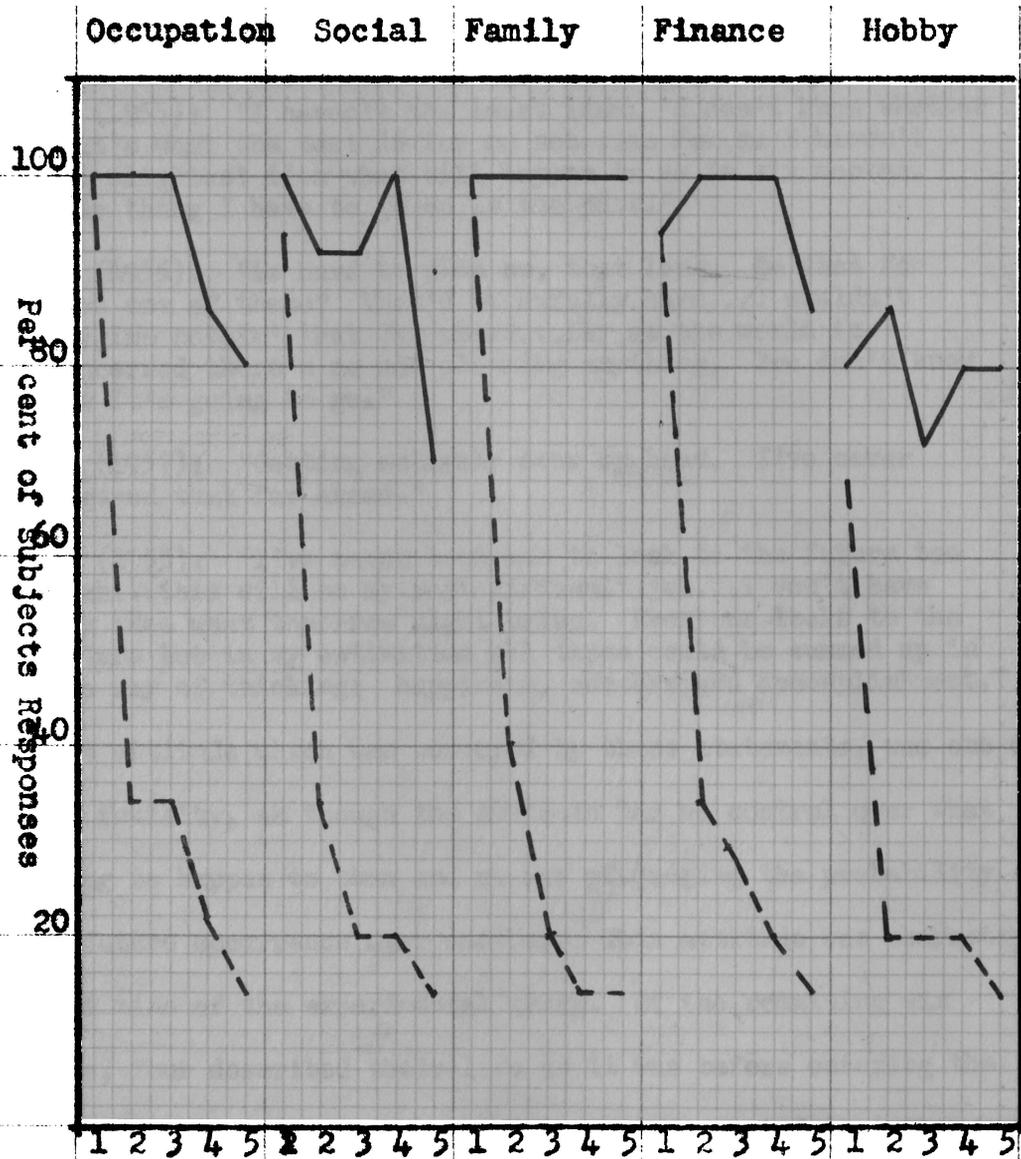


Figure II. Five graphs comparing the per cent of the alcoholic subjects with the normal subjects who described each of the five areas in each of the five periods (1, 2, 3, 4, 5 represent 1955, 1957, 1959, 1963, 1967 in that order). The alcoholic subjects are shown in the dotted line, the normal subjects in the solid line.

St (1957): "Gee, I wouldn't have the least idea. Just haven't planned that far ahead. Things change too much to plan that far ahead...you wouldn't know what...plan one thing and something else happens."

Sh (1955): "I haven't the least idea. I don't know whether that's what the test is for or not...as for me I haven't the slightest idea what will happen to me in six months. Only thing I have to go on is the past."

An (1955): "Be hard to plan on, that long. Do that for each one of these? That'd be awfully hard...I couldn't imagine nothin' that far ahead...far as the world is concerned there's no use planning anything. You don't know how it's going to go."

Ke (1957): "Getting entirely over my head. I've never figured that far ahead."

La (1955): "I've never been one to look to the future too much...this will be my most difficult job...I don't have any idea what tomorrow might bring. Everyone looks to the future but in my estimation all those could be summed up in one way of thinking: happiness, success and accomplishment."

The attitude which was conveyed by these statements, was one of passive futility, as though the subjects had no control over what was going to happen to them and no way of judging the probability of one future occurrence over another. This attitude was characteristic of nine of the experimental group. Of the remaining six subjects, four described their life as it was before entering the hospital and to which they expected to return, stated that they could see no change, or only one or two changes (such as having another child, reaching the age of retirement, or changing job location) throughout the entire fourteen year span. Only two of the alcoholics (Heaf and Th) accepted the task of describing their future as though it was something they should know something about, neither protesting their inability to predict, nor maintaining that there would be no change from the present.

The normal subjects characteristically accepted the task as a reasonable one, occasionally expressing initial protests over the amount of work involved. While there was some difference in the degree of confidence with which they described their futures, and a difference in the candor with which they offered their descriptions, at no time did they give the impression that this was a subject on which they could not be expected to have ideas. The most frequent response was a matter of fact acceptance of the directions, with few comments. For this reason, the protocols of the normal subjects do not yield quotations which parallel those used in the description of the attitudes of the experimental subjects.

#### RATINGS

The results of rating the Future Autobiography data are presented graphically in Figures 3-43. Because of the highly variable nature of the data and its unique patterning for almost every subject, it was felt best to present individually the scores on each of the four dimensions (change, certainty, reality and specificity) for each of the response units. The rating results for each of the areas is presented separately, so that the graphs show the trends of the rating dimension for each of the areas throughout the entire temporal span. Again, because of the peculiar variability of the data itself, and because the equality of the points on the scales cannot be assumed, the use of means did not seem justified. Wherever, in the discussion, it is desirable to refer to a central tendency, either the modal score is used or

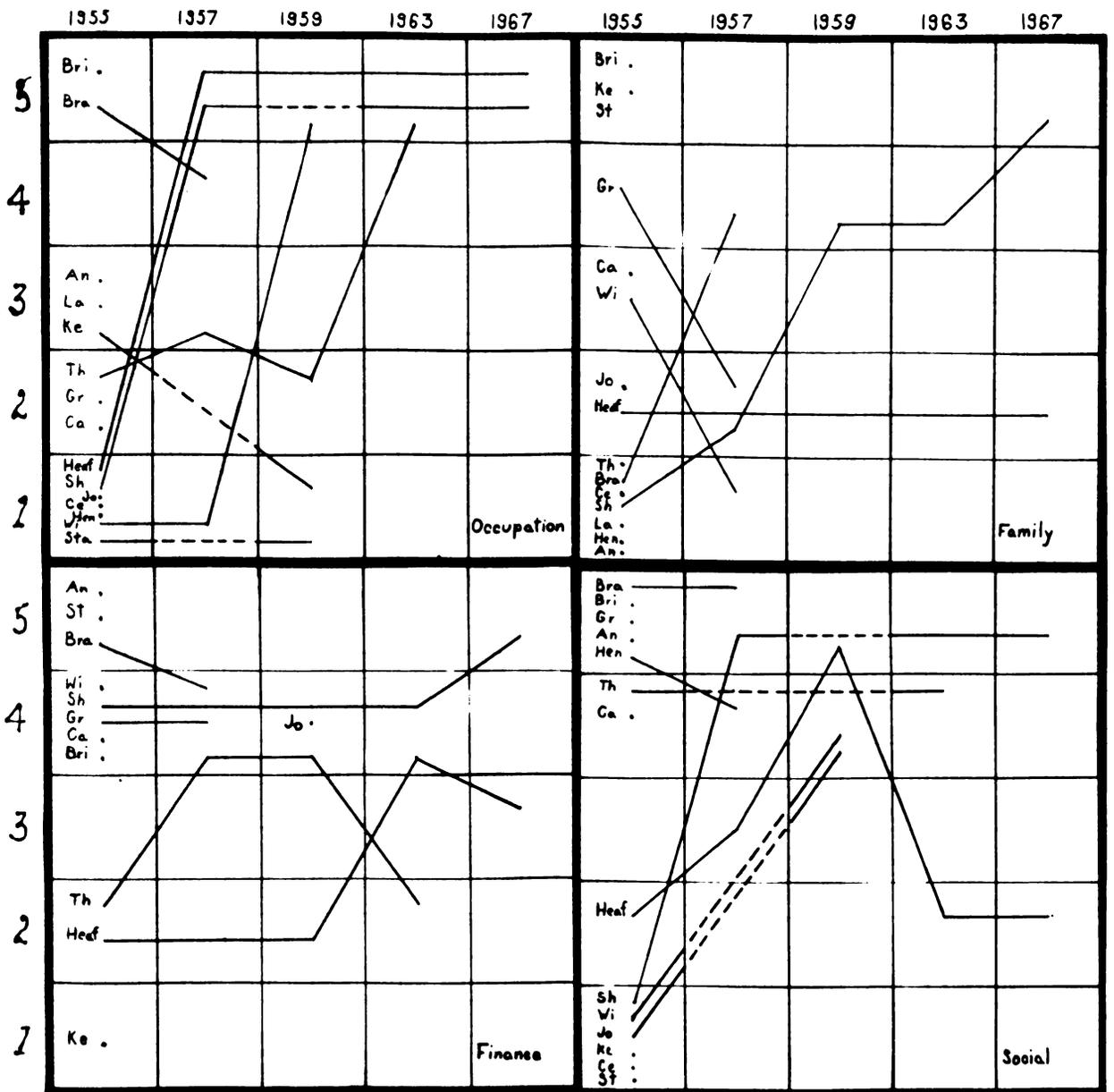
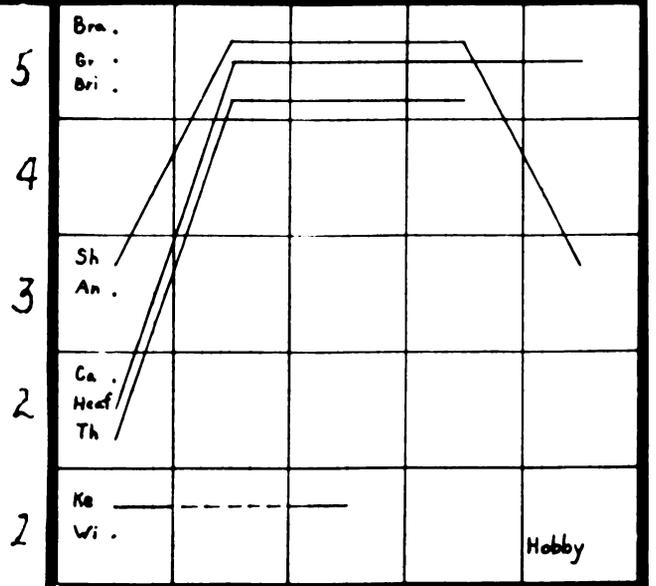


Figure III  
 The presentation of  
 the individual ratings  
 of the Alcoholic  
 Subjects on the  
 Change Scale

Future Autobiography



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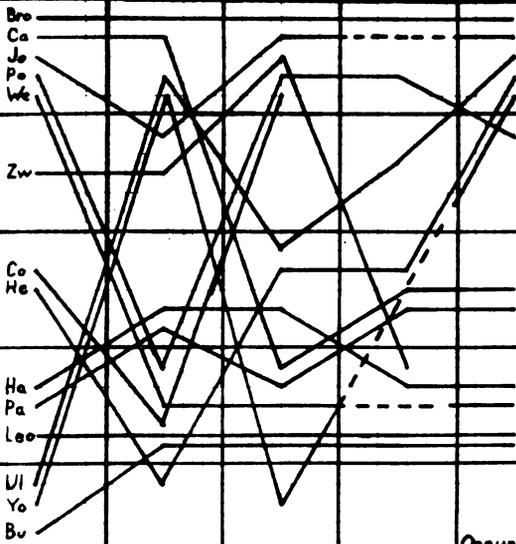
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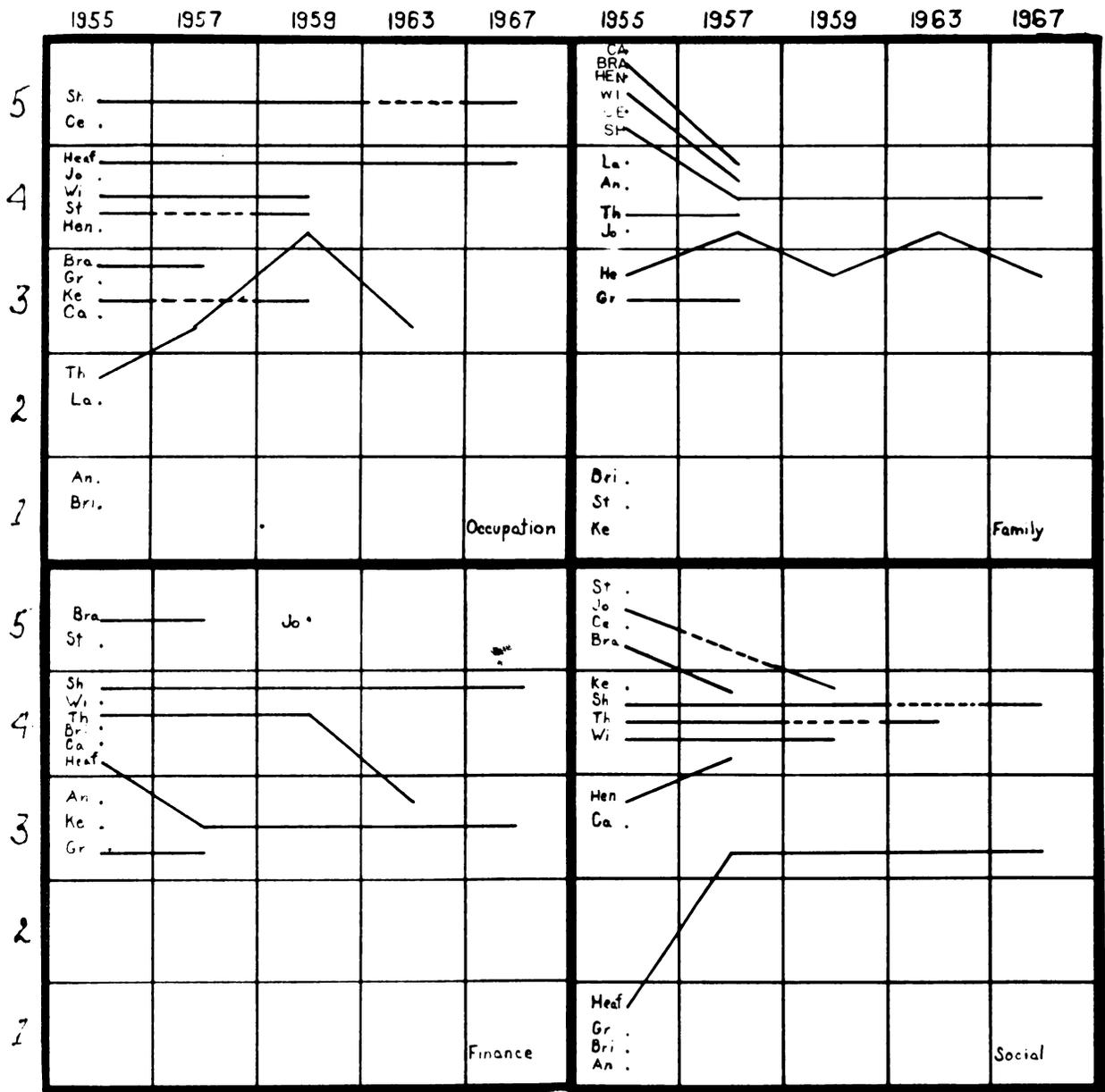
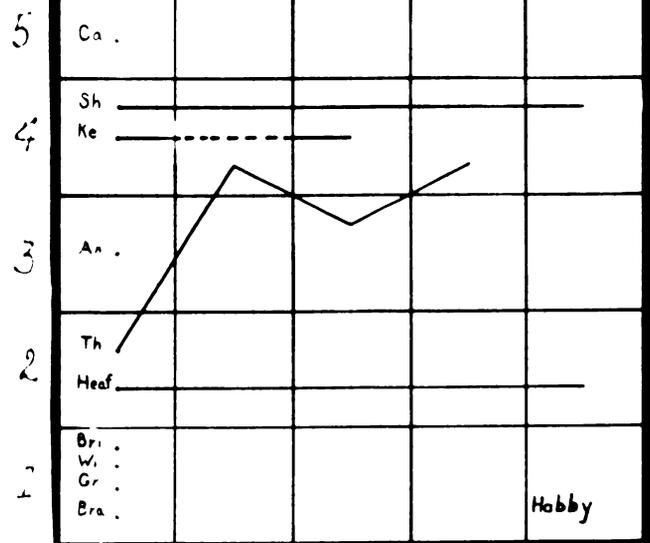


Figure V  
 The presentation of  
 the individual ratings  
 of the Alcoholic  
 Subjects on the  
 Reality Scale

Future Autobiography





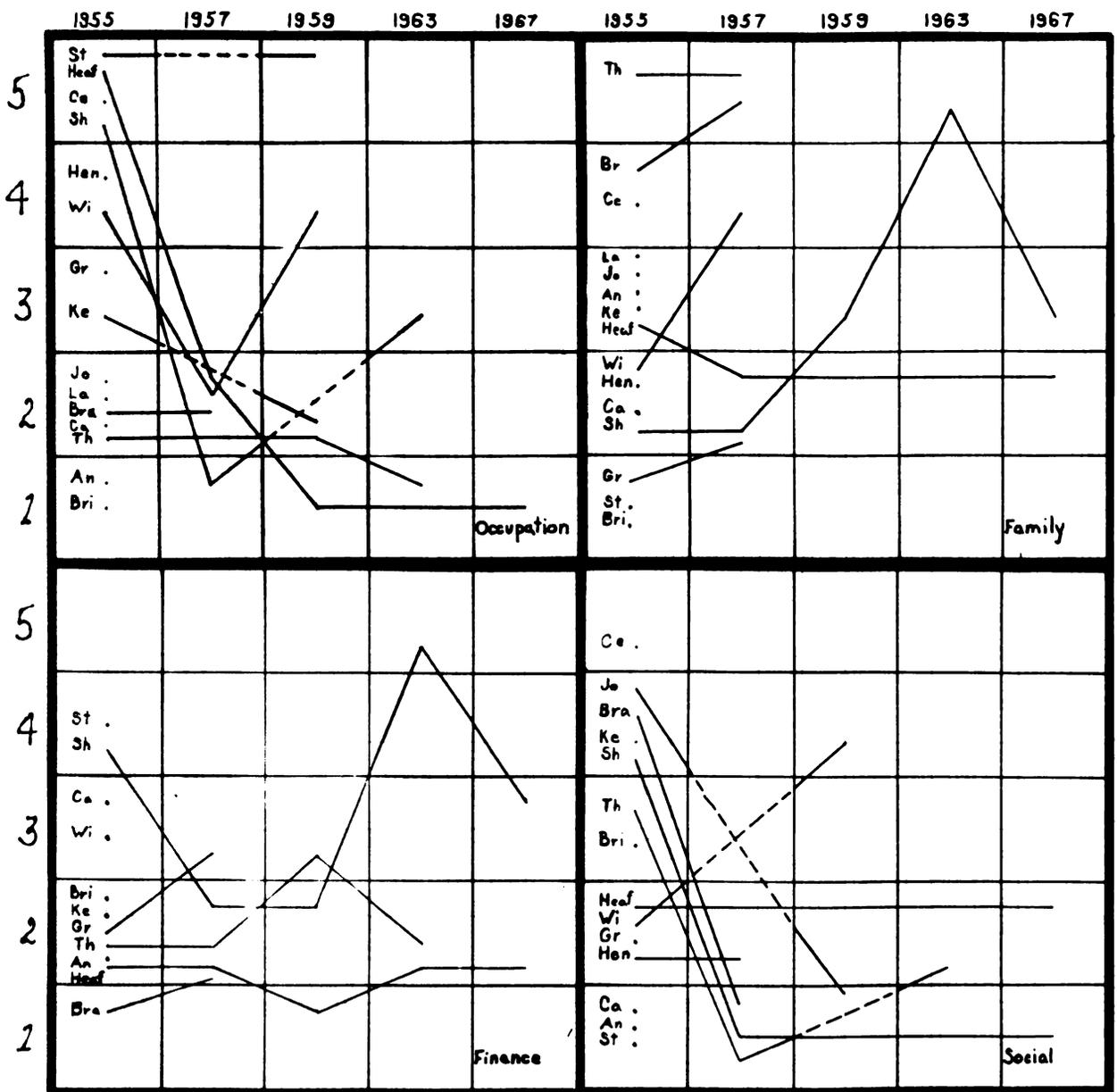
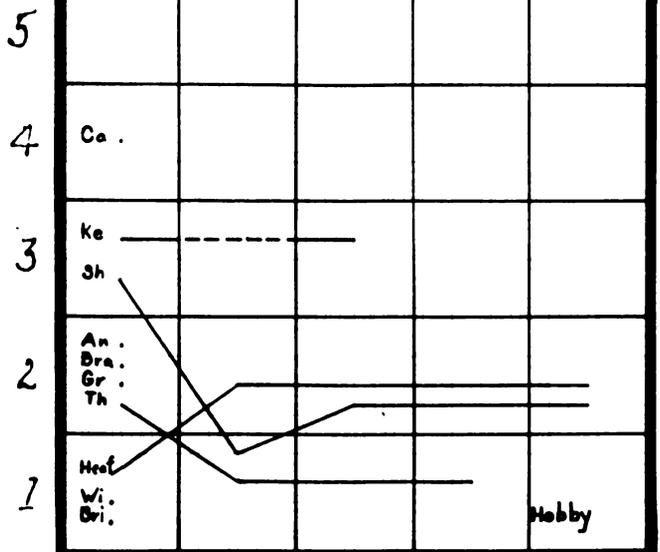


Figure VII  
 The presentation of  
 the individual ratings  
 of the Alcoholic  
 Subjects on the  
 Certainty Scale

Future Autobiography



1955

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1963

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1955

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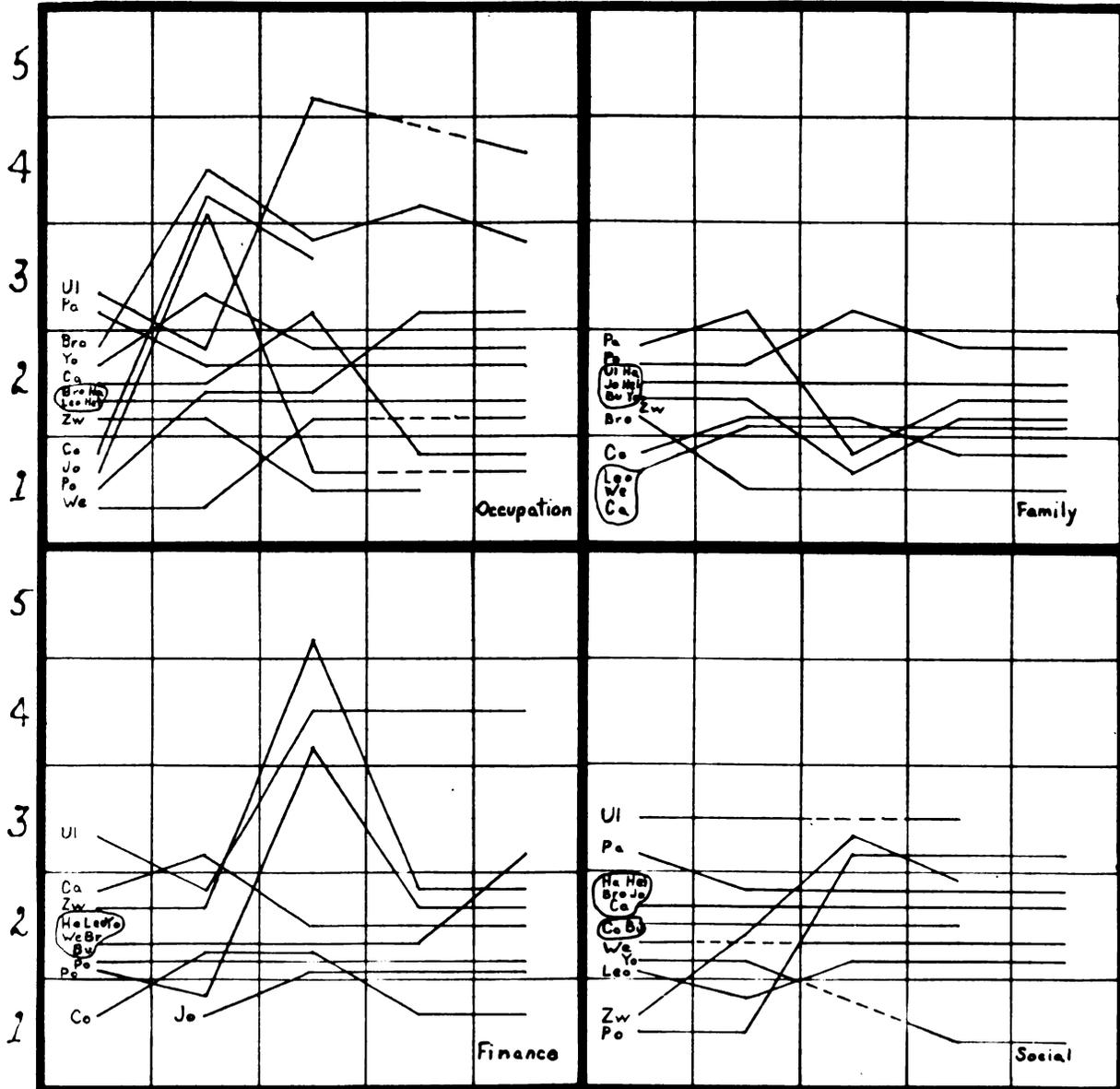


Figure VIII

The presentation of the individual ratings of the Normal Subjects on the Certainty Scale

Future Autobiography

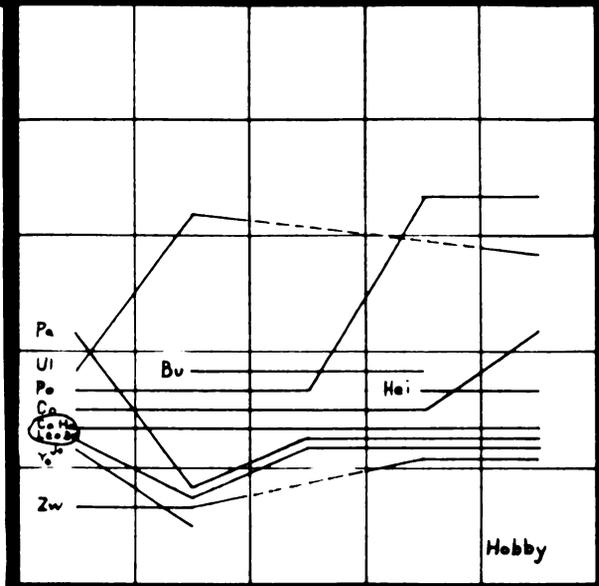
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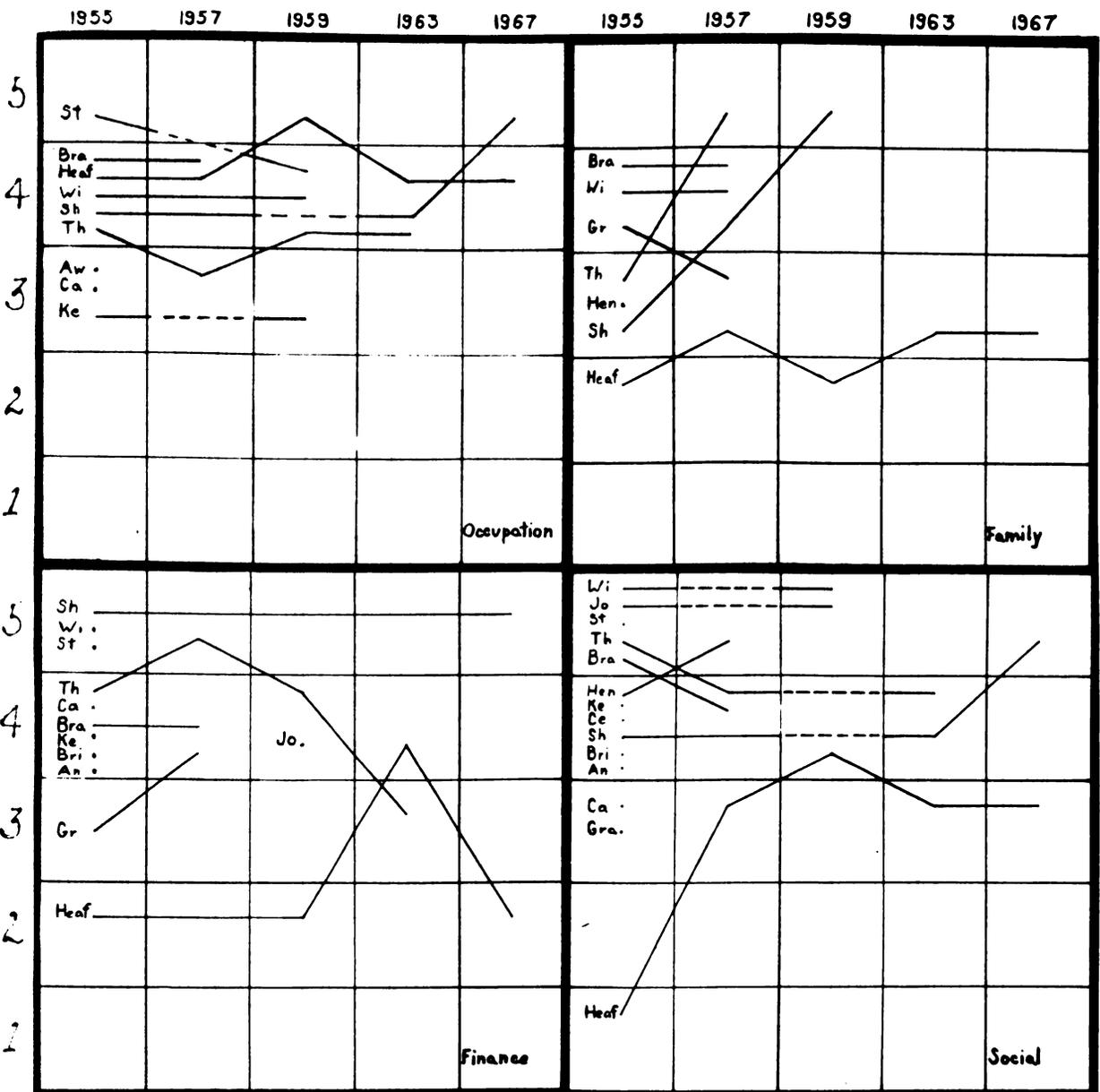
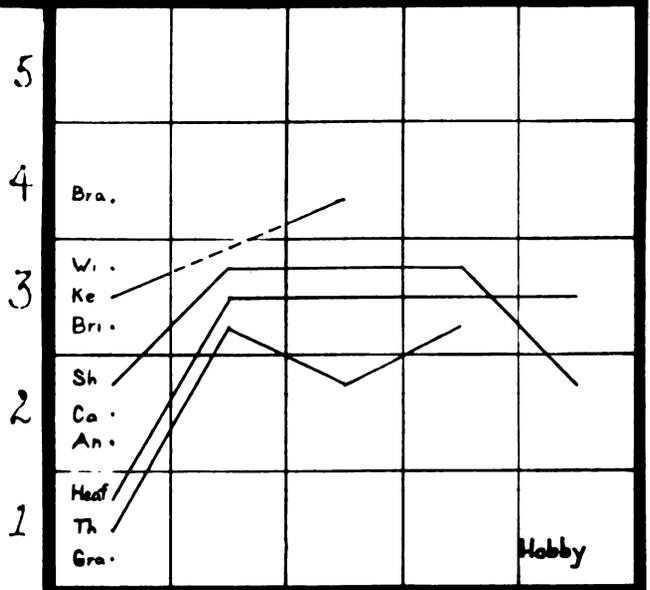


Figure IX  
 The presentation of  
 the individual ratings  
 of the Alcoholic  
 Subjects on the  
 Specificity Scale

Future Autobiography



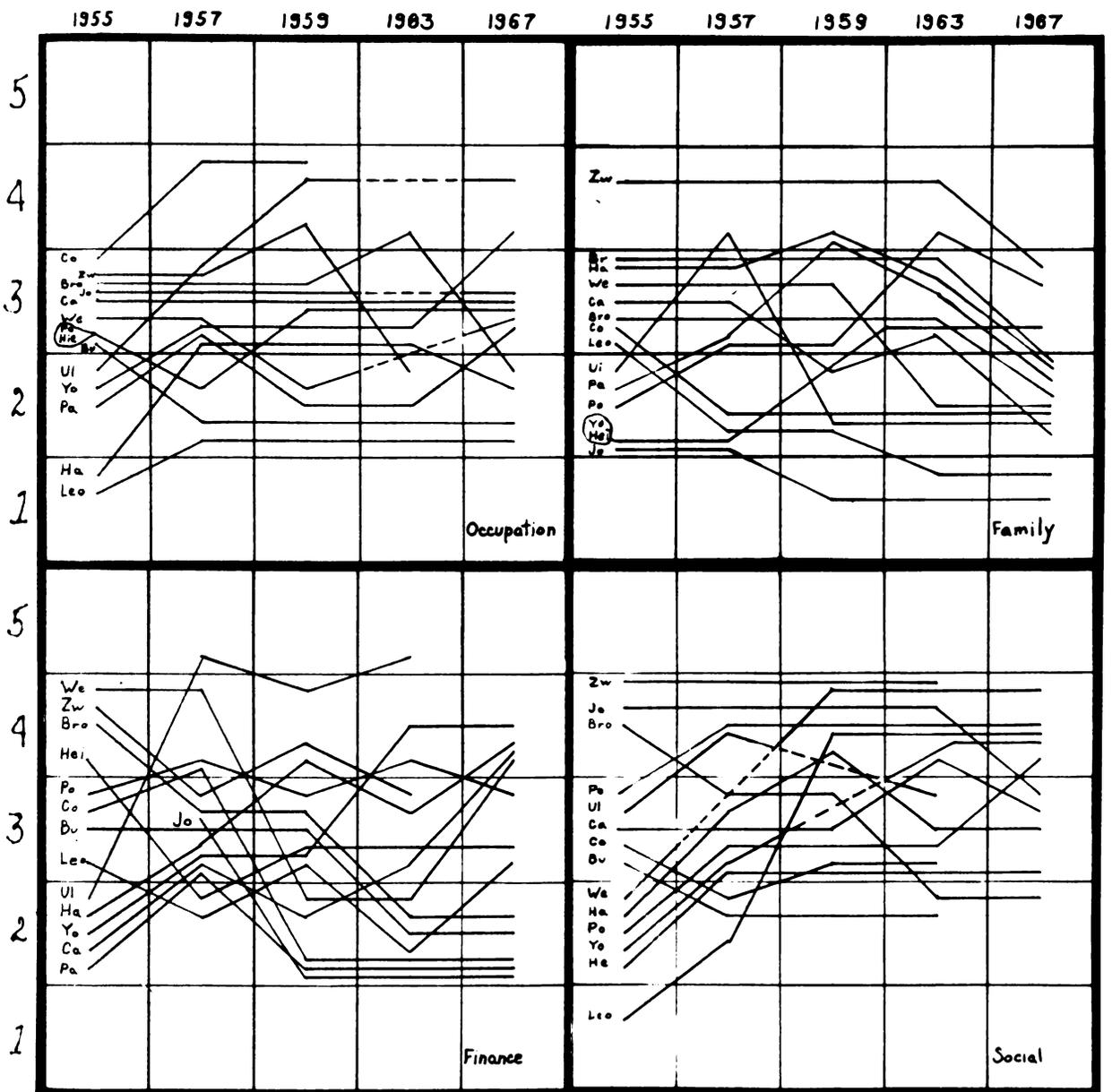
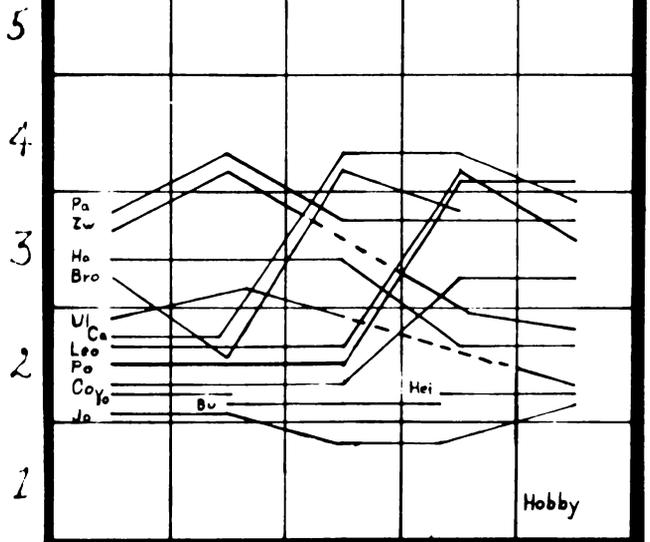


Figure X  
The presentation of  
the individual ratings  
of the Normal  
Subjects on the  
Specificity Scale

Future Autobiography



the percentages within each of the categories.

As Figures 1 and 2 indicate, very few of the alcoholic subjects are represented beyond the first temporal period. Whenever the two groups are compared, therefore, only the first temporal period is used. It must be kept in mind that any discussion of trends is limited by the fact that those few alcoholics who demonstrate some conception of a future life are least typical of the experimental group. It will be pointed out later that this is true of all of the dimensions investigated.

Ratings of the Future Autobiography revealed some consistent and general differences between the alcoholic and the normal subjects. These will be discussed first in general terms, then in terms of the individual areas. Other pertinent aspects of the protocols, in terms of the areas and the individual differences, will be presented separately.

#### RATINGS

##### Change: General discussion

Each area in each temporal period was scored on the following scale:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Complete change	part change stable whole	development of parts in stable whole	non-specific development	same

1. Denotes a statement of complete, or qualitative change, such as changing occupational fields, or getting married and establishing a family.

2. Denotes a qualitative change within a stable framework, such as a farmer buying his own farm, and describing the resulting differences in his work, or the differences anticipated and described in the family group, as a result of specific changes.
3. Denotes a description of the quantitative development of some aspects of the area, within a stable framework, such as the description of continued financial investments or payments, or continued improvements on a farm or home. This score was given when no new aspects were mentioned.
4. Denotes very general, quantitative statements of development without reference to specific aspects, such as stating that the financial situation will continue to improve, with no reference to details, or that the children will be getting older.
5. Denotes statements of sameness, such as merely saying that the job will be the same, or that there would be no change in the family.

Each response unit, that is, each area at each temporal level, was scored on this scale. The results of this rating, presented for each area (occupation, social, family, hobby, financial), and showing the temporal trend for each individual, may be seen in the accompanying graphs (Figures III-X).

The results of the change rating have been summarized, for all the areas, using only the first temporal period, in the following table:

Table 4

Rating category	Incidence			Percentages			
	1	2-3	4-5	1	2-3	4-5	
Normals 14 Subjects	frequency	5	13	8	36	93	57
	scores	5	42	19	7	64	29
Alcoholics 15 Subjects	frequency	12	11	11	80	73	73
	scores	23	18	24	35	28	37

Table of the distribution of scores resulting from the ratings of all the areas, using only the first temporal period, on the Change Scale. In this table, frequency refers to the number of subjects receiving scores in that category; the frequency percentage refers to the percent of the total group represented; scores refers to the number of scores in each category received by the group; the percentage scores refers to the per cent of the total scores represented.

From the table we see that 5 of the normal subjects, representing 36 per cent of the normal group, received 5 scores, representing 7 per cent of the total number of scores, in the first category on the scale. 12 (80 per cent) of the alcoholics received this score 23 (35 per cent) times. In the middle range, scores 2 and 3 on the scale above have been combined for convenience, 13 (93 per cent) of the normal subjects received 42 (64 per cent) scores. In this same range 11 (73 per cent) of the alcoholics received 18 (28 per cent) scores. In the last category, in which scores 4 and 5 on the scale have been combined, 8 (57 per cent) of the normal subjects received 19 (29 per cent) of the scores; 11 (73 per cent) of the alcoholics received 24 (37 per cent) of the scores.

These totals, and inspection of the graphs in Figures III to IV, indicate that the alcoholics are almost equally likely to describe the future in terms of a complete change from the present, in terms of a complete change from the present, in terms of a changing continuation from the present, or remaining the same. There is slightly less frequency of scores occurring in the range (2 to 3) denoting a gradual development, with changing aspects within a stable framework. In terms of the data, the most frequent attitudes were either "Anything can happen" or "I don't see where anything will be any different".

Referring again to Table 4 and the graphs in Figures III to IV, the normal subjects show a concentration in both the number of scores and of subjects represented, in the 2 to 3 range of the scale, indicating that their descriptions usually involved gradual changes within a continuing whole. The greatest difference from the alcoholic subjects is in the number of occasions that a qualitative change was anticipated. None of the normal subjects anticipated a complete change in more than one of the areas, while many of the alcoholics did, as is seen in the graphs of this scale. The nature of the qualitative changes will be considered when the individual areas are presented.

Change: Occupation

The graphs of the scores given to the individual areas will be referred to throughout this section. Figure IV for the normal, and Figure III for the alcoholic show the results of rating the area of occupation on the change scale, throughout the total temporal span.

Five of the fourteen normal subjects began their discussions of the future of their jobs with statements that no change was anticipated, such as, "I'll still be working on the same job" or "My job will be the same, there won't be any change in two years". Three of these five who received a score of 1 in the first temporal period, subsequently described their continuing jobs in terms of more detailed development, while the descriptions of two of the subjects (Br and Jo) remained static. Six of the control subjects received scores within the middle range (2 to 3) for descriptions of anticipated changes in their vocational situation while continuing in the same kind of work. The three subjects who expected complete

changes also saw this change to be the result of definite planning, and two of them subsequently gave detailed descriptions of their new work. The meaning of these scores and trends will be more fully discussed when the individual areas are considered.

Seven of the fifteen alcoholics indicated that they anticipated a complete change from their previous work. Of these seven, four stated that they had no definite idea what would be the nature of the change, and three of them showed no evidence of planning for the contemplated change; two of them mentioned qualitative shifts in the more remote temporal periods, the other other two gave subsequent statements of sameness. In only one case was the gradual development, which was most frequent in the normal group, characteristic.

The ratings on the change scale show that while the spread of the ratings is equally wide in both groups, the modal concentration is at opposite ends of the scale. The majority of the normal subjects began with statements that no change in jobs was contemplated, referring to jobs which they had at the time; the majority of the alcoholic group began with statements of anticipated qualitative changes, with no evidence of definite planning. The normal subjects introduced vocational changes later with evidence of planning and development within a stable vocational framework.

Change: Family

The graph of the scores on the change scale for the area of family will be found in Figure IV for the normals, and Figure III for the alcoholics.

Among the normal subjects the modal tendency of the change ratings in this area is to concentrate in the middle range of the scale (2 to 3). This concentration is seen throughout the fourteen year span. The two subjects who were scored 1 on the scale were both unmarried at the time of testing, anticipated getting married within the next two years, and both gave a detailed description of the expected development of the family over the subsequent twelve year period. The other exception to the modal trend, who received a score of 5 on the change scale, anticipated no changes until the last temporal period, the date at which he expected retirement. The type of development implied by the modal concentration of the change scores is more homogeneous for this area than for any other.

The graph of the ratings of the alcoholics on the Change Scale, shows that their descriptions of the future of their families did not differ much from the area of occupation, nor from the other areas. Again, the tendency was to describe the future of their families as either completely different from the present situation, or as unchanging. The seven of the fifteen alcoholic subjects who anticipated a completely changed situation, had no definite plans, nor were their subsequent descriptions more detailed. Of the three subjects who gave statements of no change, only one had a family at the time of testing. Because the normal subjects tended to concentrate most heavily in the middle range of the scale in their family descriptions, while the descriptions of the alcoholic subjects were much the same as the other areas, the difference between the two groups is greatest in this area.

Change: Financial

The graph of the scores on the change scale for the area of finance will be found in Figure IV for the normal and Figure III for the alcoholics.

None of the normal subjects indicated any expectations of complete changes in financial status, and only four instances of statements of no change occurred. By far the majority of these ratings were in the range of specific development within a stable framework (2 to 3), although less consistently so than with the family ratings. The changes which were described were expressed in terms of savings, investments, increased expenditures (as in buying a home or business) or anticipated salary increases. In these cases, the income level was described as remaining stable, only gradually increasing or decreasing according to the changes.

Only two of the alcoholic subjects described their financial futures in terms of detailed, gradual development. Characteristically, the statements made were global and optimistic, usually to the effect that they hoped their financial situation would improve, but without any indication of specific planning or steps toward that end.

Change: Social

Figure IV and Figure III, for the normal and alcoholic subjects respectively, present the graphs of the scores on the change scale for the area of social.

No expectations of radical change in the social situation were expressed by the normal subjects, and the rating, 2, which is most

frequently modal for the normal group in the other areas, was rarely given to the descriptions of their future social activities. The areas of social and occupation received the highest concentration of scores in the upper (4 to 5) range of the change scale, for the normal group. Most of the subjects began with somewhat detailed descriptions of the changes they anticipated within the next two or four years, then continued with much less detailed statements, less development, very often simply remarked that there would be no change. The most frequent exception to this general statement was the change in social groups described as the result of changes anticipated in other areas, such as family or work. This aspect will be discussed more fully when the individual areas are considered.

In the graphs of the Change ratings for the social area in the alcoholic records, the tendency to concentrate at the extremes is again seen. Six of the fourteen alcoholics received a score of 1 on the scale, indicating that they made statements to the effect that they were going to make new friends and change their social habits entirely when they left the hospital. Five of the others received a score of 5 on the scale, i.e., they stated that there would be no difference at all. The major exception to this trend, Heaf, differed from the modal trend of both the normal and the alcoholics, in treating the area independently of the other areas, and much more elaborately. The consistent deviation of this subject from the alcoholic group and other significant individual deviations will be discussed in detail when the individual performances are considered.

Change: Hobby

All of the normal subjects, except We, referred to their hobbies at some point in their descriptions, although the frequency within each temporal period is least for this area. Like the area of social activities, the changes and development of these interests was described as largely dependent on changes in other areas, notably family and financial. Also, like the area of social activities, there was wide variation with regard to the manner in which this area was developed. This is shown by the wide scatter of individuals within each temporal segment, and by the differences between the temporal segments of each individual's scores. In the area of hobbies, the normal subjects deviate most from their usual trend. In this area they most frequently made general, global statement; that they anticipated no change and they they foresaw little development of their activities. In this area, then, the descriptions of the normal subjects are most like the alcoholics' performance in all areas.

Only ten of the fifteen alcoholics mentioned hobbies in their future lives. Five of these ten described definite hobbies which they were interested in at the time, and mentioned definite steps in the development of these interests. This was more than in any area except occupation. Despite the greater development in the first period, the subsequent trend is toward statements of sameness.

The graphs of the two groups are more similar for this area than for any other. This is due to a deviation from their general trend by both groups. The alcoholics tended to be more frequently

specific in this area than they were in other areas while the normal subjects tended toward more frequent statements of sameness than they did in other areas, but the differences between the two groups are still apparent and in the same direction. It must also be kept in mind that the data for the alcoholic group is provided by only ten subjects, since five of the group produced no data in this area.

Reality: General discussion

Each area in each temporal period was scored on the following scale:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
actual present	very likely steps taken	planning continuation	possible fantasy	improbable fantasy

1. This score was given when the actual present situation was extended to the future, as when a subject merely said that he anticipated working on his present job, or that he expected to have the same hobbies.
2. This score denotes a description of something actualized as a result of steps which have been taken, as when a house, already in progress at the time of testing, is finished or a description of the expected results of improvements in land or livestock which have been started.
3. This score denotes those description of events which are a logical continuation or planned development from the present as improvements in their houses or getting a new car.
4. This score indicates those instances when the description was given as more of a possible hope than of definite planning, but was a logical continuation of the present, as when a farmer described buying his own farm in 1963 or 1967, but stated that it was more something that he wanted than a definite plan, or when the subject described the children beginning college, but stated that college was something he wanted for them, and that he knew they might not want to go.
5. This score denotes unrealistic fantasy, which seems to be neither planned for nor a logical continuation of the description, such as a fantasy of inventing "something" that would bring in much more money. Very few scores in this category were given, and it seems likely that this was in part a function of the highly structured directions, and the emphasis on the subject describing his future as he actually anticipated it.

The results of scoring the protocols on this scale can be seen in the graphs in Figures V and VI.

The summarized results of the ratings on the Reality Scale,

using the combined scores for the first temporal period, can be seen in the following table:

Table 5

Rating category		Incidence			Percentage		
		1	2-3	3-4	1	2-3	4-5
Normals 14 Subjects	frequency	9	13	3	64	93	43
	scores	9	51	6	14	77	9
Alcoholics 15 Subjects	frequency	8	8	11	53	53	93
	scores	13	17	35	20	26	54

Table of the distribution of scores resulting from the ratings of all the areas, using only the first temporal period, on the Reality Scale. In this table, frequency refers to the subjects receiving the scores, scores refers to the ratings given.

From the table we see that the normal subjects tend to cluster in the middle range (2-3), with very few scores in the upper category. This trend is reversed in the alcoholic group, with the majority of the scores falling into the upper range (4-5). The alcoholic protocols contained many more instances of unrealistic descriptions of the future and fewer realistic ones than the normal records.

The normal subjects show some tendency to go toward descriptions which are less realistic in the more remote temporal periods, as might be expected from the nature of the task, and the fact that they described their futures in terms of changes from the existing reality. This trend toward increasing fantasy is seen particularly in the areas of social and hobbies, as may be seen by reference to the graphs in Figures V and VI. Because of the paucity of the data beyond the first temporal segment, no trend is apparent in the

alcoholic group.

The low incidence of fantasy in the normal protocols may be a reflection of the essentially practical nature of the sample selected for this study, which is supported by the impressions of the examiner, or a result of the tightly structured nature of the task as it was administered. It is not possible to establish the reasons within this study.

Reality: Occupation

The protocols of the normal subjects either proceeded from unelaborated descriptions of the jobs they had at the time of testing, to planned or imagined changes described in the subsequent periods, or they began immediately with realistic, planned or expected changes. Most of the control subjects who were rated maximally realistic were those who described their jobs as not changing in the next two years, so that the descriptions were essentially of the present situation.

The alcoholic subjects vary much more than the control subjects. Seven of them were very much less realistic in their statements than the normal, more often reflecting vagueness than greater imagination, as will be more fully discussed in the section on the results of the Specificity Scale ratings. There is no definite trend in the alcoholic ratings beyond the first temporal period.

Reality: Family

By far the majority of the plans described by the normal subjects in this area are within logical, realistic limits. The

The homogeneity that was seen in the ratings of the Change Scale is also seen on the graph of the Reality ratings for this area. Occasionally the descriptions go into the range of possible fantasy. In all cases but one, the family plans extend beyond the present, i.e., receive ratings beyond 1 and 2.

The results of the Reality ratings of the alcoholic records show that they were much less realistic in their descriptions of this area than the normal subjects, and less realistic than their own descriptions of their occupational future, a trend in the opposite direction from that of the normal subjects. There is a tendency for the alcoholic subjects to concentrate at the extremes of the scale, in contrast to the normal group who tend to concentrate in the middle range (2-3).

Reality: Financial

The majority of the normal subjects received scores in the middle range (2-3) of the Reality Scale throughout the total time span. The homogeneity of these ratings is comparable to those of the family area.

The alcoholic scores are again more scattered and are more frequently toward the unrealistic end of the scale. The major difference between the ratings of the alcoholics in this area compared to their ratings in the others is that none of the alcoholic subjects restricted themselves to the present situation in their descriptions of their financial futures.

Reality: Social

The ratings of the normal group show some tendency to proceed

from a realistic treatment of this area to a more imaginative one. However the modal concentration remains in the middle range (2-3) as in the other areas.

The graph of the ratings of the alcoholic records does not differ significantly from the graphs of the other areas; the tendency to concentrate in the extremes and the heterogeneity of the ratings is seen in the results of the Reality rating of the social area as it was in the others.

Reality: Hobby

Even more clear in this area is the tendency of the normal subjects toward increased fantasy in the temporally remote periods, so that the modal concentration shifts from the middle range (score of 3) to the upper (score of 4) in the last temporal segment. This is the only area in which this trend is modal, and it corresponds to the impression that the normal subjects felt more free to "play" with this area. The usual trend was for them to begin with descriptions of their present hobbies, then described other "imaginative" interests which depended on financial, family, or occupational changes for actualization. The ratings on the Reality Scale for this area differ from the other areas, as do the ratings on the Change Scale, so that the graph is less sharply different from that of the alcoholic scores.

The distribution of the alcoholic scores for the hobby area is similar to those of the other areas in the heterogeneity of distribution but there was a stronger tendency to restrict their

descriptions to the existing present. More than any other area, the descriptions tended to be simply statements of hobbies which they had, or in the case of the five subjects who are not represented statements to the effect that they did not have any such interests and didn't anticipate any.

Reality: Summary

In the areas of family, occupation and finance the difference between the two groups is greatest. Characteristically, the alcoholic subjects either described the existing situation, or were highly unrealistic, while the normal subjects described their futures in logical, realistic terms. This difference is less striking in the areas of social activities and hobbies, due to the greater number of unrealistic statements made by the normal subjects in their descriptions of these areas and the greater realism of the descriptions of hobbies by those alcoholic subjects who referred to this area. The full implications of this increased unreality in the records of the normal subjects will be clearer when we discuss the ratings on the Specificity Scale, since a score in the upper range of the Reality Scale may reflect either vagueness or imaginative fantasy, depending on the elaboration of the description.

Certainty: General discussion

Each area in each temporal period was scored on the following scale:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
no doubt	realistic mild doubt	uncertainty	great uncertainty	complete uncertainty

In scoring this dimension, the statements of the subject were taken at face value; no judgments of the subject's meaning on the basis of indirect statements were made.

1. This score was given when there was no expression of doubt at all, or when statements of affirmation were made, such as "I know that..." or "There's no question about that". The score was given solely on the basis of the subject's verbalization.
2. This score denotes those instances in which mild doubt, often in the form of qualification, was expressed, such as the use of terms like "probably", "might be", or expressions such as, "If everything works out as I plan...".
3. This score was used to represent instances of greater uncertainty, frequently expressed by unresolved choices between two, close alternatives, such as when the subject stated that his hobbies or social activities were uncertain because of the changes in the family, or that he hoped to be living in his own house, but that it depended on his job. Very often the uncertainty which was expressed and judged in this category resulted from this kind of interdependence.
4. Extreme uncertainty was scored in this category, and was often expressed in terms of wide choices without any limiting framework, as when the subject said that he didn't have any idea what his work would be, and gave several, widely differing possibilities, or when he stated that he had no way of knowing what was going to happen, and followed this statement with one or more possibilities.
5. If the subject stated that he had no way of knowing, or that he couldn't tell what was going to happen, and did not give any specific possibilities, this score was given.

The results of the ratings on the Certainty Scale, combining the scores of all the variables, and using only the first temporal period, have been presented in the following table:

Table 6

Rating category	Incidence			Percentages			
	1	2-3	4-5	1	2-3	4-5	
Normals 14 Subjects	frequency	7	14	0	50	100	0
	scores	12	54	0	18	82	0
Alcoholics 15 Subjects	frequency	8	13	11	53	87	73
	scores	12	36	17	18	56	26

Table of the distribution of scores, resulting from the ratings of all the areas, using only the first temporal period, on the Certainty Scale. In this table, frequency refers to the subjects receiving the scores, scores refers to the ratings given.

The difference in this table is less striking than the other two we have presented, although the alcoholics again have a greater incidence of scores in the upper extreme of the scale. These expressions of extreme uncertainty, found in the alcoholic records, were most frequently given in general terms. They were more likely to express uncertainty with regard to all aspects of their lives in the future, and less likely to express unsureness in a few areas only. The kinds of statements implied have been quoted on page 46, to illustrate the group attitude toward the task of describing the future, and may serve also to illustrate the findings cited in the table above.

There are no instances of extreme uncertainty in the descriptions of the first temporal period. The expressions of unsureness tend, rather, to occur toward the middle or end of the temporal span. This trend is reversed in the ratings of those alcoholics whose descriptions extended beyond the first temporal period; most of

their remarks denoting unsureness occurred at the beginning. Even with the limited data available, it is possible to see a definite trend toward less frequent comments of uncertainty in the more remote periods.

Certainty: Occupation

The normal subjects express more uncertainty in describing the future of their work than in any of the other areas, and they exhibit greater variability. The trend is toward less sureness in the more remote temporal intervals.

While the majority of the alcoholic subjects indicate only moderate uncertainty, six of them express extreme unsureness about their occupation in the first temporal period. All but one who continue past the first temporal period increase in confidence. There is some trend for those who make statements of anticipating complete changes to be least sure.

Certainty: Family

Most of the subjects in the normal group find a highly realistic and confident description of the continuity and changes of their family constellations. There is no indication of uncertainty with time.

Certainty: Financial

This area elicits the next most frequent number of expressions of uncertainty from the normal group. These statements tend to become maximal toward the middle of the temporal span, when fewer changes are described. As will be seen in the section treating the individual areas, occupation and finance are most intricately

interwoven, in the normal records, and any uncertainty in one is reflected in the description of the other.

This trend with respect to the occupational and financial futures is not seen in the alcoholic subjects. There are fewer verbalizations of uncertainty elicited in this area than any other except hobbies.

Certainty: Social

The records of the normal subjects provided no instances of extreme uncertainty in the social area. Except for the area of the family, the graphs of the ratings for this area are more homogeneous than any other area.

The Certainty graphs of the alcoholic ratings in the social area are characterized by the same trends that have been seen in their other graphs. More than half the subjects are at the extremes: either completely confident in their statements, or extremely unsure. There is no definite relation between anticipations of complete changes in their social activities and greater incidence of expressions of uncertainty.

Certainty: Hobby

Very few of the normal records were given a high rating in this area. Three which do occur were remote in the temporal span.

The alcoholics express least uncertainty in this area, than in their descriptions of any of the others, and have more instances of statements of complete confidence.

Certainty: Summary

The ratings on the Certainty Scale for the protocols indicate

less difference between the experimental and control groups than any of the other scales. The fact that the highest incidence of extreme uncertainty in the alcoholic records occurred in the area of occupation, in the first temporal period, might be influenced by the fact that this area was described first. The trend for the alcoholic subjects was to make more confident statements in the more remote periods, and the most completely unsure statements made by them were expressed in general terms, protesting their inability to describe the future. With regard to the individual areas, the alcoholic subjects spoke most certainly of the future of their hobbies and finances, least certainly of their jobs and their social activities.

The normal subjects tended to give more qualifications, and to become less sure in their statements in the more remote areas. They spoke most confidently of the future of their families, and of their social activities; least confidently of the future of their jobs and their financial situation.

Specificity: General

Each area in each temporal period was scored on the following scale:

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
elaborated	many specific details	specific with little detail	vague, specific referent	vague, no referent

1. This score denotes a description which is judged to be highly differentiated and integrated.
2. This score was given to a description that was detailed and integrated, but less elaborate than the first score. Both of the first two scores usually indicated a high degree of integration among the areas.
3. This score was given when the descriptions were specific, but not very detailed, such as stating that the subject would still be working at a particular job, or that the children would be in a particular grade in school.
4. This score was given when the descriptions were vague, but referred to something that had been given specifically at another time, such as saying that "the family will be the same, only older" when the family had been more specifically described previously.
5. This score was given when the statements were vague and general, and had not been detailed, such as saying "I'll be making a living, I guess" or "Oh, I guess I'll have friends".

The results of the ratings on the Specificity Scale, combining the areas and using only the first temporal period are presented in the following table:

Table 7

Rating category		Incidence		Percentages	
		1-3	4-5	1-3	4-5
Normals 14 subjects	frequency	14	7	100	50
	scores	58	8	88	12
Alcoholics 15 subjects	frequency	8	15	53	100
	scores	17	48	26	74

Table of the distribution of scores, on the Specificity Scale, using the ratings of all the areas in the first temporal period. Frequency refers to the subjects receiving the scores, scores refers to the ratings given.

This scale was rated by establishing empirical standards within the data itself. Scale point 1 was assigned to the most elaborate protocols, and scale point 5 to the most sparse and the most vague.

The differences between the two groups, as shown in the table, are the most striking obtained on any of the variables. The alcoholic subjects are characteristically vague and circumstantial in their descriptions, while the normals are most often detailed, varying from terse (but specific) statements to rich elaboration; with only occasional vague statements.

Whether the descriptions were given in detail or were vague, undifferentiated statements has an influence on our understanding of the other three rating scales, and the interrelationship of all four ratings, with specificity central, will be presented wherever

this kind of composit treatment seems clarifying.

Specificity: Occupational

Throughout the temporal span, the majority of the normal subjects remain within the middle range of the specificity scale in describing the future of their occupations. Although they are often uncertain, they are uncertain about specific things, and even though they describe few changes in this area, the unchanging jobs are described in detail.

Most of the alcoholic subjects are vague, unrealistic and static in their descriptions of the future of their work. The uncertainty expressed by the alcoholic subjects is with regard to undetailed descriptions.

Specificity: Family

The normal subjects are most specific with regard to this area, and the modal tendency is toward increased specificity in the more remote periods. With regard to the other dimensions which have been discussed, this implies that the normal subjects describe specific changes realistically, and with a high degree of confidence.

As a group the alcoholics were very vague with regard to the future of their family life, whether they were describing a continuation of the present situation or contemplating a complete change. In contrast with the normal subjects, the alcoholic described the future of their families with about the same amount of vagueness as was found in the other areas.

Specificity: Financial

Even though the normal subjects are, for the most part, detailed in their descriptions of their financial futures, there were more instances of vague statements in the area of finances than any other except the social area, and the descriptions are least consistent.

The alcoholic subjects are very much more vague in this area than the normal subjects. This increased vagueness is not accompanied by any greater unsureness, and the descriptions are judged to be unrealistic, so that it would appear that they were much less concerned.

Specificity: Social

The normal subjects are more vague in this area than any other, and the trend is clearly toward increasing vagueness over the temporal span. Since the normal subjects also make more statements of sameness in this area than any except occupation, and tend toward less realistic statements, the total picture for this area is closest to the static, empty, vague descriptions which have been most characteristic of the alcoholic protocols in the other areas. This is not accompanied by any increase in uncertainty, as was true in the area of occupation.

The alcoholic subjects remain much more vague than the normals and the area of social activities does not vary much from the other areas. There is a slight trend toward increased statements of sameness, given with increased certainty, but with no greater detail in the more remote periods.

Specificity: Hobby

The trend in this area is similar to that in the social area for the normal group, but the trend is less pronounced. The normal subjects usually begin with detailed descriptions of their hobbies, and become less detailed and less realistic over the total time span. As in the area of social activities, this trend is not accompanied by any particular increase in uncertainty.

While less frequently specific than the normal group, the alcoholics who gave a description of their hobbies had a higher incidence of detailed description in this area than in any of the others. They also most frequently describe this area initially in terms of gradual changes, are more realistic, and less often verbalize uncertainty in their descriptions.

Specificity: Summary

Throughout all areas the normal subjects are the more specific. They are most vague in the social and financial areas, and least vague in the areas of family and occupation. The alcoholic subjects are characteristically vague, somewhat more so in the areas of social activities and finances; they are most specific in the area of hobbies.

The analysis thus far has been concerned with what we might call the formal aspects of the Future Autobiography as reflected in the rating scales. These may be summarized as follows:

1. Without exception, the normal subjects were able to give an account of their anticipated futures throughout the suggested fourteen year span. The alcoholic subjects, with two exceptions, were not able to describe their future over the entire period. Sixty per cent

of the alcoholic subjects described nothing beyond the first temporal period.

2. The normal subjects characteristically described the future in terms of changes occurring within a stable framework. The alcoholics tended, modally, toward describing the future as unchanging or as involving many complete changes.

3. The normal subjects expressed mild uncertainty about the future they were describing, while the alcoholic subjects tended to describe the future in terms of complete confidence or with expressions of complete uncertainty, but this difference between the groups is less striking than the results of the other ratings. Most often, the extreme uncertainty was expressed with regard to the task of describing the future itself, rather than to any of the aspects they were describing.

4. The normal subjects are consistently, modally, within the optimum reality range, tending to become less realistic in their descriptions of their social activities and hobbies in the most remote temporal periods. The alcoholic subjects tended to describe the future of all the areas either literally, by describing only the existing situation, or much less realistically, in terms of vague, non-specific statements.

5. The normal subjects were modally detailed in their descriptions, particularly in the areas of occupation and family. The alcoholic subjects were consistently more vague than the controls, becoming most specific in the area of hobbies.

Areas: General discussion

Because the richness and quality of the data is not adequately reflected in the ratings, we feel that an inspection of some of the individual statements will make this discussion more meaningful, and will clarify the differences between our two groups.

It seems best to state the order of presentation explicitly, to avoid confusion resulting from the quantity of the data. The individual areas will be discussed and illustrated by quotations from the records. By presenting the normal records first, in each case, it is possible to discuss the alcoholic's records in terms of their differences from the normal subject's records as well as in terms of their characteristics as a group.

After the individual areas have been discussed, the organization and integration of the areas within the entire protocol will be considered.

The quotations have been selected on the basis of: a) clearest representation of the group trend, b) deviation from the modal tendency, and c) an attempt to present at least one quotation from each of the subjects. In all cases the code name (consisting of the first few letters of the name) of the subject has been used, so that anyone who is interested in following a particular subject's performance throughout this study can.

Areas: Occupation  
Normal subjects

The normal subjects were highly variable in their descriptions of their anticipated occupation futures. In this discussion, an attempt will be made to represent the range of treatment, as well as the group trend. The most detailed descriptions came from those subjects, mainly farmers, whose work was independent and required the most responsibility. The least detailed were from those subjects who are employed in jobs offering little opportunity for advancement, and who did not anticipate changing jobs. The most uncertain and inconsistent descriptions came from those subjects who are anticipating changes, but are not certain what type of work they will go into.

Er and Jo were the least detailed of the group in their descriptions, and among the least certain. Er's position at the time as charge aide in a VA hospital, was as high as his qualifications would allow in civil service. His description of the future in this area was largely concerned with whether he should go into another field which offered more hope of advancement, or whether he should retain the security of the job he had then. This was resolved each time in favor of security. Jo was a colored subject who worked at the time as a meat packer. He did not see much opportunity for advancement, nor did he feel that it was very likely that he could improve his position. In both of these cases, the descriptions of the family area was much more detailed and certain, as will be discussed under that area.

Four of the subjects (Bu, Yo, Ul, Hei) were planning to change their present jobs. All of them indicated that they had been planning this step for some time, and only one (Ul) continued to be uncertain and indefinite throughout his description of his occupational future.

Bu stated that he planned to change his line of work because his arthritic condition no longer allowed him to continue his previous work. He gave a detailed account of his plans, and remained confident, detailed and realistic in his description:

Bu (1957): "My occupation will be the same (as 1955), the farm. I'll have a chicken project, and have things to do like feeding the chickens. I'll be more involved in 4H and so forth, if I'm on a farm. (1959): "I'll have the farm mostly paid for. It'll be a modest farm. I'll raise chickens, pigs, cattle, feeder calves and feed crops. It'll be about eighty to eighty-five acres. I'll probably change from 4H to FFA, and probably belong to a coop. (1963): I'll probably be set pretty well, with a thriving business delivering chickens to Fort Riley. I'll take an active part in FFA, judging and going to the sales around. Might add modern buildings on the farm, electricity for the barn and milking equipment. (1967): Changes on the farm will be more modern equipment, and so forth. I'll increase the value rather than increasing the land. I won't be land poor."

Yo at the time owned and operated a small restaurant with his wife. He stated that his reason for changing jobs was that the business he had was too hard on his arthritic wife, and that he could not handle it alone. He described his plans to get some kind of civil service job and move to the city so that he would have more time with his family and be able to carry out his other plans: to buy a new house, and live a more leisurely life with time for gardening and clubs. While he gave some details of the

kind of job he was looking for, the work itself appeared to be less important than the other aspects described.

Ul was the least definite in his description, and the only one in the entire group to anticipate the possibility of more than one change. He mentioned that his previous work as a farmer had become awkward because of an unpleasant situation arising among his brother, father and himself in their cooperative enterprise, but he seemed very undecided about what to do. The instability and uncertainty of his plans is seen on the graphs, and in his statements:

(1955): I would like to stay on the farm, but I don't think I'm going to. I have a brother-in-law in the Imperial Oil Company. If I could get in with him I wouldn't mind something like that. If I could get a service station leased in some good location, it wouldn't matter where. I don't feel any strong tie to any certain place, only to my wife and children. As long as they're with me it wouldn't matter. (1959): I wouldn't know (about occupation). If I find something I like, I'm going to stick with it, but until I do I might change every day."

Ul represents the least confident or settled among the normal subjects in this area, and might be considered as the lower limit of this group. The fourth subject, Hei, who planned a change in his work, had definite plans to continue his present type of work for two more years, saving his money, in order to begin his apprenticeship as a bricklayer.

Le, a farmer, best illustrates the kinds of descriptions that were given by the subjects whose work was stable and independent:

Le (1955): "My occupation will still be the same. The only way I'd change it is if I had to sell out and couldn't find any place to move to. That's the only way I'd get another job. I hope to improve my dairy herd

by artificial breeding which I've already started. It'll be two years before these calves come into production. As far as the farm ground is concerned, I'll build it up, get more production by liming and sewing legumes. I haven't started that, plan to this year. (1957): My occupation will still be the same, I guess, still be trying to improve. Nothing new that I know now, things keep coming out, like this artificial breeding has only been available for two years. This fertilizing will change the most I guess, that is, the ground. Probably by that time I'll be thinking about new machinery. I suppose what I've got will be wearing out. (1959): Occupation still be the same. Course then I'll still be building up. I'll be breeding the first artificial with artificial and ought to be getting pretty good stock by then. I'll still be improving the ground. (1963): Still be farming. Guess I'll be improving both livestock and ground. I'll be getting my reserve built up to where I can expand; more machinery, more ground. It's about time I figure on buying that farm. (1967): I'll still be working I guess, I ought to know whether I'm going to lose it (the farm) by now. Guess it'll be about the same, still improving. About that time the third generation will be coming up on artificial breeding."

In addition to illustrating the specific points mentioned in the above discussion, these quotations, and those to follow, exemplify the character of the control group and supplement the picture disclosed by the history material.

Areas: Occupation  
Alcoholic subjects

None of the alcoholic subjects gave a detailed, consistent description of their anticipated occupational futures. Many of these subjects had been unemployed when they came into the hospital, or quit their jobs at that time. Most of them gave no evidence of having planned carefully, or having made any definite decisions with regard to the kind of work they would do. Their descriptions were vague, unrealistic, and undecided, as the following examples show:

Ge (1955): "That would be awfully hard to do. I don't know if I could do any of that. Well, I couldn't say. I don't know. I can't make up my mind on work, I don't know what my capacity is. I'm sure it's going to have to be something that isn't too strenuous. Might be shoe repair. I don't know, I don't really have the benefit of training. I have thought of janitor work."<sup>1</sup>

St (1955): "As to work, I don't know what I'll be doing. I do several things. (1957): Gee, I wouldn't have the least idea, I just haven't planned that far ahead, you wouldn't know what...plan one thing and something else happens. By 1960 I'll probably be out on a farm somewhere making a living there. That's all I can think of. (farm?) Oh, I intend, my plans are, if I ever get enough money to get a little farm somewhere, make my living on it."

Hen (1955): "I can name what's going to happen up to this last date if I take another drink. I'll be in the penitentiary; almost got life last time. (recidivism) I want a clerical job I think."

Tu (1955): "I expect by that time..I expect to have a business of my own. I suppose I'll be the same way I am now, only not drinking. Or somewhere in a hospital, trying to quit."

1. As a clinical note, it might be remembered that this subject was diagnosed as a depressive, and subsequent to his treatment for alcoholism was transferred to another ward for further hospitalization.

In general, the alcoholic records were difficult to rate on the Reality Scale, because of the inconsistencies between the history material and the statements made by the patients in describing their futures. The following quotations exemplify the difficulty of judging the probabilities of their statements. Bra stated that his job would remain the same as it had been, but his history revealed that he was not employed at the time he came into the hospital, and there was no evidence of any definite prospects:

Bra (1955): "Occupation? I imagine it will be just exactly what it is now, commercial artist. And as to the rest of the years, I imagine my occupation will be the same as it is at the present time. Then, too, in my type of work the more I'll do of it the better you become until you get so old your hand shakes and you can't do it. In this business I'm in, or the profession I'm in, it's continually changing; new fashions, new methods. I don't think anything would change from '58 to '68 except for betterment by sobriety."

Sh stated that he planned to get a job when he left the hospital, and subsequently indicated that he would remain in this job for the next fourteen years. His history reveals the most unstable work history of the entire group. He had had over fourteen jobs, ranging from unskilled laborer to farm worker to short-order cook, in the year preceding his admission for treatment.

Sh (1955): "I haven't the slightest idea what will happen to me in six months. Well, I'd hope to own a restaurant or something like that. (1957): Occupation would still be the same. (1963): Far as I know I'll still be in the restaurant business. (1967): I guess it wouldn't be too much different. Probably be about the same. Wouldn't be ready to retire for sure."

The most definite statement of the occupational future that was found in the alcoholic protocols, given by Bri, did not extend beyond the first temporal period. After stating that he anticipated no changes, Bri said that he intended to return to his job as manager of his father-in-law's implement store, and remarked, "I'll go back as manager of the store and I'll stay that way. There'll be nobody to fire me."

Two of the alcoholics approached the kind of description given by Ul, the most unstable and undecided of the normal subjects. Heaf and Wl were undecided between two possible kinds of jobs, and didn't come to a definite resolution of the alternatives throughout their descriptions:

Heaf (1955): "Well, on occupational--you don't know you'll be doing. I don't know whether to stay with the government or not. Maybe I'll be a farmer. I don't know what I'm going to do. (1957): Practically be doing the same thing I was in 1955. (1959): I'll be doing the same thing I was in 1955. (1963): Twelve years. If I worked for the government I ought to be able to retire soon..no, won't be able to retire yet, so I'll still be working. (1967): I won't be old enough to retire, so I'll still be working."

Wl (1955): "Think I'll be selling real estate, or my brother is going to open an embalming-funeral parlor, so either one or the other. If my sisters do pretty well in the funeral business I intend to take up embalming, too. Well, I expect in 1955 to be in real estate. (1957): By 1957 I expect to go out on my own. By then, I'll know whether I want to go into the embalming business. (1959): Well, if I do get in any of these, I'm going to stay in either real estate or embalming. I intend to make it my career. If I do well in embalming I'm going to stay there, that's the trouble with changing jobs, you got to look out for the future."

Th is the only alcoholic subject to approach the kind of description given of this area by the majority of the normal subjects; his ratings in this area most closely approximated the trend of the normal subjects, deviating mostly in the direction of greater vagueness.

Th (1955): "I'd like to be finished with my school and employed with RCA or Motorola or Philco in the field of electronics, which covers quite a scope of things.  
(1957): I should be working with some corporation then.  
(1959): I should be just about what I want to be as far as my occupation is concerned. I should have acoustics and further electrical knowledge to where I can do what I want.  
(1967): Occupation remains in the field of electronics."

From these excerpts, the impression arises that the future of their occupational lives was seen by the alcoholics to be much wider in possibilities, less stable, and less certain than the future as seen by the normal subjects. The control group gave the impression of being reasonably sure of a particular future course of events, while the alcoholic group seemed equally sure of uncertainty.

Areas: Family  
Normal subjects

The ratings of this area for the normal subjects were the most homogeneous of all the areas, and were the most consistently detailed, logically and realistically developed throughout the fourteen year span. All of the control subjects mentioned their families in each of the temporal periods. This was true even of those subjects who were not married at the time of testing. The protocols selected for quotations represent the range, as well as the most representative examples, of the normal group.

Zw was the most reserved of the normal subjects reporting in this area, as he was in all the others. His description of the future of his family was least detailed, most vague, and undeveloped. He was the only control subject who neither had, nor was planning to have, children; his family actually consisted only of himself and his wife.

Zw (1955): "The family'd be about the same. (1957): About the same--no changes. (1959): The family's the same. (1963): The family's about the same. We're bound to have a new car. We have a nice house. Might be some changes, but none that I know of right now. (1967): We'll be able to take more trips, hunting and fishing. Go with my wife--we hunt in Kansas, the Dakotas, and go to Colorado and Minnesota for fishing. It can take six months out of the year by that time. (Refers to plans outlined in the occupational area, to establish the feed business he owns on a more independent basis, to allow him more spare time.) We stay in cabins, don't like trailers. They're too much trouble."

The most elaborated of the records in this area were those of Jo and Br. For these two subjects, the degree of richness of description appeared to vary with the centrality of the area,

rather than to be a pervasive characteristic as it was with Zw.

Jo (1955): "I hope to at least start building a home or to buy a home. Security anyway, with my family in it. The family'd be in the same harmony. My daughter is ten years old now (meaning in 1953). I'd expect her to be developed a little further, say sort of to the courting stage. She'd have to get a decision from her mother or father as to whether she'll quit school or continue. I want her to go to school and her mother wants her to get an education also. We'll be striving ahead for our point." (1957): "Hope to have half my home paid for in addition to the upkeep of my family, and my daughter --she's happy in school...We go to a ball game or fights or wrestling match occasionally. We play and dance at home whenever we feel like it, mostly get our amusement out of each other. We'd still be happy." (1959): "We hope the home is paid for. We have a little money saved. The wife has a saving account in addition to the joint account--matter of fact each member of the family has separate saving accounts in addition to the joint account, so we ought to have a little put away....my daughter, she's sixteen. She has made up her mind to be a nurse and she wants to be a career woman. She's pretty well following that field up--she's still going to school, though. I tell her as long as she wants to go I'm going to push her forward. (1963): "Well, course the home is secured. My wife's a little grouchy--she's starting the change. My daughter's got problems--she ran into a difficult case with a patient in private nursing. She don't know whether to put her career down and marry this guy or keep going. I assure her that she's grown and her mother does the same thing--then she does what she sees fit. She gets married, raises her own family. (Describes a fantasy of a successful invention in connection with his hobby) well...that gives my wife a little more money to spend....(1967): My daughter has--we are now grandparents and we are trying to show her the baby should have one thing when she thinks another, so we take full possession of the child--as much as she'll let us...I don't find much time for that hobby now with that grandchild....I drink a little every now and the, sort of get away from the home a little more socializing with the boys. My wife knows where I'm at, so if she gets lonesome and calls on the phone, I go home immediately."

Particularly evident in Jo's record is the overlap of the family with the other areas, and the impression of centrality suggested by this pervasiveness. This is also noticeable in Br's

record, although less imaginatively presented.

Br (1955): "Concerning the family, the only change is the possibility that we might have to place the little girl in an institution (explain)...imagine increased interest in sports for the entire family, for one thing. Maybe increased interest in music and dancing. Our little girl's started in dancing lessons, she'll be more actively interested in dancing." (1957): "There's a chance that by that time there might be an increase in the family, another child...we belong to the local PTA...there'll be increased interest in the little girl's activities in school and church activities, too." (1959): "As far as family life, the older the children become the more we have in common, and the more they'll get to go with us." (1963): "The youngest girl should be in Junior High School and the other child, if we have one, will be starting to school and I imagine the family will be more interesting, more activities with both children in school. As far as friends and social groups, with a daughter in Junior High, that will increase our social groups with other children's parents, and there is a possibility that either my wife or I might take part as a leader in a Girl or Boy Scout organization."

Even those subjects who were not married at the time of testing, gave a full description of their anticipated family life:

Hei (1955): "I'll probably just have gotten married. Right now we go to shows, dances--after we're married we'll probably settle down, have card parties, and so forth. (1957): By 1957 I'll probably have one child, probably have a home of our own, be making payments on it, that is--be buying a home of our own. (1959): I'd still be married, with two children. One would be about four, or, she'd be about five years old. (1967): I'd be married and have about three children. We'd probably just have our house paid for."

Po (1955): As far as family--I do want to get married again, and I want to know definitely what kind of woman I marry, I don't want to make the same mistake twice. (1957): I expect to be married, I hope. Would have a child. Might by that time be able to live in my own house. If I do have a family, I wouldn't spend as much time with them (refers to his hobbies). May change to a hobby that wouldn't take so much money, or something that the whole family could be in. (1959): Family would probably be getting a little older. As far as how many goes, I

really don't know--I would rather have more than one (child). It would depend on the situation, my job and all that. (1967): Family could possibly be better clothed, maybe own our home."

In all of these excerpts, it can be noted that the descriptions of the family includes references to many other areas. This was also true, although it was less striking, in the normal records in the area of occupation. This quality of organization and integration of the five areas in the normal records, which is not found in the alcoholic records, will be discussed in a later section. It is mentioned here to call attention to the fact that the quotations used to illustrate the discussion of the separate areas may serve also to illustrate this aspect of integration.

Areas: Family  
Alcoholic subjects

The descriptions of the normal subjects in this area were characterized by a high group consistency, 100 per cent productivity, and the most detailed, logically developed accounts of any of the areas. The descriptions of the alcoholics in the area were sharply contrasted: the productivity declines more rapidly in this area than in any other (see Figure II) and the descriptions given are characterized by the same heterogeneity, vagueness and uncertainty that was found in the other areas.

The extreme instability of the alcoholic subjects is, perhaps, best seen in this area. Half of the group anticipated complete changes by 1955 in their family life, and two of the three subjects who stated that there would be no changes were without family ties and planning to remain that way. Of the fifteen subjects, only two stated their plans to return to families which had been established for some time, and from whom they had not been separated. Sh and An, who had never been married at the time the tests were administered, state their intentions of being married by 1955, although neither of them had anyone definite in mind. Ce, La and Bra, who had been separated from their families for some time before coming into the hospital, stated their hopes of being reunited by 1955. Th, like St and Ke, was divorced by his wife before entering the hospital, and he stated that he did not anticipate either reunion or remarriage. Hen expected to return to the wife he had married three days before coming into the hospital.

The picture of the family life of the alcoholics as they presented it in both the history and the Future Autobiography is strikingly different from the normal group. The protocols of this area are extremely meager and vague, either as contrasted with the normal records or with the descriptions given by the alcoholics in the other areas.

The following examples from those few subjects who went beyond the first temporal period in their descriptions are illustrative:

Sh (1955): "I hope I'll be married in two years and have a family. (1957): Hope to have some children. (1959): Family might be bigger. (1963): Family might be more, might not. Don't know about that."

Bra (1955): "My family--from the standpoint of my wife-- God willing we'll be together. I mean death. I mean I'm not worried that I and my wife will go back together. I do have one worry about my father. He's taking shock treatments in Wesley Clinic. I don't know how that situation will come out. From what I've heard about shock treatments, he might not be with us in 1955. (1957): And I wouldn't even attempt to say about my family--both my mother and father are past middle age now and that is something I couldn't say."

Wi (1955): "I hope to go back to my family. (1957): By then I intend to either return to the wife I have now or find someone else and start a new home life. That's probably what's wrong with these guys, they have no home life."

Gr (1955): "I don't see any reason for change, we own our own home, and intend to stay there. Our friends would be church groups and my wife's associates, she teaches school, and my fellow workmen. The family would be the same family, only older, there won't be any more....don't see any change in 57 or 59...the children will be gone, of course, be some change. The boy's seventeen now, those are things that will be coming off. I'd expect the children to be married and have children of their own. The boy will probably have served a hitch in the Army by 56, didn't think of that. I don't know much of what else there is to say. It has to

be of a specific nature. When a person's lived together for seventeen years there isn't apt to be any radical change. That is, the unforeseen can always happen."

There is little detail, little vitality in these accounts.

Except for the last example, there is no overlap with any of the other areas, and the only overlap here is with the social area.

As indicated by the graphs, Heaf is the only one of the alcoholic subjects to approximate the characteristic normal records:

Heaf (1955): "Well, I hope all the family is still alive in 1955. My little boy'll be starting in school then and I may have some more children by 1955. I don't know--hope we're all in good health." (1957): "Maybe I'll have another child by then--and the rest of the family will not be sick--be in good health. I think I'll have myself a new car and a nice home for my family." (1959): I know I'll have money in the bank, set aside in case he (son) wants to go to college. Set there for either one. The boy'd be in the sixth grade by now. She'd be in the third grade, the little girl. Just hope they're (family) all well, in good health. Two children should be in high school, or practically starting. The girl anyway, and doing well in their grades. If we have any more children they'll probably be in grammar school." (1967): I'll be able to send Jimmy through college. He'll be in his second year, whatever you call it. I'll be able to do anything I want to have money enough anyway, do anything we want to do, I should say. Think they'll be in good health, hope rather. By then my little girl should be just about finishing high school. And if we have any other children, they'll be either in high school or just ready to start."

In the case of this subject, many aspects of his record closely approximate those of the normal subjects. The relative detail of his family's future, the much greater overlap of the family with other areas, and the comparatively confident, realistic development set him apart from the other members of the alcoholic group.

Area: Financial  
Normal subjects

In the protocols, this area is most closely interrelated with the area of occupation; next most frequently with the family. The normal subjects rarely discussed finances without referring to at least one other area. The ratings indicate that there was somewhat greater insecurity and vagueness in their descriptions of their financial future than in the descriptions of the other areas. Insecurity frequently arose because of risks which were taken for the welfare of the family, as in buying a new house or putting money aside for college for the children; it arose, too, from business ventures, as in buying a farm or expanding a business. When these steps are taken at some point in the future, the verbalized uncertainty increases at this point. In their descriptions of their financial future, more than any of the other areas, the normal subjects expressed the view that the role of chance was greater than their own power.

The least differentiated and most static record among the normal subjects came from U1, who was also the least stable and certain in the area of occupation:

U1 (1955): "Hope they get better, Only one way they could go, to get better. Hope to have a different car, don't know that it would be new. (1957): Financially, I'll probably be in the same old rut. (1959): I wouldn't know, hope for the better. Financial security would be rather nice, but only a selected few have what I would call financial security. (1963): The boy'll be getting old enough to be wanting the car to go out nights. If financially able, I hope he has one of his own. By then it should be settled whether we're going to have any (money) or not."

Another of the more vague of the normal records, but one in which the overlap and differentiation increase in the middle portion of the temporal span is that of We:

We (1955): My financial condition I hope is better than it is now. (1959): I have hopes of building my financial part up some, by then. I'm planning some repair work on the barn, maybe building a milk house. (1957): By that time I'm planning on having the place pretty well cleared up and the fences in good shape--that'll give me more land. If I run more cattle, it should pay off more. A farmer will spend most all the money, keep trying to build up a little more; build up his herd or repair buildings or build new ones. (1963): I hope to send him (son) to college. I haven't any particular plans, I'd like to make a doctor out of him but that financial (question) comes in here. I hope to be better off financially than I was in 1959, because it's going to take more for schooling, whichever school he might go to. (1967): Boy'll probably be married, he should be out of school by then. I hope to be better off financially ...should be able to take it easier with the boy married and settled down."

A good example of the interrelationship with the area of occupation, and of detailed planning is found in the description given by Le:

Le (1955): "By '55, let's see--well, I won't be clear out of debt by that time yet. Can't say much more about that--expect to have better living quarters for the family by 1955. (1957): Ought to be out of debt by then. When I started out I told the wife that it'd take about ten years, it'll be about ten years by then and I'm sort of going along on schedule. We'll have better family living, being out of debt. (1959): Financially I ought to be building up, have a little reserve. (1963): Be getting reserve built up to where I can expand, more machinery, more ground. It's about time I figured on buying that farm....if that's the year to buy a farm, I'd say better living quarters. (1967): I guess I ought to know whether I'm going to lose it by now. Paying for the farm, I guess I wouldn't have much. Well, wouldn't have much more reserve built up." (Le also mentioned college for each of the two children, but not specifically in the area of finances.)

Those subjects who were employed in salaried jobs usually described their financial future in terms of saving for anticipated expenses, usually involving the family. The farmers, or those who own their own businesses, frequently described financial future in terms of periods of economy leading to expansion, further investment, or greater independence from their work. This is in addition to the family obligations which are mentioned.

Area: Financial  
Alcoholic subjects

Twelve of the alcoholic subjects commented specifically on their expectations in the area of finance; three descriptions went beyond the second period. Very little of the detailed planning found in the records of the normals occurred in the records of the alcoholics, and the area of financial expectations is rarely directly related to any of the other areas. The following excerpts from the alcoholic protocols will help illustrate these points:

Ca (1955): "Oh, I don't know. If I stay off whiskey, I'll probably have a little money. I don't know where I'll be in those two years. Might be in Africa, Alaska, New York or Oklahoma City--wherever that money is, that's where I'm going to be."

Hen (1955): "I'd like to be financially fixed and not have to worry."

St (1955): "I wouldn't know that, just have to be doing the best I can."

The following examples, from those records in which the descriptions extend beyond the first temporal period, are the "richest" of the alcoholic protocols. Even in these cases, comparison with the quotations from the normal records make the differences clear:

Gr (1955): "We'll be comfortable, not wealthy. We'll have sufficient income, about seven or eight thousand dollars a year, something like that...I don't see any change in any of them until retirement, except possibly financial, not much change there. A person never knows about income, never knows what will happen--it'll be current, whatever that is."

Bra (1955): "I don't expect it to be much different than it is now. I expect at the very least to

be in the six thousand dollar bracket. (beyond 1955):  
And financially, with sobriety behind me, by 1960, if the  
past is any judge I'll probably double my financial status  
--if the past is any judge, because I've doubled it in the  
past five years."

Sh (1955): "Financially? Well, I--just making money. I may  
not be in the red. (1957): might be making more money.  
(1959): Financial status ought to be better. (1963):  
Financial might be more or less."

Th (1955): "Financially I'd like to have enough money to  
have a comfortable living, as far as necessities go. I'd  
like to have a nice home, nice furniture, a car. I don't  
ever cherish being wealthy, I don't like that--rather have  
a happy medium. Just be comfortable. Almost all my family  
is pretty well-to-do, I don't like it. Too much obligation.  
You have to do this and have to do that--have to go to this.  
I'd rather just be happy. You don't have to put up with  
all those--like Shriner's meetings, and have to have big  
parties. You're bound down too much, it's too confining.  
(1957): Finances should be pretty good. By 1959 my  
financial status should be increasing. (1963): All I  
want is just enough to have a comfortable life. (1967):  
Hope to--by that time I should have put away enough in  
insurance bonds, etc., so that when I retire I'll have an  
income."

The last example is the most specific, and the only one to  
mention investments or savings for the future; the only overlap  
among the areas, however, is his negative attitude toward the social  
obligations which he sees as part of the life involved in the higher  
income groups.

The deviation from the other alcoholics, and similarity to the  
normal records which has been true of Heaf in the other areas is  
also seen in his description of the financial area:

Heaf (1955): "You mean how I'll be fixed in 1955? Let's  
see, that's about a year (examiner corrected). I hope I'll  
be out of debt in 1955. I hope I will, can't say exactly  
how much money I'll have. I know I'll be better fixed than  
I am now. (1957): I think I'll have myself a new car and  
a nice home for my family. That'd be all on finances.

(1959): I know I'll have money in the bank, set aside in case he (son) wants to go to college. Set there for either one. (1963): Should be quite a bit better off than I was four years before. (1967): Financially, I'll be able to send Jimmy through college. He'll be in his first year, whatever you call it. I'll be able to do anything I want to do, have money enough--do anything we want to do, I should say."

Areas: Social  
Normal subjects

Generally, the descriptions and planning in this area were less differentiated and less evenly distributed over the entire temporal span than in any of the other areas except hobbies. None of the subjects foresaw a complete change in social activities; on the other hand, none report no change, i.e., only "the same". The normal subjects usually began with a description of their present activities and affiliations, indicating the changes or differences in the amount of participation which they anticipated within the next two or four years and then described in non-specific statements a generally constant situation except for financial changes and those resulting from the family growing older.

To the normal subject, social activities seem to be something that can be given up or replaced, more or less regretfully, as the more urgent demands of the family or occupation conflict. The attitude which is most usual is "you can always make friends. Wherever I've gone I've made friends." Attitudes toward social activities vary mainly in the specificity, e.g., in the expectation of joining or maintaining membership in certain organizations which are seen as potentially helpful in their occupations (mainly in the case of farmers). Using a grammatical analogy, it is as though this area were always the object rather than the subject of the action; reflecting the changes in the other areas, but never causing changes. Again, it is hoped that examples will serve to concretize

these general statements:

He (1955): "I'll probably have a lot of friends because I have a lot now. I belong to the American Legion in Alma, I'll be more active then, I just joined. Right now we go to shows, dances--after we're married we'll probably settle down, have card parties, etc." (1957): "Probably still have friends, few card parties, probably belong to some other social group." (1959): "Probably still be paying on a house or home that we would have and would have friends come in for card parties and probably be pretty active in some other social group. (Might go to Wichita on job) Make more new friends, but I don't think that would make much difference because I've always made new friends everywhere." (1963): "Still have friends come in and play cards and be pretty active in social groups." (1967): "We'd still have friends and be active in social groups."

Co (1955): "In two years I imagine I'll have the same friends, maybe a few more. As far as social groups is concerned I don't think there will be any change in that. I don't belong to any." (1957): "Well, friends would be about the same, we'd be in a different community (job in a different location) so we'd change churches and I imagine I'd have social groups to go with the little outdoor fireplace (this year moved into the house which he is building now) for wiener roasts. Guess its nice to join VFW or American Legion, but then you kind of stick your neck out because if a meeting comes on Wednesday and I want to watch TV then ....I like to do what I want." (1959): "Maybe a teacher of Sunday School or something like that. All the different school sports, I'd be attending these more so." (1963): "Wife might join PTA. Be a little more matured. I think with a house paid for, a car, a full acre of ground,..... and with two, possibly three children, by then, attending church fairly regularly, what else could a man want?"

Bu (1955): "Friends would probably consist of the same ones I have now. Might add a few and might drop a few." (1957): "Friends and social groups will be relatively changed, as far as the ones we run around with now, they'll probably never settle down and I will. Can't run every night, I'll have things to do like feeding the chickens, etc. Probably take more interest in church for the child's sake, so he'll have benefit of that teaching. I'll have interests in 4H, judging of cattle...be more involved in 4H, etc. if I'm on a farm." (1959): "Friends and social groups won't vary too much. Friends would be the ones you want to be with. Probably change from 4H to the FFA and probably belong to a colp." (1967): "I'd be taking an active part in FFA, judging and going to sales around."

Br (1955): "I would imagine that by then we'd probably have quite a few different friends along with those we have at the present time. (1957): By that time there would still be new friends. That's something that comes along naturally. We belong to the local PTA and the chances are, if the American Legion--might join it. That really belongs in 1955. There will be increased interest in the little girl's activities in school and church activities, too. (1959): The older the children become, the more we'll have in common, the more they'll get to go with us. There will certainly be an addition of friends over a two year period and probably the same social groups as in 1957. (1963): I imagine the family will be more interesting. There will be more activities with both children in school. As far as friends and social groups--with a daughter in Junior High School, that will increase the social groups, with the other children's parents and there is a possibility that either the wife or I might take part as a leader in girl or boy scout organizations. (1967): An increase in the family activity as a whole. As the children grow older and take part in social groups it will bring us into friendship with more people that they come into contact with, besides additional friendships that the wife and I make on our own. Should have more time to devote to social groups, too."

Like the area of finances, this area is seldom treated entirely separately from the others. It is most frequently integrated into the discussion of the family, or with occupation.

Areas: Social  
Alcoholic subjects

The area of social activities appears to play a different role in the lives of the alcoholics than that seen in the normal subjects. All of the normal subjects gave instances of a positive attitude toward friends and social groups, although this area played a more important role with some than with the others. Some of the alcoholic subjects specifically stated that they were not very social and didn't care much for social activities, and this indifference to social ties is further seen by the fact that six of the fourteen subjects who mentioned their anticipated social activities stated that they anticipated a complete change in their social contacts. The transiency of their social contacts, as well as the meagreness and vagueness of their descriptions may be seen in the following quotations:

St (1955): "As for friends, I'm going to have different friends. I'm not going to fool around with a bunch of drunks all the time."

Ke (1955): "And friends--I don't know. The friends I have will have to be more or less avoided. I have some friends who don't drink. I'll probably associate with some. I'm not much of a social person."

Jo (1955): "I expect I'll be looking for new friends at that time if I'm not drinking. (1960 on): Don't know what you can say about 'em. Nothing more I can see. Oh, I'm going to be looking for friends, expect to be looking for friends until I die."

Bra (1955): "And my friends--if I have my way, they'll be all new. (1957 on): My friends will be about the same but there will be more of them as my sobriety continues, and as I continue through this occupation, always meeting new people as they come into the field."

Wl (1955): "As far as friends--I intend to change my friendships. (1960): As far as friends go--I'm a person

who likes friends, social gatherings. That's the reason my wife and I separated, we didn't have enough. I hope that gets better, the right kind of friends."

These examples also illustrate the tendency of the alcoholic subjects to ascribe to the area of social activities a causal relation to other aspects of their lives, which was not seen in the normal records. The fact that there is more of this kind of overlap described by the alcoholics in this area suggests that it is relatively more central for them than for the normal subjects, but the ease with which many of them speak of changing all their present friends or affiliations suggests that it is the area of social activities in general rather than specific friends or groups, as was the case in the normal subjects.

The following examples are slightly more specific, but still much more vague and meager than the normal protocols:

Gra (1955): "Friends would be the same as now. I don't see any reason for change. We own our own home and intend to stay there. Our friends would be church groups, my wife's school associates--she teaches school--and my fellow workmen."

Sh (1955): "Well, I don't know. I never thought of anything like that before. Maybe Veteran's groups or something like that. (1957): Friends and social groups will be the same. (1963): I'll have the same social groups."

Th (1955): "I like friends, I like people, in fact, I like everybody. There's no such thing as for me to dislike anybody. As to social groups I like anything as long as it is conducted in a mannerly--and is something beneficial. (1967): Hope to have a lot of friends and be an active member of social groups--enough to where you don't feel yourself obligated, letting them interfere with your other more important activities."

Heaf, who differs from the rest of the alcoholic group even more

sharply in this area than in the others, seems to be much more dependent on his specific social activities than any of the normal subjects:

Heaf (1955): "Oh I imagine I'll have some of the same friends I have today. There will be some new ones--some of the so-called friends, I don't imagine I'll have any of those. On these social clubs; I belong to the Cooties and the VFW, I know I'll be connected with those two social groups. As far as any other ones at the present time I don't belong to any of them but I may join another one or two groups. That's about all there....(hobbies) I play cards, go to dances once in awhile, have friends come to the house, go visit them. I mean my brothers and sisters, too, because they're always back and forth. I like to belong to the Cooties because their work is hospital work and I know that patients in Veteran's Hospitals gets awful lonely at times and the different work that they do cheers them up. We bring shows up--I've been a patient and I know how lonely you get, some of them. Another point of interest is to raise money through dances, etc. and see that the boys are entertained. I was in two minstrel shows. I told them they're going to miss me this year. (1957): I hope to have the same friends as I had in 1955. I'll probably have some new ones and maybe some of the old ones won't be there any more. The social groups will probably be the same as in 1955. (1959): Friends and social groups will be practically the same thing, too. (1963): Some of my older friends, older than myself probably will be passed away. I will still belong to the same social groups as in prior years. (1967): As to my friends, I'll probably have new ones, some of the old ones won't be with us anymore. Social groups are the same as in prior years."

Area: Hobby  
Normal subjects

As with the area of social activities, hobbies did not play a centrally important role in the descriptions of the normal subjects. They were specific, but somewhat less realistic in their treatment of these activities than the other areas. They described this area more playfully than the others. All the normal subjects except We described spare-time activities at one time or the other in their descriptions of the future, and ten of the subjects mentioned hobbies in each of the temporal periods.

More than any other area except that of occupation, hobbies seemed to vary in the meaning they had for the individual. For some, they were pleasures to be taken up after the family was secure and grown and there were fewer occupational or financial worries. For others, hobbies altered and expanded as the family grew into fuller participation, and it became increasingly difficult to differentiate the areas of social, family and hobby. For some a hobby was seen as a possible, and pleasurable, source of additional income as well as providing an outlet for creative ideas which (apparently) could not find expression in their work. The subjects who were farmers frequently mentioned hobbies and spare-time interests that were associated with their work.

There is less evidence of long-range planning in the areas of social and hobbies, but the specificity and integration which characterized the normal records in other areas is also sharply evident here. Many hobbies, such as gardening or working with

tools, were seen as hopes for the future, depending on the subjects' obtaining their own homes. In these cases, they were frequently integrated into the plans for the home, and partly determined the location or kind of home. Other hobbies, such as sports, increased and changed as the family grew and participated more, and the emphasis changed from playing to watching as the subjects saw themselves grow older. Where travel was mentioned, either hunting trips or tourist, they were frequently seen as dependent on either retirement or increased independence from work.

The only subject who did not specify a hobby, We, described his spare time activities in terms of working around his farm, attending club and church meetings and being active in school activities. All of the other normal subjects indicated some particular interests, either now or hoped for in the future, in addition to these kinds of activities which were treated as either social or occupational.

Examples of the normal records which illustrate these points follow:

Jo (1955): "As a matter of fact, my hobby is leather work. I like to have a piece of leather to work on. It might even pull me out of my work (job) but not by 1955. (1957): My hobby is getting better, I'm improving. This house I have (obtained in 1955) has a little workshop where I work on my hobby in my spare time. We (family) go to a ball game or fight or a wrestling match occasionally. (1959): My hobby is the same. I just had a brand new idea, a new way of tanning the leather. I'm trying something. Don't know how long it'll work out. I have cut down on sports. (1963): My hobby is still the same. I figured out that new idea and it worked. So, after sneaking around trying to get a patent on it independently, I turned it over to this company and they bought it. My wife--that gives her more

money to spend...(etc.) (1967): My hobby's still the same. I don't find much time for that hobby now, with that grand-child."

Pa (1955): I'd like to be situated where I could build model railroad trains. (1957): Interests and hobbies would be the same as before. (1959): By then I'd like to start buying a speed boat. (1963): I'd like to have the boat paid for and two model trains completed. I guess that's all on that. (1967): I just want to be able to spend some time with the boat, and the same with the trains.

Co (1955): In the apartment I don't have room for it. In the future, but not in the apartment. (1957): I will have a workshop and do different things. I'll have a skill saw, may build a gold fish pond and things like that. I'll have lots of things to do, I'll still have to work finishing the house. I'll have five years work after I get in. (1959): I may be a teacher of Sunday School or something like that. All the different school sports, I'd be attending those more. By then I might be financially better off and take a vacation. I've never had one.

Le (1955): "Sports is mostly my--guess you'd say hobby. I always have been active in sports until last year. I played basketball, baseball on a team in Berryton. I'll probably be playing in 1955. I like almost any kind of sport. To listen to them on the radio or to watch them. (1957): Well, I'll still be interested in sports, though I don't know about much playing by that time. My girl that's seven is interested in sports, and the little one might be interested by that time--she'll be going to school. My wife, she likes to swim more than anything. (1959): In this last one the children will be getting old enough so you kind of have to go their way on their school activities, spend more time following the school sports. For myself, I'm still interested in sports of all kinds. Might be active in community sports--keep them going for the younger ones coming up. (1963): Not much difference, I guess. (1967): I don't know what to say on this last one now. I'll always take an interest in sports and activities of the neighborhood, I guess."

Areas: Hobbies  
Alcoholic subjects

The most apparent difference between the two groups in this area is that all but one of the normal subjects had definite hobbies and interests at the time of testing and had plans for future hobbies, while six of the alcoholic subjects indicated that they had no hobbies and no plans for any. While the descriptions given by the other nine subjects were more specific in this area than in the other areas, they were much more vague, meager and static than the normal records. The vague, indefinite quality of the statements are illustrated by the following:

Ke (1955): "I'm going to try to develop some sort of hobby to put my spare time on when I'm off the job. I haven't decided what it will be yet. Probably something connected with the building trades."

Hen (1955): "Extra-vocational interests? (explained) I don't believe I have any."

Bra (1955): "As for extra-vocational interests, I don't believe they'll be any different than they are now."  
(no further elaboration was given.)

Heaf (whose hobby was social activities, and was quoted in that section) was the only one of the subjects to develop this area as the normals did, but his description did not show the inter-relationship with the other areas that the normal records did.

Other examples of rather full descriptions are:

Th (1955): "I like all kinds of sports; golf, football, baseball, fishing and I imagine I'll study the rest of my life. When I finish one thing I imagine I'll start out on something else. (1957): I know from the past that my extra-vocational interests will remain the same. I've done it since I was a little kid and I always will. (1959): I will still go ahead with things I like; if I

want to learn something I'll still just go to school and learn about it. (1963): My extra-vocational interests remain the same."

None of the alcoholics included the family in their descriptions.

The integration with the social area found in Heaf's record, and the suggested integration of the occupational area in Th's record are the only instances of interrelationships with the other areas found in the alcoholic protocols.

Future Autobiography

ORGANIZATION

Normal subjects

It is possible to examine the organization and integration of the protocols in terms of the influence exerted among the areas, and the centrality or peripherality, as seen by the cause and effect relationships implied in the descriptions, of the areas. For example, if one of the subjects made the statement that he would give up a particular hobby when the children grew old enough to need more time, it would be assumed that there was a relationship between the areas of family and hobby in such a way that the family was central, the hobby peripheral. Centrality is also determined by the direction of the overlap among the areas, so that if the family is mentioned in each of the five areas, while hobby is mentioned only as integrated with the family, hobby is considered peripheral for that protocol while family is more central.

For the five normal subjects who are proprietors of their own businesses (four are farmers and one the owner of a feed store) Le, We, Ha, Bu, and Zw, the areas of Occupation and Family assume a position of centrality as indicated by the amount they overlap with the other areas. In these cases, the Finance area is described in terms of the growth of the farm or business, of investments, of improvements, of acquisition of new land, of buying a new house or improving the present one, of saving money for the children's needs, and of the security of the family. The hobbies and leisure time activities of these subjects are fairly well divided between such occupation-related interests as attending agricultural courses,

studying FFA literature, attending 4H or Grange meetings, and keeping up with church, school and community functions along with the whole family. In the case of Zw, who had no children and did not anticipate any, leisure time activities are shared with his wife, and he anticipated the time when his feed business would be independent enough to allow them to spend six months of the year hunting and fishing.

For four of the remaining subjects who indicated that the job they had was the result of deliberate choice rather than merely a way of making a living, the area of Occupation does not assume the centrality it had with the five cases mentioned above, but, as with them the family is central and overlaps with all of the other areas. Co, a barber, and Pa, who works in diesel engines, mentioned having taken training for their work. Hei indicated the plans he had at the time of testing for beginning an apprenticeship in bricklaying in 1955, and pursuing that occupation from that point on. Pot, a worker at Goodyear, indicated that if there were to be any future changes in his occupation, they would be in location, not type of work. There is no instance in these four subjects of the areas of Hobby or Social Activities being influenced by their work, although, more often than not these areas are influenced and changed by the changes in the family group; such as improving the house, becoming better acquainted in the community, and having more money to spend on the family through saving and paying off obligations. With these four subjects the main development of their work was

presented in terms of regular increases in salary and status, or possibly changing location within the field. The main overlap of Occupation is with the Finance area; three of the four subjects described their hobbies in terms of supplementing their salaries.

Three subjects are working in a salaried job which is not explicitly of their choosing (Ca, Jo, and Br). Ca and Br are in civil service and Jo works in a packing house. With these subjects the area of family was strongly central, and overlapped with all other areas, while their work overlapped only with the area of finance, and that was restricted to minimal exposition. The hobbies mentioned by these three subjects were partly aimed toward augmenting their incomes, and may or may not involve family participation. Jo, who described increased independence in 1967 in his social activities, is the only one to mention any social activities which do not include the family, and this was described after the children were married and away from home.

With the two control subjects whose occupation was most uncertain, the family was also central, and overlapped with all other areas. Ul, in this connection, said "If I could get a service station leased in a good location--wouldn't matter where. I have no ties to any certain place, only to my wife and children." And Yo, in much the same vein, said "I think I'll be working in civil service by 1955. Doesn't really matter (kind of work), either in communication field or at the Post Office. It wouldn't make any difference where. It would make a difference in the family. We would get to spend more time with her (daughter)...If I change jobs I'd do more--

like you're off on Saturday and Sunday--they'd (wife and daughter) go more." Both of these subjects indicated social interests and hobbies that were independent of the family, as well as those which included the family group.

The two control subjects who were not married nonetheless indicated the centrality of the family in their future lives as they perceived it. Po and Hei both anticipated being married by 1955, and both described the subsequent family as determining their social activities, hobbies and financial activities.

ORGANIZATION  
Alcoholic Subjects

The protocols of the alcoholic subjects did not lend themselves to this kind of analysis. They did not express an integrated organization among the different areas. In contrast to the normal subjects, the alcoholics almost always described each area independently of all others.

Eight of the fifteen alcoholics do not make any explicit mention of the relatedness between any of the areas. La and Ce described their futures in terms of returning to their families, from which each of them had been separated for some time, and stated that they anticipated starting entirely new lives in which no part of their past remained. Neither of them had nor anticipated having any hobbies or social activities; both indicated extreme uncertainty and a lack of definite plans for the future. Jo and Sh anticipated complete changes in the areas of occupation, family and social activities, and they are compartmentalized changes without any mention of one influencing the other. Sh especially maintained this compartmentalizing, and developed each area minimally, though he is one of the few alcoholic subjects who described his future through all five temporal periods. Bra, An, Hen and Sta mentioned their anticipation of complete changes in some areas, and gave only statements of sameness in some others. None of these eight subjects expected to return to well-established families, nor to the same jobs, so that the two areas which were found to be most often central in the protocols of the normal subjects, and to be integrated into the other areas, did not hold this position with any of this group.

One of the other seven alcoholics, Ca, gave only one instance of overlap between the areas, and that was a negative instance in which he stated that he did not intend to allow one to influence the other; "I'm going to bridge (work as a bridgeman) for two more years. If she (his wife) don't like it she can go home."

There was some overlap in the other six records, but at no time does it approach the kind of integration which was characteristic of the normal protocols. Ke has two instances of overlap; later indicating that he intended to continue his work in the building trades, he stated, "I'm going to try to develop some sort of hobby to put my spare time in on when I'm off work....probably something connected with the building trades", and in speaking of his social activities, "I'm not much of a social person. Most of my friends will be in the immediate family, I imagine. (He referred to his sister and brother with whom he lives.)" The overlap in Wi's record consisted of possibly going into business with his brother (never definitely decided in his description), and his statement, "I'm a person who likes friends, social gatherings. That's the reason my wife and I separated. We didn't have enough. I hope that gets better--the right kind of friends." The overlap in Bri's record is less explicit. He gave essentially a description of the life he had been living and to which he anticipated returning, with no changes outlined except his hop for two more children. However, there is more cohesion and implicit overlap in the description of his social activities among the farm folks, church groups, civic groups and Kiwanis club, his hobby of farming and his work as manager of a

farm implement store.

The three alcoholic subjects who have been most frequently cited as deviant from the larger group were the only subjects who approached the normal subjects in the integration of the areas in their descriptions. Gra had more integration in his description of the existing situation, but had little temporal development in his record. In his description his work on a newspaper and his wife's job as a teacher determined their circle of friends, and their friends were described as mutual. With Th, the central area seemed to be his work, which overlapped with his hobby of research and study in the field of electronics. He, like Ca, had more negative statements than positive ones regarding overlap, as when he stated that he wanted only enough money for personal comfort, but not enough to obligate him socially, and when he stated that he wanted friends and social group membership, and again stressed that he didn't want such activities to interfere with his interests in other areas. Heaf, always the most atypical of the alcoholics, had the most organized and integrated record of the group. In his record the Social area overlapped with his Hobbies, and the Family area overlapped with the area of Finance. He was the only one of alcoholic subjects who described his financial future in terms of buying a car and house for his family and making college possible for his children. Even with this subject, however, the areas were mainly discrete; the apparently central Social and Hobby area did not overlap with the other important areas of Family and Finance, while Occupation remained separate from both.

## Summary

The normal records have a cohesive, complexly organized unity that gradually develops through the entire temporal span. In all the records every area overlaps with at least one other area in some temporal period. Which areas are interrelated varies with the different subjects, but for all of them the area of Family has the greatest frequency of overlap; with those who run their businesses, the area of Occupation has the next greatest.

The alcoholic records are characterized by the compartmentalizing of the areas. Most frequently each area was described discretely, even with those few subjects who described their futures beyond the first few temporal periods. Those alcoholic subjects who were found to be deviant from the general trend of the groups in the other analyses were also found to have the most overlap in their descriptions. Again the difference is clear; the most complex of the alcoholic records is more compartmentalized than the least complex of the normal records.

## Reflective Thinking

The inquiry into the characteristics of the reflective thinking of the subjects was the most unstructured and informally administered of the techniques used in this investigation (see Chapter III, page for the detailed administrative procedure.). Because the intention was to attempt to capture the subject's inner world as he describes it, methods which would yield precise quantification were sacrificed. Such quantitative statements as can be made have arisen from an examination of the data after it was obtained.

In reading through the protocols striking differences between the two groups of subjects were immediately apparent. Essentially, the procedure in analyzing the data was guided by this initial impression as well as the basic questions which have been investigated in all the techniques.

### ATTITUDE TOWARD REFLECTIVE THINKING

One cluster of differences between the two groups is the attitude displayed toward reflective thinking and the role it appears to play in the subjects' lives. Many of the normal subjects indicated that they generally preferred to be active, but this was not exclusive nor emphatic, and all of them indicated that there were times when they liked to sit and relax with their thoughts. The majority of the normal subjects seemed to feel that thinking and action were pretty equally characteristic. In their words:

Br: "I'd say the preference is action. Well, you have to give it some thought before you can take action successfully. I'd say it approached fifty-fifty."

Leo: "I'd usually rather be doing something, the biggest part of the time. Like now, when I'm sitting around, I don't feel right. I feel I ought to be working. But when I'm home I like to take it easy once in awhile."

Bu: "I'd rather keep busy, be up doing things. I'm too nervous to sit still very long. At times I like to sit down and think but generally I keep busy."

Ul: "Well, this winter I've kind of enjoyed myself just sitting. Usually, I enjoy activity."

Ul: "Well, this winter I've kind of enjoyed myself just sitting. Usually, I enjoy activity."

Of the fifteen alcoholic subjects, all who answered the question specifically, thirteen subjects, were emphatic in their preference for some kind of action rather than thinking. More than half of them spontaneously mentioned this preference and described going to some trouble to avoid ever sitting around with "nothing to do but think.":

Sh: "That's something else I've learned--I can't afford to be idle much of the time. If I keep myself busy, I don't build myself as many mental conflicts."

Hen: "I prefer doing something, try to keep active, busy. In this place you find a lot of extra time on your hands. I don't like it. When I get to thinking I get nervous."

Jo: "Don't do much sitting around. If I'm not working I'm usually going somewhere or doing something...When I get to worrying about something, that's when I go get a bottle."

Gra: "I very seldom sit around and just think. I usually try to read or do something...I got to do something, can't just sit still."

#### TYPES OF THINKING

##### Planning:

In the normal protocols planning appears to play a very important role. All of the subjects were able to give examples of present plans as well as examples of past plans. "Planning" was

frequently described in the spontaneous section of the inquiry, most often present in plans which extended into the future. While the normal subjects occasionally described plans in conjunction with their work, these plans were always extended over a considerable period of time (never restricted to planning the next step of a particular job as is described by the alcoholics). Occasionally the normal subjects made statements of uncertainty regarding the eventual outcome of their plans, but this was never offered as a reason for not planning. It will be pointed out later that plans which they described as most uncertain, were often labeled "daydreams" by the normal subjects; while "plans" on the other hand, were described as pretty definite, even though they extended over a period of years. All of the normal subjects gave examples of plans that extended over a period of time. Examples of these plans are:

We: "Well, I've planned a lot of things and done a lot of them. Well, on my place it happens that clearing brush and building fences has been quite a problem to me. I most generally plan to do so much of it--which I've followed. Most generally how much I can get done in a certain time. This year I had a certain area to clear of brush and I thought about when I could do it."

Jo: "You plan a surprise for your wife...you've been shopping with her and she shows you a nice pair of shoes. You want to get it for her, and have to save for weeks, maybe, out of what's left of your salary."

Cam: "I've been doing a little thinking here in the hospital. Planning to build a chicken house. Small--eight by ten. It's just going to be high enough so I can get in and work inside it. Put heavy, small cubed wire on the bottom and on the sills, then lay flooring on that so the rats can't gnaw through the floor on the bottom and I'm planning to sheet it up good and tight and put colored asbestos shingles and black paper...."

Leo: "Well, I go to this G.I. school and they require you to make a plan at the beginning of the year. I'm planning to hire someone to help me for Spring, a kid in Berryton, and I might get him to drive one of my tractors, might get him to help. Have to plan to do things a certain time so your work will come out right. Like next month, if the weather is right, I'll sew oats, so I should start working the ground in the middle of February."

The normal subjects are detailed and specific in their examples; speaking in terms of planning the steps in farming, or building a chicken house.

The compelling nature of motor activity for the alcoholics was also seen in their description of "planning". The plans offered as examples by the alcoholics were frequently accompanied by expressions of fear of something interfering. Most of their plans were very close in time to the intended action, and many of them stated explicitly that these were the only plans they ever made. The most frequent example given by the alcoholics of planning was thinking out the next step of a particular piece of work. They also, more frequently than the normals, gave examples of planning they had done in the past rather than plans which were projected into the future. Examples of the kind of planning they described, and their attitude toward them, follow:

An: "In general I think about what'll happen the next day ...sometimes I go on a job. When I'm not working on it I try to figure out the easiest way to do it. Sometimes I think about what I'm going to do that night--if I have a date or something....how to make the best of it. (plan in advance?) No, never plan that far ahead."

St: "Depends on what I'm working on. Not now I don't. Maybe if I have a complicated job to do I try to figure it out. Try to figure out what the next step is. (after the hospital.) I figure the first thing to do when I get out is to go home to my mother for a few months, and get a

job doing something, I haven't figured out very much."

Ci: "I can honestly say that of all the planning we have done, very little has turned out successfully....I've been awfully disgusted. I'd plan things and then when the time came to do it I wouldn't feel up to it. There's nothing I can plan on--I've been disappointed so many times. Well, things are too uncertain--too many things."

Sh: "Well, it seems as though I used to do some of that but I've quit doing it. I don't make any plans now to amount to anything beyond a week or a day."

No instance of detailed planning beyond a few days or a week was elicited from the alcoholic subjects. The feeling that "you can't tell about the future, anything can happen" which was also very evident throughout the Future Autobiography is stated explicitly by many of these subjects when they were asked about planning.

#### Daydreaming:

The question about daydreaming produced the most clear-cut differences between the two groups. All of the normal subjects were able to give examples of daydreams from their own experiences. Only one of the alcoholic subjects described in detail his daydreams, and two others gave examples of thinking which might have been termed daydreams in line with the answers given by the normal subjects, but which the alcoholics did not consider to be dreaming.

The normal subjects all gave examples of daydreams, often with an attitude of apology. The comments accompanying their descriptions of their daydreams is closest to the attitude of the alcoholic subject's when they were asked about planning, except that, again, this attitude was not offered as a reason for not having daydreams. Only two of the subjects gave examples of daydreams that had no temporally projected action coordinates; the others all gave as

examples fantasies of what they would have liked eventually to have or to be, but about which they felt less confident than the examples they gave as plans. Examples of daydreams which were seen as possible are:

Po: "Well I've always thought of--I want to live in my own house. I think about how I'd like to have it, where I want it to be, different things around it. (Picture?) A ranch type, five rooms with a garage on it. I can just picture the house there and me looking at it...it's something I'd like to do but it seems far away."

Zw: "I suppose a guy always wants something better than he's got. If he didn't he wouldn't be human. That's what you work for--like a house, car, furniture. Oh, I suppose a guy dreams of a big ranch type house and everything that goes with it or the time when he won't have to work and can take it easy and go fishing. Don't visualize it because I can't buy it--no use thinking about it. It's no more than here and gone."

Leo: "I dream about what kind of place I'd like to have. What I'd like to have if I ever got one would be mostly farm ground where I could sew my own pasture. Like last year you'd think about water basins more than usual. I'd have some dairy, the bulk in farm ground. I've always wanted to get one somewhere between Berryton and Topeka. I know one place but I'll never get it now. I dreamed about that place. There's no buildings on it--I'd build them to suit myself. No fancy--a rectangular shaped house, six rooms, modern. I've seen other houses and kind of picked out one and think I want one like that or something. I want the other buildings handy, a Grade A barn, etc..... It's something I want to work up to."

Cam: "I daydream a lot. When I was in the army I dreamed about when I got out of the army and met the right girl and of the home I'd have and how I'd fix it up. Since I got married we have this home and small acreage I've dreamt of having a five or ten acre tract so I can have a cow and riding hourses. My wife likes to ride. I dreamed of having a wife and family and all that came true. The dream of a house I would have isn't quite right, I've had dreams of how I'd like to fix it for my wife....I probably like to daydream about things I could do."

The two examples of daydreaming which had no temporal coordinates are:

Bu: "If I read a book or sports story I sort of daydream about being--oh, a ball player, something like that. I dream about it as though I was a baseball player. Sometimes I can visualize it clear as hell, sometimes I'm just thinking."

Pa: "At one time or other every man wishes he was a millionaire. I'd have a big mansion, five or six automobiles, be very generous to people who was less fortunate. About a twenty room stone house, two acres in immediate grounds around the house, shrubbery, lawn and so forth. Total acreage of about fifty acres and nice gardens. Lots of shrubbery and a nice bar. It's not too clear--sometimes I can see it rather clear. I imagine the family in it, but that doesn't play too much a part."

Bu also gave examples of dreams which were possible of achievement, while Pa did not. (It is interesting that in these two instances the dreams described were in areas most closed to the subject's realistic aspirations, since Bu is chronically handicapped with arthritis, and Pa, a colored subject, has little chance of approaching the economic level described.)

The alcoholic and normal subjects also differed in their attitudes toward the daydreaming question. The attitude toward thinking in general; as though it were something to be avoided. They often state that they are too realistic to daydream, or that they haven't done any pretending since they were children, giving the impression that this kind of thinking is not compatible with their conception of an adult. Examples of the attitude toward dreaming expressed by the alcoholics follow:

Gra: "Any kind of daydream I do is in music, in which I hear the music--a symphony and that sort of thing. In fact, it would be better if it were more practical than

that. Don't know exactly what you mean by daydreams... I go a certain distance with that then say foocy. What's the use of that when it goes as far as fantasy. My little girl is good at that."

Ca: (daydream?) "No, told you before I live with facts and figures. I never imagine things."

Th: "I never daydream anything about--thing is you have to look at it the way it actually is, try to accept facts. Can't do anything about the world as a whole, I can only do my best to blend in with it."

Sh: "Never did much of that castle building--too damned realistic for that I guess. It would be pretty hard for me to do any."

La: "No, I can honestly say that I don't. I was trying to think of any time when I would have and I can't remember. I suppose I did as a child."

The two alcoholics who gave examples of dreaming present very different examples. Ke, who gave the only detailed instance, described the "static" kind of dream; i.e., that which does not point toward eventual action in the world:

Ke: "I have a wild imagination--build up wild schemes, etc. When I'm sitting around I'm not thinking of anything else. I'm a terrible dreamer. I discovered a uranium mine one time, back in the Arkansas hills and sold it to the government for two million dollars. I had that one worked out to perfection. Good as reading a book...as a general thing it doesn't mean anything. Most of my sitting around studying is like reading a fiction novel, it doesn't amount to anything."

The other example from the alcoholic group is from Heaf, and most closely approximates the usual normal descriptions:

Heaf: "Oh, I don't know. I'd like to have a nice home and so forth. (pretend you have it?) No, if I ain't got it I ain't."

#### Worry:

While a few subjects in both groups began their descriptions of the kind of thinking called worrying by saying that they didn't

worry very much, and that there wasn't any use in worrying, all of the subjects in both groups were able to give examples of this kind of thinking. Considering only the descriptions of worrying, and not the role it appeared to play in the entire picture of their thinking, there is less difference between the two groups here than on their answers to either of the other two questions.

The normal subjects are more specific in their examples, and the content of their worries tends more often to transcend the immediate situation, i.e., they more frequently give examples of worries that have to do with their lives outside the hospital situation, than the alcoholic subjects. This difference is consistent with the differences found in all of the productions of the two groups which we have compared so far. Examples of the worries given by the normals, are:

Hei: "Well, I worried a lot about getting a job because, well, I'd bought the car and I was getting old enough to be out on my own. I hated to be living off my folks all the time. When you're worrying you're kind of--oh, it's hard on your nerves and it bothers you. When you're planning something you can always put it off until later on but when you're worrying you have something on your mind such as a bill that needs to be paid and you're worried about where you are going to get money to pay the bill---worrying you can't put off and it keeps bothering."

Co: "Before I came in here I was a little worried about how long I could go without having this done (operation), how long I would be in, and how much money it would take. Never know when you or the wife are going to take sick. When we sent the baby to the baby center I worried about leaving her before I got confidence in the woman."

Br: "One of the main worries is the decision we're going to make concerning the girl with the cerebral palsy (daughter). The main thing is the decision whether we should place her in an institution or whether we should take care of her in the home."

Ul: "The most worries I ever have are financial. I wonder where the next dollar's coming from. Well, if you have money borrowed from the bank and don't raise the crop you planned on, you find it hard to pay the money back."

The greater evasiveness of the alcoholic group, and the kinds of worries cited by them may be seen in the following examples:

Gra: "...too much..I worry about things that never happen. Worry is definitely a factor with me, or stewing. Worry seems to be a relative affair. When I have a big worry I wonder why the Sam Hill I worried about the little ones, but when it gets solved then I worry about little things again."

Sha: "Mostly I guess I worry about the future, how I'm going to get along, if there's going to be any changes made."

Hen: "I think of my future, just wonder what I'm going to do, how I'm going to get along....It's a worry. I ain't got no occupation, don't know nothing, I worry about what I'm going to do."

Bri: "...I wouldn't say it was a worry. A lot of times I can iron out a problem. I might worry some, too, if we had some bad debts we couldn't collect or something like that --figuring out how to get it...there's been times when I pull a big deal or something, when I stay awake and you could call it worry."

An: "Just thinking--they don't worry me none 'cause it's all over and past. No, I don't worry about anything. Sometimes thinking is uncomfortable, but it doesn't pay to worry about it."

Both groups, when they specified, gave financial problems most frequently as the content of their worries. With the alcoholics worries were usually vague and undifferentiated; the worries of the normal subjects were most frequently in conjunction with either their family or their work. This finding is similar to that found in the investigation of the Future Autobiography.

#### Characteristic Thinking:

The subjects were asked which of the three types of thinking

(planning, daydreaming, worrying) they though was most characteristic of them. In answering this question, several of the subjects spontaneously combined two of the three suggested types, so that some of the normal subjects referred to "dream-plan", and some subjects in both groups referred to "plan-worry" as characteristic. In no case was worry combined with dreaming. The results of this question are summarized and presented in the following table:

Group	Dream	Dream Plan	Plan	Plan Worry	Worry	Total
Alcoholic	2	0	4	2	6	14
Normal	0	8	5	1	0	14

Table 8. Presenting the kind of thinking selected by each subject which he felt was characteristic of himself.

The table above shows that the alcoholics tended to characterize their thinking as worrying and planning, while the normal subjects tended to characterize their thinking as planning and dreaming.

To understand what these differences mean in terms of our central thesis of immediacy and transcendency, we must have some measure of the temporal perspective implied by each of the kinds of thinking. The fact that the content of the examples of thinking which were given and classified (as worry, plans, or dreams) by the subjects in the Inquiry into Reflective Thinking was frequently found to be integrated into the descriptions given in the Future Autobiography offered an opportunity to obtain an objective temporal measure of these types of thinking. For this analysis, only those examples which the subject labeled as planning, dreaming or worrying in the Reflective Thinking Inquiry and which reappeared in the Future

Autobiography descriptions were used. The results are tabulated in the accompanying Tables 9 and 10.

"Worries" are all resolved in the first temporal period by subjects in both groups, except for the normal subjects Br, whose worry about his job continues throughout the entire period, and Pa, whose concern (which he called worry-planning) about financial security involved steps towards its solution in each of the five periods. The trend, as seen in the table, is for "worries" to be resolved in the temporally closest periods. Worries were the most frequent kinds of thinking to appear in both the Reflective thinking inquiry and Future Autobiography (four subjects), and the most frequently chosen as characteristic of their thinking (six subjects) among the alcoholic subjects; it was the least frequent kind of thinking chosen by the normal subjects and the least frequent kind of thinking to appear in both techniques (two subjects).

Those examples of thinking which were labeled "plans" and which appeared in the Future Autobiography were most frequently actualized in the first two or three temporal segments by the members of both groups, with only three of the sixteen instances (combining the groups) extending longer. The examples called "plans" appeared in the Autobiographies of three alcoholic subjects and eight normal subjects. This kind of thinking appears to hold a middle position in the temporal scale which extends from the distantly projected "dreams" to the immediate "worries", and Table 8 as well as the examination of the data in Tables 9 and 10 suggests that this category is the

Subject	Reflective Thinking Units	Type of Thinking	Occurrence in Future Autobiography				
			1955	1957	1959	1963	1967
An	Marriage	dream	R				
Ca	Choice of job	worry	MP	R			
Heaf	Nice home	dream		R			
Hen	Choice of job	worry	R				
Jo	Change jobs	plan	R				
La	Reunite family	worry	MW				
	Work or School	worry	R				
Sh	Job choice	worry	R				
Th	School	plan	R				
	Profession	plan			R		
	Activity	Plan	MR				
Wi	Job	plan	MW	MW	MW		

Table 9. Presenting the character and temporal incidence of plans, worries or dreams which first appeared spontaneously in the Reflective Thinking Protocols and later appeared in the Future Autobiography of the Alcoholics.

In this table, the Type of Thinking which is presented is that which was mentioned by the subject during the Inquiry into the Reflective Thinking. The abbreviations used to describe the type of mention which occurred in the Future Autobiography are as follows:

- MW: The thought is mentioned with expressed indecision
- MU: The thought is mentioned with no resolution
- MR: The thought is mentioned with steps toward resolution
- MP: The thought is mentioned with partial resolution
- R: The thought is mentioned with resolution.

Subject	Reflective Thinking Units	Type of Thinking	Occurrence in Future Autobiography					
			1955	1957	1959	1963	1967	
Br	Crippled girl	worry	R					
	Mortgage	plan	MR	MR	MR			
	Work	worry-plan		MW	MW	MW	MW	
	Farm	dream						MW
	Larger family	dream		R				
Bu	Family in community	dream	MR	MR	MR	MR	MR	
	Pregnant wife	worry	R					
Ca	Build chicken house	plan	R					
	Rebuild kitchen	dream		R				
Co	House	plan		R				
	Child	dream		R				
Ha	Terraces	plan	R					
	Better living conditions	dream	MR	MR	MR	MR	MR	MR
	New machine		MP	MP	MP	MR	MP	
Hei	Job	plan	MR	MR				
	Marriage	dream-plan	R					
	Build house	dream		R				
	Buy a car	dream				R		
	Have children	plan		R		R	R	
Jo	Independence	dream	R					
Leo	Own Farm	dream				MP	R	
	Farm work	plan	MR	MR	MR	MR	MR	
Pa	House	dream-plan	R					
	Better job	plan	MR	MR	MR	MR	MR	MR
	Security	Worry-plan	MR	MR	MR	MR	MR	MR
	Master diesel	plan				R		
Po	Chrome set	dream	R					
	Own home	dream						R
We	Clearing brush	plan		R				
	Building fence	plan		R				
Yo	Civ. Serv. job	plan	R					
	House	dream	R					
	Leisure time	dream	R					
	Work in yard	dream		R				
	Days off	dream	R					
Zw	New car	dream				R		
	More leisure	dream				MP	R	

Table 10. Presenting the character and temporal incidence of plans, worries or dreams which first appeared spontaneously in the Reflective Thinking Protocols and later appeared in the future Autobiography. An explanation of the symbols appears in Table. 9.

dividing point between the two groups; the majority of the alcoholic subjects characterize themselves in the lower (temporally shorter) end of the scale and the majority of the normal subjects characterize themselves in the upper end.

"Daydreams" may become actualized at any time in the Future Autobiography, most frequently at a point beyond the first temporal period. They are the most frequent examples of the types of thinking to appear in both descriptions to be actualized in the last two periods; ten of the normal subjects mentioned daydreams, five of which were actualized in the last two periods. Two of the alcoholic subjects' autobiographies included daydreams which were actualized within the first two periods.

These results support the impression of an underlying temporal continuum implied by the three kinds of thinking. "Worry", when resolved at all, is temporally closest in actualization; "plans" may be close or somewhat distant with regard to the anticipated point of actualization; "daydreams" are the most remote of the three, and they are actualized without many intermediate steps, in contrast to plans.

When these temporal implications are considered, the difference between the two groups in their attitudes toward reflective thinking takes on added significance. The alcoholics, for the most part, are impatient toward daydreaming, give very few examples, and select worry or worry-planning as characteristic of themselves. The normal subjects all give examples of daydreaming, and the majority of them select planning or dream-planning as characteristic of them. This

finding supports the impression that the world of the alcoholic is temporally more immediate than that of the normal subjects. A statement made by one of the alcoholic subjects in the Future Autobiography spontaneously mentions this association:

La: "I've never been one to look to the future too much. This will be my most difficult job. That goes back to my daydreaming, I suppose--the fact that I don't do much. Never try to imagine myself and my family in the future. Nothing forms in my mind (about the future). It would be just daydreaming and I don't daydream. I don't have any idea what tomorrow might bring."

The difference between the two groups with regard to the amount of organization and integration of the separate areas in the protocols of the Future Autobiographies which was characteristic of the normal subjects and not of the alcoholics is also seen in the data of the Reflective Thinking Inquiry. The control subjects had many more instances of content overlapping between the two descriptions than the alcoholic subjects; only one of the controls, U1, did not have at least one instance, while six of the alcoholics did not.

A further substantiation of the greater incidence of future orientation in the normal subjects, although less striking, is seen in their spontaneous references to the past in describing their thinking. The following table indicates this trend:

	Only past mentioned	Past plus present mentioned	Past not mentioned	Total
Alcoholics	4	4	7	15
Normals	0	5	9	14

Table 11. Showing the temporal referents found in the spontaneous section of the Inquiry into Reflective Thinking.

These results suggest that the temporal continuum for the alcoholics is usually the past, present and the very immediate future; while the normal subjects orient spontaneously to the present and the future, both immediate and remote.

Responsibility:

The most difficult of the hypotheses to objectify and test proved to be the one which referred to freedom to act responsibly in the world, that is, to initiate responsible action. One manifestation of this sense of personal responsibility is the concept of oneself as the source of well-being and satisfactions of others, particularly the immediate family. No specific questions or references to the family was made during the administration of this inquiry, so that wherever indications of this kind of concern or planning occur, they were spontaneously given. In the Future Autobiography all the subjects were asked directly regarding family and other social activities, so that instances which occur here were to some degree instigated by the examiner.

Data are shown in the following table:

	Reflective Thinking		Future Autobiography	
	normal	alcoholic	normal	alcoholic
No mention of others.	0	5	0	0
Others mentioned, no concern or responsible action contemplated.	2	7	0	11
Concern for others, no responsible action.	3	3	0	3
Explicit responsible action described.	9	0	14	1 (Heaf)

Table 12. Showing the instances of the attitudes towards others described in the Reflective Thinking Inquiry and the Future Autobiography.

In the Inquiry into Reflective Thinking, none of the alcoholic subjects mentioned planning for someone else's satisfactions, while nine of the normal subjects gave such examples. Heaf, always the exception, gave the only clear-cut example of concern (worry) for others occupying his thoughts, and two others (Lam and Bri) gave examples in which this kind of concern was explicit; only Heaf, however, expressed a feeling of responsibility on his part. Five of the alcoholic subjects did not mention anyone else at any time in the Reflective Thinking Inquiry, while none of the normal subjects failed to mention others.

The difference between the groups regarding the mention of contemplated responsible action on behalf of others in the Future Autobiography has already been described at some length in the

discussion of the role of the family. Only Heaf, of the alcoholic group, explicitly stated his responsibility toward his family in describing such intentions as saving money for his children to go to college, buying a house for his family, etc. Lam and Bri gave indications of implied responsibility, but did not give specific examples of action toward others which could be termed responsible. All of the normal subjects delineated responsible roles in the family, giving many instances of concern and contemplated responsible action. For example, seven of the normal subjects mentioned plans to send children to college, all of them indicated plans for better living; either acquiring a new house, completing the payments on a house they were buying, or improvements on the house they had. Many of them listed detailed plans to join such organizations as the Scouts, 4-H, PTA or to take a more active part in school sports as their children grew older. Three of the normal subjects mentioned plans to provide in some way for their parents as they grew older.

### Stroop test:

As described in the chapter on procedure, this test was administered in three parts. Part 1 consisted of asking the subject to read aloud typewritten words on a sheet of ordinary typing paper. These were the words: red, blue, green and yellow, printed in black, in random order, ten words to a line, ten lines to the page. After the first sheet had been read and the time recorded, the subject was handed the second sheet and asked to read aloud the names of colors in which groups of X's were typed (part 2). The number of letters is kept constant by making the numbers of X's in each group on page two correspond to the number of letters of each color name on page 1. The groups of X's on this sheet were each typed in one of the four colors, red, blue, green and yellow. The sequence was such that no color corresponded to the color names occupying the same position on the sheet of part 1. (Thus, four X's, substituted for the word blue, was either in yellow or green or red, but never in blue.) In part 3, the page consisted of the color names from the first sheet. They were, however, printed in such a way that the color and the word at no time corresponded. On this page the sequence of the color names is the same as on page 1. The sequence of colors in which these names are printed is the same as on page 2 for the colored X's. The subject was asked to name the colors which appeared on the sheet as rapidly as he could.

When the subject had finished, a brief inquiry was made into his experience in the final portion of the task, particularly with regard to whether he experienced the task as becoming noticeably easier toward

the end.

The scores computed from this test are in terms of the time, in seconds, required by each subject to read each of the three pages. In the accompanying tables and graphs, the designation of these scores is as follows: RT (reading time), time to read the words in the first section; CT (color time), time required to name the colors in the second section; and ET (experimental time), the time required to name the colors in the third, conflictful, section. A third score, computed by subtracting CT from ET, was used as a measure of the influence of the interference introduced by the conflict between the words and the colors in the final part of the experiment.

The individual scores are presented in the appendix. One subject from each group was eliminated from the computation of the critical ratios because each was strikingly deviant from his group in all three sections of the experiment.

Table 13. A comparison of the mean time required for the three sections of the Stroop test, by the two groups.

	RT Mean	CT Mean	ET Mean	$\frac{ET}{CT}$ Mean
N	52.23	77.00	142.92	1.86
A	56.29	100.71	154.	1.66
Critical Ratio	.81	2.10	.85	1.47
Significance Level	.38	.036	.395	.141

The group data are presented in Table 13, which reveals that the alcoholics required a longer time for all three parts of the experiment.

The time difference, however, is significant (beyond the .01 level of confidence) only for the CT scores, in which the alcoholics were much slower than the normal subjects. The measure of interference (ET-CT) is found to be much greater for the normal subjects (a difference which approaches but does not reach significance.) These differences are shown graphically in Figure XI.

The alcoholic subjects have the greatest (relative) difficulty in the second part of the experiment, while the normal subjects have the greatest difficulty in the third, conflictful, section. In order to obtain a clearer picture of these differences, we investigated the homogeneity of the groups in each of the sections of the test. The results are presented graphically in Figure XII, and the results are compared in the following table:

	$\sigma$ RT	$\sigma$ CT	$\sigma$ ET
N	8.55	10.91	29.3
A	16.25	40.65	29.2
t	2.2	3.54	.013
Sig. level	.04	.0005	-----

Table 14. A comparison of the homogeneity of the alcoholic and normal subjects in the three parts of the Stroop test.

These results show that the variability for the alcoholics is greatest on the color naming part of the test, and that it decreases sharply in the experimental section; while the normal subjects show the greatest variability on the experimental section.

It is not clear from these results whether the differences found

result from improvement of the alcoholics' performance or from a greater vulnerability of the normal subjects to the conflict situation. The extreme differences in the color naming section between the groups, and the wide variability on this part of the test in the alcoholic group tend to confuse the final results, and present an interesting question for further study. When an attempt is made to partial the differences in the color-naming rate (by using a single score representing the time in seconds on the third part of the test minus the time in seconds on the second part divided by the latter) the results, while not significant are in the direction predicted, as shown in Table 14a:

	M	$\frac{ET - CT}{CT}$
N		.87
A		.65
t		1.69

Table 14a. A comparison of the performance of the two groups in the final part of the Stroop test using a composite score, partialing out the variability on the color naming section.

Supporting evidence of this difference is found in the results of the inquiry into the subjects' experiences on the last section of the test. Almost all of the normal subjects reported that they did not experience any sense of "learning", i.e., that the task did not seem to get any easier for them toward the end. A few stated that it seemed to get more difficult. The alcoholic subjects reported that they experienced the task as becoming easier, and felt that if there had been another page, they would have had no difficulty.

are a result of the alcoholic subjects' improved performance in the final, conflictful, phase of the experiment, or of the normal subjects' decreased ability to handle the conflict. The difference in the performance between the two groups, however, is unmistakable. It is also in the direction predicted from the theory as stated in the first chapter. Supporting evidence of this difference is found in the results of the inquiry into the subjects' experiences on the last section of the test. Almost all of the normal subjects reported that they did not experience any sense of "learning", i.e., that the task did not seem to get any easier for them toward the end. A few stated that it seemed to get more difficult. The alcoholic subjects reported that they experienced the task as becoming easier, and felt that if there had been a further page, they would have had no difficulty.

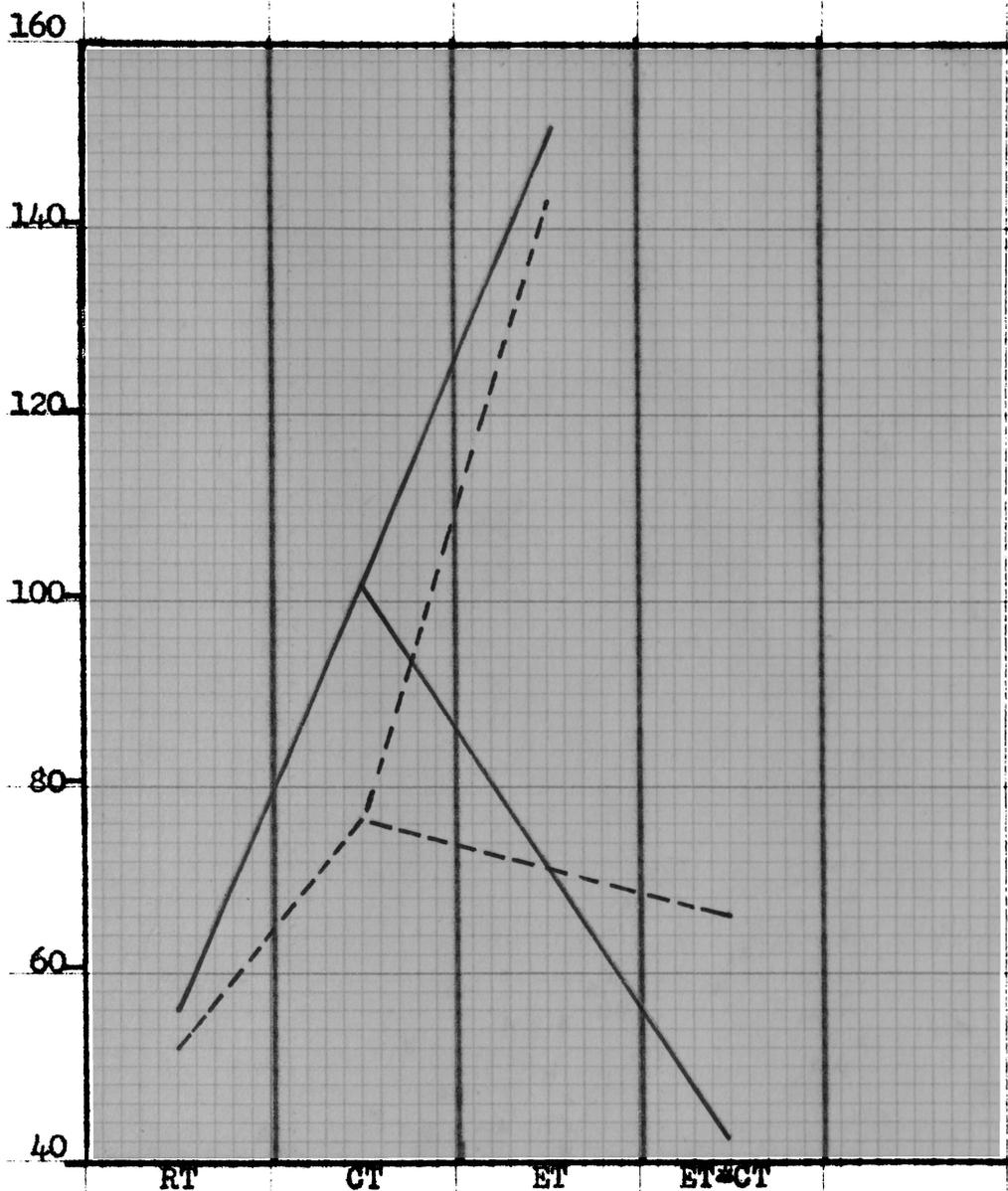


Figure XI. A comparison of the mean scores for the Alcoholic subjects and the Normal subjects on the three parts of the Stroop test. The last section shows the mean Color time subtracted from the Experimental time.

The dotted line represents the Normal subjects and the straight line represents the Alcoholic subjects.

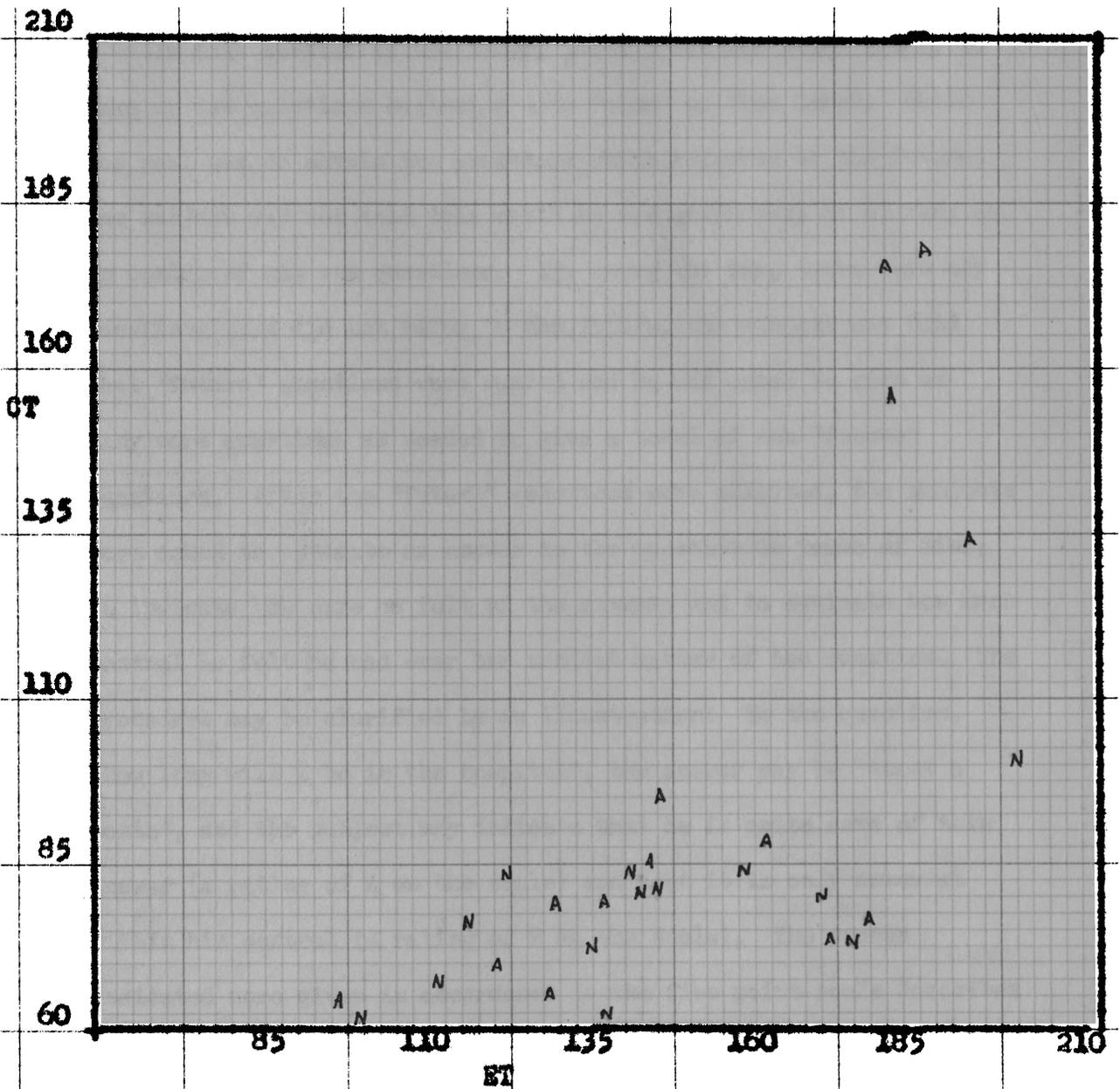


Figure XII. A Scattergram showing the distribution of the individual scores for the Normal and Alcoholic Subjects on Parts II and III of the Stroop test. Both coordinates are measured in seconds required for the reading. The two most deviant scores, 66 of the Alcoholic group, and 90 of the Normal group, are not shown.

### Data from the When Questions:

In this section of the study, the subject was asked simply to make up ten questions beginning with "when" or "how long". While the goal was to obtain ten questions which referred to the future, the subject was not told this until he had given ten, or as many as he could, of his own questions. If, among the ten, there were any questions that did not refer to the future, the subject was told that "future" questions were wanted and he was asked to give as many more questions as needed to give a total of ten "future" questions. After the "future" questions were elicited, the subjects were asked to estimate an answer to the question in terms of time; to indicate how sure he felt of the answer; and to estimate how much control he felt he had over the subject matter of the question. The procedure may be clarified by an illustration: To the question, "How long will I be in the hospital", the answer may be "About a month", and the subject may indicate that he is quite sure of this answer (a rating of 4 on the scale) and that it is only somewhat within his control (a rating of 2 on the scale). The scores indicated were given in accordance to the five point scale described on page 41, in the chapter on procedure. These scores are entirely in terms of the subjects' verbalizations and do not involve a judgment of the objective reality of the estimates.

The analysis of this material was pursued with the purpose of further investigation of the aspects studied in the preceding sections, rather than in the hope of establishing any new trends. This technique is more structured than the others, and yields more quantitative

data, so that it is possible to quantify some trends which were discussed qualitative in the preceding material.

Productivity:

The productivity of the alcoholics is, again, less than that of the normal group, but the difference in this more structured procedure is much less striking.

	Subjects	Questions asked for	Questions obtained	Mean Questions
N	14	140	120	8.6
A	14	140	136	9.7

Table 15. A comparison of the number of future questions obtained from the two groups.

All of the normal subjects gave ten questions each, but two were unable to answer three of the questions on the final part of the test. Ca, one of the normal subjects, asked the question "When will your operation be?", then said that he couldn't answer the question because he was actually thinking of his own operation which had been performed. Yo asked two questions which could not be answered, because (as he explained) the first didn't refer to anything real, and the second referred to something in the past: "How long will it take you to do the job?" (referring to fixing the radio) and, "When are you going to take your examination?".

Two of the alcoholics were not able to give the ten questions asked for (Ca gave 5 and Hen gave 6); otherwise the difference in the table above represents questions which were unanswerable, either because they represented something in the past, or because they were unreal questions.

The most important result of this comparison is that the difference between the two groups is less striking in the more objective situation.

Immediacy:

Immediacy, as it is used here, was defined as any question which dealt with the patient's illness, treatment, activities in the hospital or the testing situation, because these were temporally and situationally closest to the patient when used as content for the questions relating to the future. Questions such as, "When will we go to the show?" (usually answered, "tonight") or "How long will it be before the doctor comes to see me?" (usually answered, "tomorrow morning") were assumed to fit the criterion for the classification of immediacy.

The results of this analysis are presented in the following table:

	Total Questions	Treatment and Illness	Hospital	Testing Situation	Total	Percentage
A	120	24	17	2	43	35.8
N	136	13	11	3	27	12.5

Table 16. A comparison of the number of questions and answers which were considered to fit the category of immediacy.

Using a Chi square test of the significance of the differences of the total numbers of questions which were judged to be immediate, we obtained a result of 7.4 which is significant at the .01 level of confidence.

### Temporal Span:

The normal subjects gave realistic temporal answers to most of their questions. The alcoholics tended to vary between temporally close estimates and vague answers such as "never", "ever" or "forever". Because of this difference, the computation of a mean temporal span was not feasible, and would not have shown a significant difference. On the assumption that any answers which postulated temporal extensions beyond twenty years were unrealistic and evasive, we have compiled a table showing the difference between the two groups with regard to answers which range between twenty years and an infinite period.

The difference between the two groups on this basis is summarized in the following table:

	Total Questions	Answers of 20 years -	Percent of total
A	120	27	22.5
N	136	10	07.4

Table 17. A comparison of the answers to questions which involved temporal periods of twenty years or more.

Again, a Chi square test of the significance of the differences between the two groups shows a difference which is significant on the .01 level of confidence (Chi square is 10.6).

The questions were also analyzed with reference to the number of questions which has a past referent. This comparison is summarized in the following table:

	Total Questions	Past Questions	Proportion
A	120	23	.192
N	136	8	.053

Table 18. A comparison of the number of questions which referred to the past rather than the future.

The Chi square test in this case yielded 7.24, again significant on the .01 level of confidence.

These results support the findings reported in the other sections of this study, in suggesting that the immediate surroundings and the past are more real and important to the alcoholic subjects, and the future is vague; while the normal subjects tend to orient more spontaneously to the future, in specific terms, and to be concerned with questions that transcend the present surroundings.

Control and Certainty:

These two variables are discussed together, in order to see whether or not there is any relationship between them, and if so whether there is any discernable pattern.

When we compare the means of the scores received on the Certainty Scale, we find that the normal subjects are more likely to ask questions about things they feel some degree of certainty regarding, as seen in the following table:

	Mean Score	Percent of scores over 2
A	2.23	35.8
N	2.49	55.9

Table 19. A comparison of the mean scores on the Certainty Scale.

Chi square test of significance yields a score of 7.22, which is significant at the .01 level of confidence.

When the mean scores on the Control Scale are compared, we find that the normal subjects are more likely to ask questions which they feel involve them in a capacity of control, as seen in the following table:

	Mean Score	Percent of scores over 2
A	1.78	27.5
N	2.17	48.9

Table 20. A comparison of the mean scores obtained by both groups on the Control Scale.

Chi square test of significance of differences yields a score of 8.84, which is significant at the .01 level of confidence.

In summarizing these findings, we find that the productivity of the normal subjects is slightly greater than that of the alcoholic, but the difference is less striking than was found in the less structured parts of this study.

With regard to the temporal aspects of the questions and answers, the alcoholic subjects again show a much greater tendency to be organized by their immediate surroundings, to make more frequent references to the past, and to be more vague and global in their reference to the future (assuming that answers beyond the twenty year period and answers of "never", "ever" and "forever" indicate vagueness).

In general the normal subjects are significantly more likely to

ask questions about things they feel they have control over, and about which they feel more certain than are the alcoholics.

## CHAPTER V DISCUSSION

### Brief Restatement of the Basic Rationale and Hypotheses:

It seems best to preface the discussion of the results, and the implications which stem from them, with a restatement of the rationale and the hypotheses which led to the procedures used.

The point of departure was the general hypothesis that the person's own conception of the future goals toward which he is striving serve to structure and direct his actions in the present; that these goals are part of the framework from which he organizes and selects his perceptions, actions and his interpretation of the meaning of his present world. It was hypothesized, further, that for the future to play this role it must exist in the present as a plan, hope, ambition or dream of the future toward which some action may be taken at the present, with completion possible only at some future time. At all times the "dreams" with which we are concerned here are seen as future action possibilities.

It was this basic assumption that a structured conception of the future must exist at the present in order to stabilize and direct present actions. To have such a conception of himself and his life in the future, a person must:

1. be free of urgent, immediate needs. Practically this means he will show a stable history of work and family life that guarantees some security with regard to meeting his vital, recurrent needs;
2. have a positive attitude toward daydreaming about his future, give reflection some place in his daily life, and show a familiarity with a reflective state as something positive;

3. be able to delay action, and to suspend the response to immediate demands of his environment;

4. be able to perceive and initiate responsible action toward his goals. A corollary to this hypothesis is that he will also manifest a tendency to take responsibility on behalf of others (with particular reference to his family or other dependents).

To investigate the relevance of these hypotheses for the normal life space two groups of subjects were selected. The first as a normal control group, the second as "deviant"; namely, the alcoholic group. This choice of subject seemed also especially suitable to compare the phenomena of immediacy and transcendency. The alcoholic patients have been found to exhibit immediacy clinically, and to differ from normal subjects in no other, obvious manner which would be expected to influence the study as outlined. As a group they are as intelligent as normal subjects, they are not out of contact with reality as are psychotics, nor preoccupied with inner fears and conflicts as are some anxious neurotics.

The selection of the experimental group was such that the only operational criterion for inclusion was that the patient had requested treatment for alcoholism. An initial attempt was made to set up rigorous criteria for the control group, but, because of limited facilities, the only criteria that were actually used were that the attending physician was not impressed with any striking evidence of psychological disturbance, that the patient was not the victim of a chronic or disabling illness, that he roughly matched the age group of the experimental subjects and that he was willing to cooperate. The result, as can be seen from comparing the

pertinent historical information in Tables 1 to 3, is that the normal subjects tend, as a group to be somewhat lower in socio-economic level judging from their educational and occupational histories. This is mentioned as a preface to our discussion of the results obtained, since the differences hypothesized should probably be even more striking if control subjects of higher occupational and educational levels were used. It was felt that the sacrifice of the original criteria for the selection of the control group tended in all cases to minimize the obvious differences between the groups.

In this discussion, we will first consider the data as they bear upon the original hypotheses, then present findings which seem important to the further understanding of the central thesis being studied, and finally discuss these results in terms of broader implications and further investigations which they suggest.

### Discussion of the Data in Terms of the Hypotheses:

The first, and basic hypothesis, concerns the existence of a structured conception of the future. Reference to the reported findings on the Future Autobiography shows very clearly the extreme difference between the two groups with regard to this hypothesis. The least imaginative of the control subjects gives a more integrated, organized and rich description of his future as he sees it than the most imaginative of the alcoholic subjects. (With regard to the individual areas there are only two exceptions, Heaf in family and Th in hobbies. The question of excluding Heaf as not meeting the minimum requirements of essential alcoholism has been raised earlier, so that in this case there would be only one exception to these results. Further support for these findings is the absence of day dreams, and the short temporal span in the examples of planning given on the inquiry into reflective thinking. Additional, less direct support may be seen in the decreased productivity on the When Questions, and in the greater incidence of spontaneous reference to the past in both reflective thinking and When questions. In this regard, perhaps the most striking distinction is found in the different attitudes of the two groups (see p. 46). The normal subjects regarded the request made to give a description of the future as a legitimate one, as something about which they would be expected to know, while the alcoholic subjects regarded the same request as very difficult, as though they were asked to predict the future of something about which they knew nothing, and as though they had no control over it.

The clear impression that emerges from these data, then, is that the control subjects describe their future in specific, realistic, developing terms. Their descriptions have a sense of continuity from their present situation, and are logical extensions from the past. While there is an individual difference as to the amount of details, and also differences in the certainty and elaboration of some of the areas as compared to others, all control subjects give a realistic, convincing picture of the course they expect to follow through the next fourteen years. There is no air of capriciousness; whatever extreme changes are introduced, and there are comparatively few, they show evidence of forethought and are integrated into the total order.

Judging from the descriptions, the future perceived by the alcoholic subjects differs markedly. Whereas all of the control subjects had an idea about the next fourteen years and described them accordingly that was an exception for the alcoholic subjects. The first, and most impressive result, is the absence of any coherent, detailed or realistic idea of their lives in the next fourteen years. The "excuse" they offer for being unable to describe their expected lives, is, characteristically, that one never knows what is going to happen that far ahead. This is not usually offered as a personal insecurity, but as though this were the way the world is; that no one could have any reason for knowing what was going to happen to him. This attitude seems also expressed in the fact that among the four rating scales, the two groups differed least in the amount of

uncertainty they expressed in the Future Autobiography.

That future plans and hopes play a less than casual role in the phenomenal world of the control subjects, contrasted with the alcoholic subjects, is further suggested by the much greater incidence of day dreams and plans given on the Inquiry into Reflective Thinking. They are here repeated as an integrated and realizable part of the Future Autobiography protocols of the normal subjects. Since the "future" was not specifically asked for during this inquiry, the spontaneous mention of plans which also appear in the Future Autobiography suggests that the normal subjects are not merely better able to comply with the directions in the Future Autobiography in describing their anticipated future; it suggests further that these future plans and dreams occupy much of their reflective attention, and play a part in their daily life. The alcoholics seem to spend more time in thinking of the past, the present, or in vague, worried terms about the future.

The data, then, support the difference predicted by the first, basic hypothesis. We return to the data in relation to the derived hypotheses which we have advanced as results of the phenomenal existence of the future.

1. An essential condition of a transcendent ego is life so arranged that satisfaction of the basic needs is guaranteed, so that the person is free from worry about them; free to occupy himself with reflections of less urgent, less immediate content. In terms of the data the subject should have some stability and confidence with regard to his occupation and income, family, and living conditions.

The data of Table 3 on page 27c indicate that the control subjects are much more stable, on the basis of their histories, than the alcoholics. They have kept one job longer, show a narrower range of types of jobs they have held, and have a much more stable marital history.

In the Reflective Thinking Inquiry, the alcoholic subjects offer many examples of "worries" which are concerned with their jobs, their income, and their families. These instances are more frequent and less likely to be resolved than in the case of the normal subjects; in addition, the alcoholic subjects select much more frequently "worrying" or "planning-worrying" as characteristic of their thinking. The implication from these data is that the alcoholics tend to describe their reflection as dominated by worries with the most frequent content of the worry being either job or family while the normal subjects describe their thinking as dominated by plans for the future and by dreams which they hope to change into plans involving the same content.

In the Future Autobiography, the alcoholic subjects give many more instances of anticipating radical changes in the central areas (Family, Occupation) than do the normal subjects, are much less specific about what they plan or expect to result from such a change, and compared to the five instances of major changes

occurring in the protocols of the normal subjects the alcoholics do not show evidence of equivalent planning and deliberation.

This hypothesis was evolved by reference to a principle of economy: if a person is preoccupied by one area of concern, he is not free to attend to any others; if he is concerned about primary needs, he cannot be preoccupied with unsatisfied "derived" or "ego" needs. There is ample evidence of the much greater incidence of derived needs in both the Reflective Thinking protocols and in the descriptions of the future given by the control subjects. Where the alcoholic subject worries about whether he is going to be able to get a job, the normal subject is concerned about achieving a promotion, or becoming independent in his present work, e.g., buying a farm. With the exception of Heaf, the alcoholic discusses his family mainly in terms of worrying about whether or not he will be with them, or the possibility of establishing a family, while the control subjects are concerned with the development of the family and the increased participation and satisfactions in all areas to be expected through the years. Even those of the normal subjects who were unmarried or estranged from their families, described the future of this area in terms of positive plans and hopes, and in rich detail which assumed but went beyond the mere fact of the existence or non-existence of the family. This same trend is true of the area of finance. The alcoholics either indicated that money was a source of worry, related to their worry about getting or holding a job, or spoke in vague terms of getting whatever

salary was current, with equally vague references to expected increases. The normal subjects also tended to worry about this area, but gave much more evidence of specific steps contemplated and taken toward assuring security, and they much more frequently spoke of wanting such increase in order to attain luxuries and pleasures for themselves and their families.

This trend finds further support in the greater elaboration with which the normal subjects give their description of their hobbies and social activities particularly past the first temporal period. It is as though, with the necessities of life stabilized, the normal subjects have time and inclination to take a real and active interest in these more peripheral aspects of living. Again, the evidence indicates that the alcoholics neither give as specific a picture of their interests and activities in either of these areas, (although they are more specific in this area than any other in the first temporal period) nor do they attach as much importance to the role these interests play in their lives as do the normals. (This again excepts Heaf and Th, whose descriptions in these areas resembled the descriptions given by the normals.)

It is felt that the evidence presented here is not definitive and is supportive rather than conclusive, but in the absence of any opposite trends, it will be considered that the hypothesis holds.

2. The transcendent person must want to dream; reflection must be a positive thing, so that the person feels at home with his thoughts enough to think about his future and what he would like to be: to do. In terms of the data, the person must show familiarity with a reflective state, and show that reflection has a place in his daily life.

In the Reflective Thinking Inquiry, the alcoholic subjects described themselves as strongly preferring action to thinking, many made explicit statements to the effect that sitting around thinking was something they avoided if at all possible, and were emphatic in denying that daydreaming played any role in their thinking. The same attitude was manifested in the Future Autobiography.

The normal subjects were much less emphatic in stating their preference between thinking and action, and all of them stated that there were some times when they liked to sit and think, all of them were familiar with the idea of daydreaming and able to give examples from their own thinking, many of them stating that they felt this kind of thinking was most characteristic of them.

This difference is further supported by the productivity of the two groups, both in the reflective thinking inquiry, and in the amount of structured material which is offered in the Future Autobiography. Both their own statements and the amount of thoughtful material they are able to produce support the hypothesis that reflection is not an important part of the daily life of the alcoholic, while it does play a larger role in the thinking of the normal subjects.

3. The transcendent person must be able to delay action and to suspend the immediate demands of the situation, in order to reflect and to choose appropriate action; in terms of the data, the subject will not express an urgency toward action, but will show a tendency to delay.

The most direct evidence pertaining to this hypothesis has already been discussed in connection with the second hypothesis, since these two are assumed to be antithetic. In order to reflect, one must give up acting; conversely, in order to act one must suspend reflection. The alcoholic subjects state directly that they try to keep busy with something active, and many of them state explicitly that they try to keep active in order to avoid thinking. They give almost no examples of planning or daydreaming which are not temporarily very close to action (either the examples from the past or those from their present thinking).

While the majority of the control subjects state that they are generally pretty active, they do not express their preference with the sense of urgency found in the alcoholics. All of the normal subjects state that there are times when they like to sit quietly and think, but the majority of the time they are busy. Since all of the control subjects are employed in jobs which mainly involve motor activity, it is felt that the difference seen between the groups on this dimension is minimal, and would be much greater with control subjects whose occupation was one which required more creative reflection. Nonetheless, the difference between the groups is clear. The normal subjects all, except U1, gave examples of plans or daydreams which reappeared in their description of the future, all were able to comply with the directions in Future

Autobiography and express expectations that extended logically from their histories and present situations into the future, indicating the steps which they plan to take during this temporal period in order to reach the final goal. All of the normal subjects gave examples of this kind of projected planning, and only two of the alcoholics (Heaf in family and Th in occupation) did so. This trend is even more striking than had been anticipated, in view of the compromises which had to be made in the selection of the control subjects.

The second and third hypothesis combine to produce a difference in the characteristic approach to the world found in the two groups. The alcoholic subjects describe a reflective state as uncomfortable, and avoid it by any activity which appears possible. While the normal subjects describe themselves as, for the most part, active, they describe a reflective state as something positive, which they enjoy when they are free of their work. Reflection is an ever-present possibility to both groups; for the alcoholic, it exists as a threat from which he must escape into activity, for the normal subject it is a luxury into which he can relax when his work is taken care of. It is significant that the alcoholic does not see or refer to action as a positive goal but as something to keep him from thinking. The alcoholic is driven to action by his thoughts, his thinking is largely worry over the consequences of his actions, and the only complete escape appears to be sleep (or its equivalence in drinking). Action appears to play a different role for the normal; it is preceded by reflection, often toward something rewarding and

meaningful, and permits him to then "indulge" in thinking or reflection as relaxation.

4. The transcendent person must be able to take the appropriate, responsible action, to make the dream real and actualizable; in terms of the data, he should have a stronger tendency to see himself in the responsible, controlling role with regard to personally important action possibilities, and to extend this sense of responsibility to those people for whose welfare he has committed himself.

Responsible action presupposes some reflection and delay. The additional quality required to act responsibly has been discussed before, but may be briefly recapitulated here. Essentially, the "dream" or contemplated goal must be in the world, i.e., realistically possible, it must be seen as something the subject can attain through his own efforts, something to which he feels he has a right, and for which he is willing to commit himself. Because of the alcoholic's predilection for action, and the limits of the techniques of inquiry, this hypothesis was most difficult to test directly.

We have ample evidence that the first requirements, those of reflection and delay, are seen more in the normal subjects than in the alcoholics, so that by the logic of the underlying the hypothesis, we would not expect to find action contemplated or effected by the alcoholics which involves delay. In the analysis of the planning and hopes elicited in the interviewing, these intentions were found in all the normal records and were numerous; only two examples (Heaf and Th) were found in the alcoholic records, and these were restricted to two areas.

The results of investigating the extension of this hypothesis to include responsibility for others has been presented in Table 12, page 132. This table shows clearly the difference between the two groups with regard to their spontaneous plans for others, particularly

the family. Only one of the alcoholic subjects (Heaf) gave any examples of plans he had made for his family in the Future Autobiography, while all of the control subjects give many instances of responsible planning for others.

The direct questioning of the subjects with regard to their control of the conditions they mention in the "When Questions" is not considered a valid measure of the problem under consideration here, since the relation of "control" to "responsibility" is by no means clear; and in this test is entirely left to the subjects' interpretation. As was mentioned in the data section, many of the questions and answers over which the subject indicated he felt he had maximum control, would have been judged by the examiner to be beyond his control.

### General Comparison of Immediacy and Transcendence:

There is a clear difference between the two groups in accordance with the rationale of the basic hypothesis and the four derived hypotheses. We are justified in considering that the greater immediacy of the alcoholic subjects (with the exception of Heaf) has been established, and the greater transcendence of the normal subjects is also established.

In the absence of the future as a director of present behavior, the alcoholic is bound by the present and the past, and his actions and perceptions, his understanding and interpretation of any situation must be in these terms only. That the temporal span which exists meaningfully for the alcoholics consists of the past and present with only a vague, undifferentiated conception of the future is independently supported by the analyses of their performance on all three of the investigatory techniques in terms of the temporal span involved: there is an absence of differentiated descriptions in the Future Autobiography of the alcoholics and a much greater vagueness to their descriptions; their emphasis is on past and present in the Reflective Thinking; and on past, with the greater incidence of vague ("forever" or "never") answers, in the When Questions.

In addition to the memories of the past and the perception of the present, the normal subject has a more definite, structured goal-studded conception of the future to guide him. As has been seen, this pervades all aspects of the techniques used in this study, and serves

to produce a qualitative difference between the two groups.

From the data, it is possible to present a composite picture of the personalities resulting from these two approaches to life (or these two kinds of organization). Following the same procedure established in the presentation of the data, it seems best to present the life of the normal subjects and the characteristics of this group before discussing the differences which emerge from the study of the experimental group. This discussion should also provide a clearer picture of the usefulness and limitations of the techniques used in this study, on which point, however, we will reserve discussion until later.

Transcendence:

A concept of self which transcends the immediate situation and the present time can be identified in all of the normal records. While some of the control subjects are less reserved, and more elaborate in describing their thoughts and hopes, and some others tend almost to terseness, this "transcendent ego" is seen in all the records, in the consistency with which they describe the next fourteen years, in the content overlap between the Reflective thinking material and the future material, and the comparatively delimited range of possibilities which they see for themselves in all of the areas described in the future. In a few cases this approaches a dedication to their profession (notably the farmers in the group) or their families, so that one feels that any major change in these areas would produce a severe disruption in their concept of themselves and their role in life.

This sense of self transcends time as well as overlapping the diverse situations used in this study. This is seen in the Future Autobiography, in the logical extension of the person's present life, interests and activities, and the greater sense of certainty that what changes may take place will do so within a definite framework which is an extension from the present situation. Thus, none of the normal subjects saw a complete change taking place in more than one area, and only one (U1) saw more than one major change in any area over the complete time span.

In all of the normal records, a pattern of organization and integration emerges, as measured in terms of the centrality and peripherality of the areas. The area of family is central for all of the control subjects, even those who are not yet married, and the other areas are influenced by any changes in the family constellation. For some of the subjects all other areas are peripheral to this area, so that the kind of job they have is not of importance in itself, as long as it provides security for the family: with these subjects, financial plans are given with the needs of the family always uppermost, and other interests (hobbies and social activities) are changed, given up, or added as the children grow and the family participates as a unit, or as the children become more independent. For some of the normal subjects, notably the farmers, occupation plays a central role, influencing all the other areas. These central areas serve to limit the possibilities seen by the subjects for the future, and to establish some order of probability.

All jobs are not equally possible to the man who has committed himself to supporting a growing family; he does not mention full time return to school as a plan or a dream, nor does he offer as possible a job which requires that he travel freely about the country. The three cases where occupational changes were anticipated all spoke of the primary importance of a job which would either allow more time for family life, or would provide greater security for the family. In those cases where marriage and family was still a part of the future, all spoke of marriage as the time of settling; and the subsequent development of their lives shows a narrowing of the possibilities and a concentration of activities and interests within the family. There is no air of regret in this "giving up" of unlimited opportunities, but rather a positive acceptance of these changes as part of the goals toward which the subjects are striving, and it seems significant that the content of the aspect under discussion here is offered as a "plan" or a "dream", and not as "worry" where it appears in the Reflective Thinking protocols.

The two areas (family and occupation) which appear most frequently as central, seem also the most limited with regard to possibilities. In the ratings of the protocols, they are most specifically and realistically described. While there is more uncertainty in the area of occupation, it does not occur in the records in which this area is central; for these subjects, and for all of them in the area of family, stability is maximal.

Social activities and hobbies are most frequently peripheral,

achieving centrality only when they are integrated with either occupation or family. The one exception to this, Jo, is an interesting one. The subject is an intelligent, imaginative colored man, who works as a laborer in a meat packing plant and does not, in his exposition, see any realistic chance for either improvement, change or promotion in his work. From his description of his hobby of leather tooling, it seems likely that, in a prejudiced milieu, his family and his hobby offer the only possibilities for creative work, and while he plays with the idea of some day being able to make his hobby his profession, he states that this is not realistically likely. In these areas of social activities and hobbies, the control subjects (except Jo and Zw) are less specific, less certain and become less realistic. In the case of Zw, and it is interesting to note that he is the only one of the normal subjects who does not have children and does not plan for them, the area of hobby approaches centrality in the sense of influencing his plans and conceptions of his life course; he progressively strives for greater freedom from his work as owner-manager of a feed store in order to devote more time to his hobbies of fishing and hunting, specifying always the company of his wife. The composite picture which emerges, however, unmistakably places these two areas as second in importance to those of occupation and/or family, integrated with them, changing as they change, gaining or losing prominence as the central areas allow.

Throughout these descriptions there runs the quality of a

positive choice. The farmer who describes his future in terms of steadily improving his land and his stock, whose hobbies are attend-classes and meetings in order to keep up with the latest developments in agriculture, and who steadily puts money aside through the years in order to realize his dream of owning his own farm is not a farmer only because this has been his past experience, but also because this is what he wants to be, what he has chosen to be, and what he intends to be all his life. This quality is captured by Leo when he says "I'll still be a farmer. The only way I'd change is if I had to sell out and couldn't find any place to move to.... that's the only way I'd get another job." The stability and dedication implied in an attitude of this kind is not seen in the peripheral areas, where the ease of possible changes is emphasized as seen in the frequent statements that there will always be new friends, or that new interests will develop and replace the present ones.

The greater incidence of content overlap between the Reflective Thinking inquiry and the Future Autobiography, and comparative rarity with which the present situation determined the content of questions asked in the When Questions, supports the contention that the aspirations for the future play a dynamic part in the perception of and response to the present situation.

The normal subject, then, has a highly differentiated, consistent and integrated conception of his own life course and his relation to his world, transcending the moment and the situation. We have seen, directly and indirectly, that this conception is one which has effect

on present behavior. The phenomenon of a man depriving himself of luxuries now in order to deposit a certain amount of money at certain intervals might be explained by an independent observer in terms of early experiences of deprivation leading to hoarding tendencies (a la Hunt and his rats) but the subject according to our data, would be much more likely to understand the behavior in terms of hopes and plans: sending the children to college, buying a farm, building a house, etc. We do not mean to deny the importance of early experience, nor the value of such explanations, but wish only to add another aspect of motivation which seems to play a vital role in understanding normal living.

Speculating, for the moment, we may say that part of the psychic energy available to the subject is bound to these remote goals in such a way as to influence the selectivity of his perception, cognition and action. These bound systems are not given up, even in situations which do not specifically relate to the future or to the person's sense of self. He is therefore less able to lose himself and to attend to an immediate situation wholly "objectively, i.e., without reference to this framework. This is also the explanation which might be offered to account for the poorer performance of the control subjects in a situation such as the Stroop test, where, as we see it, they are asked to adopt an unfamiliar set in a situation where it conflicts with a well-established, or bound, one.

### Further Implications and Speculations:

Throughout the discussion of immediacy and transcendency as pervasive and established ways of life, the question of etiology has subtly intruded. The design of the present study produced no data that bear directly on this question. An attempt to theoretically explore the genesis of these ways of life could make sharper the differences found on the adult level, and make clearer the reasons for the hypotheses used in the final study.

Initially, the human baby starts life with a body which has certain needs, limits and action possibilities, all of which are to be discovered by him. Early, he becomes aware of the recurrent quality of the body needs. He also becomes aware that these needs will increase in intensity, causing him increased discomfort when they arise and are not satisfied: under circumstances of deprivation they have the property of assuming regnancy, i.e., taking precedence over all other thoughts or experiences until they are gratified. Because of the necessary dependency of the very young child, he must rely on his environment for satisfactions; if the environment is secure and routined, these needs are less compelling and he is freed to further his exploration of his world.

As he develops, he discovers that he can, by doing and by not doing, exert some control over his environment. He discovers that his body has the property of changing in time, initially toward increasing opportunities. The child looks longingly toward the time when he will be grown up and can do the things that adults do; he begins to dream of growing up, not only in terms of being bigger and

stronger, but also in terms of what he might become. New possibilities appear for the developing personality, and he begins to explore the world of ideas, imagination, feelings and creative urges. He begins to aspire toward becoming something in the world.

At some point the child experiences pain and leans to defend himself against it; he experiences mortality in the world about him, and death becomes a possibility. As he develops, his awareness of death becomes an awareness of a finite life-span; and urgency is generated. This means, the awareness of his life-span carries with it the awareness that what he wants to accomplish, to become, must be actualized within a certain span of years. This awareness of mortality (nicely captured by Marvell in "To His Coy Mistress") becomes the outer limit for the temporally remote aspirations which are a part of the transcendent ego.

During adolescence, the infantile "dreams of glory" are adjusted to the world in which he lives, and he begins a third phase, that of responsible action. This is the period of commitment or dedication to one life course, the relinquishing of the other dreams, and is the last easily outlined stage in the life of the growing personality. If personal responsibility is taken, first for himself, then extended to his family, a step toward maturity and transcendence is taken. With the evolution of the transcendent ego, his present life is consistent with his past, and guided and directed by his conception of his future, so that he acts or delays action according to what is appropriate to his goals and aspirations.

Developmentally, the stages described culminate in the emergence of the transcendent ego. During the early period, stability, the freedom to relax, to explore the world of ideas and experiences and to discover the self are left to and determined by the environment. With the emergence of the transcendent ego and acceptance of personal responsibility he also takes the responsibility for maintaining these conditions which allow him to take meaningful actions toward becoming what he aspires to become, and toward acquiring what he hopes to acquire.

Conversely, if all these steps have not been taken, all these stages not gone through, then the transcendent ego has not fully developed, and future aspirations will have no compelling place in the person's life; there will exist no central organizing point and no reason for ordering the present in this fashion. To choose action appropriate to a goal, one must first conceive the goal; to aspire, one must first have an idea of that toward which one aspires.

Thus the four conditions, which we have presented as derivatives from the basic hypothesis, are the necessary conditions for the development of the transcendent ego. Because if these conditions are not fulfilled by the child, no integration into the responsible, transcendent ego occurs and this way of life is always vulnerable to environmental changes. By contrast, the transcendent adult imposes upon the environment the demands of his transcendent self (subject to the limits of his culture), and the logical order is reversed; the four derivative statements result from his transcendency.

We are now in a position to explore some of the implications of these two Weltanschauungen; to investigate logically some of the implications for performance in situations not specifically touched on in the present study.

One of the most obvious implications, and most important, is that the transcendent person is always responding to a more complex situation than is the immediate person, and that he brings many of these complexities to the situation. He responds, as does the immediate person, in terms of his history and the present, but in addition his responses are influenced by his concept of himself and what he aspires to become. This implies that a knowledge of his personal history should be adequate to predict the response of an immediate subject in a controlled situation (that is, where the present is also known). But for the transcendent subject, the additional knowledge of the goals to which tension is bound is needed for accurate prediction, unless that situation is totally irrelevant to his long range intentions. The immediate subject is maximally responsive to the "real" external situation and should respond with a high degree of literalness, that is, in terms of the environment. His perception of the situation, in other words, should correspond more closely to the "objective". Using the same logic, he should be least able to produce in an unstructured situation, where he is left to imaginative or reflective devices. The usual test productions of the clinically immediate personality support this contention; very often a high score Wechsler-Bellevue accompanies a poverty-stricken Rorschach or TAT.

For the immediate person, the world presents a maximum of possibilities at any time, and a choice is made either as a result of outside persuasion or on the basis of previous experience with satisfying objects. He will be much more likely to try something new, to "go along with" any suggestion. Like the rat in the experimentation experiment, as long as he avoids the "compartment with the electric grid", it doesn't really matter which of the other five he approaches. The responsible person who has committed himself to certain action courses, will be less responsive to his surroundings in other ways. He will be less adjustable, less likely to accept easily and amiably a whim of the moment. The action of the transcendent person, to continue the analogy, seems almost rigid by comparison. It is as though his world of possibilities has been narrowed by his positive anticipations, he follows one course of action as though the others did not really exist. This aspect of transcendency is pointed to in the quotation from Sartre on page 3 of the Introduction, and in H. James' statement; "I want something or someone outside myself to give me a reason for doing one thing more than another."

A study of rigidity or flexibility (in learning, attitudes, perception, etc.) with these groups would be interesting. The prediction, on the basis of the present study, particularly the S<sub>t</sub>roop test, would be that the alcoholics would be less rigid than the normal subjects. Since the normal protocols from the Future Autobiography showed that the range of possibilities seen and changes anticipated were highest in the more peripheral areas of

social activities and hobbies, the normal person's inflexibility would be highest with regard to the central areas, diminishing as the area approached the periphery.

Immediacy:

We have seen some of the influences of the transcendent ego in the normal subjects, and with this as a background, we will try to characterize the life of the alcoholic, where this influence is lacking. In presenting this picture, Heaf, for reasons already well established, will be omitted.

No consistent sense of self emerges from the protocols of the alcoholics. The transcendence of the normal subject, both in terms of the future and in terms of the overlap from one testing situation to another, is not characteristic of the records of the immediate subjects. Their responses are discrete, as though each aspect of the test were responded to without reference to a central organizing principle. The kind of organization, in terms of central and peripheral values, seen in the normal records is also lacking in the alcoholic records. There is no evidence of the centrality or greater stability of any of the areas in the Future Autobiography, nor of influence of one area upon another. The possibility of qualitative change is perceived as likely in all the areas, and it is contemplated with no more evidence of verbalized feelings of insecurity than that with which the normals view the future.

Since the conception of the future does not seem to play a dynamic role in the life of the alcoholic, his perception of the

world must be primarily determined by the present moment, interpreted in terms of his experiential past. More specifically, since the alcoholic is explicit in stating that he avoids reflection whenever possible, his world seems dominated by the realistic, sensible world, interpreted in terms of present action possibilities.

While the normal subject enjoys occasional leisure with his reflections, most often thinking in terms of plans or possible plans for the future, the alcoholic finds his thoughts dominated by worries about meeting basic needs, past regrets and a sense of the futility of planning. His reaction to this is to avoid reflection whenever possible. Since, in so doing, he cannot deliberate his moves and plan his course of action, life must be filled with the unexpected, and it must indeed seem to him that there isn't any use planning, since he never knows what is going to happen. If he is asked to look at his life in its temporal extension, he sees himself at the mercy of a capricious fate; since he does not deliberate and initiate responsible, temporally extended courses of action, and is primarily oriented to the outside situation rather than his own thoughts, the source of dissatisfaction and frustration which he experiences is attributed to the world, not to himself. In the data, this is most clearly seen in the alcoholics' verbalizations of his attitude toward planning or dreaming in the Reflective Thinking Inquiry, and in his reasons for being unable to describe his life in the next fourteen years.

As we have seen, he spends as little time as possible in reflection, i.e., in contemplating transcendencies, preferring to lose himself and his thoughts by acting toward the immediate situation. The data yields no transcendent self as is seen in the normal records. Each situation is responded to discretely, according to the investigation of overlap among them, and he is more efficient in the conflict situation produced by the third part of the Stroop test. Another indication that he is more attentive to, and that his thoughts are more dominated by his present environment is seen in the much greater incidence of questions dealing with the immediate situation given in the When questions.

Any discussion of the function or etiology of the transcendence or immediacy goes beyond the scope of the present study, which was designed merely to explore the temporal characteristics of the two personality organizations. Assuming, since we are dealing with the area of the conscious ego exclusively, that transcendency and immediacy are both ways of coping with the world, we are now in a position to speculate about the efficacy and adjustment value of these kinds of adjustments.

It might be speculated that the alcoholic wards off anxiety or psychic distress by denying his transcendent hopes or aspirations, by a "flight into activity" and a preoccupation with the world of the moment. There is nothing in the data we obtained in this study to indicate that there is a lack of capacity for abstraction, as some of the earlier theorists have suggested (those who defined psychopathy

in terms of "moral imbecility") and much indication that the alcoholics find reflection painful and anxiety arousing, and deliberately strive to avoid it, in the ways described.

Immediacy emerges as having a compartmentalizing influence on the subject's perception of his world. The immediate person appears to attend to his world in extremely simple fashion, there is a minimum of overlapping from one area to another.

Throughout the discussion of the data, two aspects of the phenomenal world of the alcoholics have been emphasized. The temporal closeness of their world is one, and it is this aspect that has been defined as immediacy in this paper. The other aspect, that of the compelling quality of the external environment particularly with regard to action possibilities, is characteristic of the clinical group used in this study, but not theoretically an integral part of the adjustment implied by the concept of immediacy. This difference may be clarified by an extension of the theory advanced in this study to other clinical groups, on which predicted results we can only speculate.

Many of the intensive studies of schizophrenics and their worlds (Storch, Sechehaye, Angyal, etc.) suggest that, in our terms, they are bound to the moment in their perception of the sensible world, but transcendent in their reflection. When the reflection is most dominant, action in the world must be given up relatively completely, as in catatonia. If the external world retains its compelling quality with regard to action, the schism implied above would result

in inappropriate action and distorted perceptions as in paranoid schizophrenia. When there is no transcendent reflection, the result is the hyperactivity and extreme immediacy of the maniac.

What appears to be the case is that the reality tested and culturally acceptable transcendencies (in the sense of the meaning or implications of what is perceived) appear to be lost, so that the environmental stimuli becomes too real, too compelling. When the person interprets these stimuli and acts upon them on the basis of an unknown and acultural framework, then such behavior is not understandable in the usual way. The schizophrenic may appear strange and unpredictable in part because of the unknown and autistic quality of the transcendent framework in terms of which he interprets his environment. Our study has suggested that the responses of the normal subject are less understandable in terms of a knowledge of the environmental stimuli than are those of the alcoholic subject, because the normal subjects interpret more in terms of the transcendent self that they are maintaining.

The responses of the organic patients who appear to have lost the capacity for abstraction, are sometimes difficult to understand. On the basis of our theory, the reason would lie along the same continuum as the interpretation of the schizophrenic, but in the opposite direction. It is almost as difficult for a time-binding person to empathise with complete immediacy as it is difficult for him to empathise with a strange transcendent framework of an autistic nature.

## Bibliography

1. Angyal, Andreas, Foundations for A Science of Personality, Commonwealth Fund, New York, 1941
2. Buhler, Charlotte, in Arthur Burton and R. E. Harris, Case Histories in Clinical and Abnormal Psychology, Harper, New York, 1947
3. Cleckley, Hervey, The Mask of Sanity, The C. V. Mosby Company, St. Louis, 1950
4. Erikson, Erik Homburger, Childhood and Society, Norton, New York, 1950.
5. Goldstein, Kurt, Human Nature in the Light of Human Pathology, Harvard University Press, 1940.
6. Israell, Nathan, Abnormal Personality and Time, Science Printing Press, 1936
7. Marlow, A. H., Levels of Integration, Psychosom Med., Volume 5, 1943.
8. Meerloo and Clauber, Clinical Significance of Starvation and Oral Deprivation, Psychosom Med., Nov-Dec., 1952.
9. Sartre, Jean-Paul, Existentialism, Philosophical Library, New York, 1947

10. Strecker, Edward A. and Chambers, Francis J. Jr.,  
Alcohol, One Man's Meat, Macmillan Company,  
New York, 1949

Appendix

The reliability of the rating on the rating scales used in the analysis of the future Autobiography was tested by having another psychologist, rate two of the protocols on the change scale. The scale of change or development had been experienced as the most difficult to rate by the author so it was felt that this scale would give the best estimate of the reliability of all the scales.

Two protocols were chosen one of the alcoholics (Sh) and one of the normal subjects (Ha) and were scored by both psychologists for all five areas in all five temporal periods. The ratings, 48 in all, were then compared and a chi square  $X^2$  test of significance was computed. Chi Square  $X^2$  was 129.14, which is clearly significant at the .01 level of confidence.

In the table, the scores given by C (a control rating given by a psychologist who was naive regarding the data other than the rating scale presented on page 49) and E (the experimenter whose ratings were used in the study) are presented.

<u>SH</u>	<u>1955</u>		<u>1957</u>		<u>1959</u>		<u>1963</u>		<u>1967</u>	
	C	E	C	E	C	E	C	E	C	E
Occupation	1	1	5	5	no com- ment		5	5	5	5
Social	2	1	5	5	"	"	5	5	5	5
Finance	2	4	4	4	4	4	4	4	5	5
Family	1	1	2	2	2	4	4	4	5	5
Hobby	3	3	5	5	5	5	5	5	4	2

<u>HA</u>	<u>1955</u>		<u>1957</u>		<u>1959</u>		<u>1963</u>		<u>1967</u>	
	C	E	C	E	C	E	C	E	C	E
Occupation	2	2	3	3	3	3	3	2	2	2
Social	3	3	3	3	3	4	3	2	3	3
Finance	3	3	3	3	4	4	3	3	4	4
Family	3	2	2	2	4	4	3	2	3	2
Hobby	5	5	2	2	2	2	2	2	2	2

The Chi square was computed as 129.14, which is significant on the .01 level.

Preface to FA, appendix

The examples of the protocols from the Future Autobiography are presented here. Since the test was administered verbally, and the answers were transcribed as faithfully as possible without interfering with the spontaneity of the reports, the continuity and syntax of the records are not always appropriate to a written form. As it was felt that accuracy was more important than literary form the protocols presented here, and those of the Reflective Thinking Inquiry, are as faithful to the verbalized reports as we could make them.

Appendix

Alcoholic subject  
Sh

Future Autobiography

1954

I haven't the slightest idea. I don't know whether that's what the test is for or not. As for me, I haven't the slightest idea what will happen to me in six months. The only thing I have to go by is the past. (Can you imagine your life in 1954?) Well...I'd hope to own a restaurant, or something like that. What's that? (Refers to social) Well, I don't know. I never thought about anything like that before. Maybe Veteran's groups, or something like that. Let's see...what's next? Financial? Well, I...just makin' money. I may not be in the red. I hope I'll be married in two years and have a family. Probably fishing and boating.

1956

My occupation would be the same. Friends and social groups the same. I might be making more money. Hope to have some children. Fishing and hunting would be the same. (Anything else?) No, I guess not.

1960

Financial status ought to be better. Family might be bigger. Hobbies I guess would be the same. I don't care much about thinking about those last two numbers. (Referring to hobbies and social activities.)

1964

I'll be 44, let's see...you're supposed to imagine what you'll...Far as I know, I'll probably still be in the restaurant business. I'll have the same social groups. Financial might be more or less. The family might be more, might not. I don't know about that. I'll probably still have the same preference for fishing.

1968

I guess there wouldn't be too much difference. Fourteen years doesn't amount to much. I might have to quit the fishing, I'll be a little soft for it. The rest would be about the same. I wouldn't be ready to retire for sure. I guess that's about all I can think about now.

## Future Autobiography

1955

My occupation would still be the same. The only way I'd change it is if I had to sell out and couldn't find any place to move to. That's the only way I'd get another job. I hope to improve my dairy herd by using artificial breeding which I've already started. It'll be two years before these calves will come into production. As far as farm ground is concerned...to build it up...and get more production, by liming and sewing legumes. I haven't started yet; I plan to this year. On social groups--well, I belong to the Grange and the American Legion. By 1955 I'll probably join the farm bureau and I'll always make more friends--you're better off to. My wife and I belong to the Westside Christ Church in Topeka, and if we stay in Berryton we'll join the B----- Church. Financially? By 1955, let's see, well I won't be clear out of debt by that time yet. I can't say much more about that. About the family? You mean increase and so on? I know there'll be one more. I don't know if you'd mention better living quarters for the family. I expect to have by 1955. Sports is mostly my, guess you'd say hobby. Always have been active in sports until last year. I played basketball, baseball. I've been on the team in B---probably be playing in 1955. I like almost any kind of sports--to listen to on the radio or to watch 'em.

1957

My occupation will still be the same I guess. I'll still be trying to improve, I guess--nothing new that I know now. Things keep coming out like this artificial breeding has only been available for two years. This fertilizing will change the most, I guess--the ground. Probably by that time I'll be thinking about new machinery, I suppose. What I've got'll be wearing out. I'll continue making friends. That's about all, and keeping up with the groups. The Farm Bureau sends out bulletins on new things, we have stag nights during winter where they have lecturers and discussions. Of course, this new administrations might do away with it--Republicans are against all sorts of farm organizations. The bureau discusses problems of marketing. It takes the place of the G.I. school. Financial--ought to be out of debt by then. When I started out I told my wife it'd take about ten years. It'll be ten years by then and I'm sort of going along on schedule. Well, on the family--I'll have better family living, being out of debt. Well, on the last one, I'll still be interested in sports. I don't know about

much ball playing by that time. My girl that's seven--she's interested. The little one--by that time she'll be going to school--might be interested by then. My wife, she likes to swim more than anything.

1959

My occupation will still be the same. Of course, then I'll still be building up. I'll be breeding the first artificial (generation of cattle) with artificial, and I ought to be getting pretty good stock by then. On the ground, I'll still be improving it. The next one will still be the same, I guess. Finances ought to be building up, I should have a little reserve. You can always keep bettering family and living conditions. We'll stop with three. The kids will be 13, 10, 6. There will be a lot of change in them but I don't know how to say it. The oldest one, by that time you just kinda have to--oh--kinda tell more about things about life, I guess. In this last one (referring to the category of hobbies) the children are getting old enough so that you kind of have to go their way on their school activities--more following the school sports. For myself, I'm still interested in sports of all kinds. I might be active in community sports--keep them going for the younger ones coming on.

1963

I'll still be farming, I guess. I'll guess I'll still be improving both livestock and ground. Social groups? I'll just be keeping up with them, I guess. Financially I'll be getting the reserve built up to where I can expand with more machinery and more ground. It's about time I figure on buying that farm. Back to the family again--that'd be ten years. That would make the oldest one 17--she'd be out of high school or almost out. I'll be thinking about sending her back to college if she wants to go. If that's the year to buy a farm I'd say better living quarters. I don't know about the last one. Not much different, I guess.

1967

I'll be 46. I'll still be working I guess. I ought to know whether I'm going to lose it by now (referring to the farm which was bought in 1963). I guess it'd be about the same. Still improving. By that time I ought to have what you'd call a real good herd built up. About that time the third generation will be coming up on the artificial breeding. I'll be keeping up with the social groups. That one there's kinda got me...what to do with that. Friends? You always need them. Let's see, financial? I'm paying for the farm, I guess I wouldn't have much--well wouldn't have much more reserve built up. The family...the next one would be about to enter college if she were going. She'd be one year going, wouldn't

she? The boy would be 14 years old, he'd be helping around the farm. I probably could add quite a bit more, but...just keep improving family living, I guess. By that time I'd probably be thinking more about my older age...what you was going to do. I don't know what to say on this last one now, I'll always take an interest in sports and activities of the neighborhood, I guess.

## Appendix

### Preface to the Reflective Thinking Protocols

This inquiry was devised specifically for this study and for this reason it seemed best to include the complete protocols from both groups. The questions which were asked by the experimenter are abbreviated and presented in parantheses through the protocols. These questions follow the general form and order presented on page 34 in Chapter III.

## Appendix

### Reflective Thinking Protocols Alcoholic Subjects

An

I think of different things. It's kind of hard to put them down. Lots of times I think of getting married, and raising a family and so on. Lots of times I think of things I have done that caused me to get in my condition. I just think about the possibilities, about the girls I know. I think I should be doing something. I never sit around, manage to keep busy. I like it better. It's just thinking, it don't worry me 'cause it's all over and past. (Worry) No, I don't worry about anything. Sometimes thinking is uncomfortable, but it don't pay to worry about it. (Pretend) Sometimes. (example) In general I think about what'll happen the next day. Like I imagine I'm married to a certain girl and everything's working out all right--a nice home. The girl I was going with...I messed up. Was planning to get married...she got married to someone else. Sometimes I imagine what things would have been like if I had gone ahead and married her. I've thought more about it since she got married. (Plan) Sometimes I go on a job...when I'm not working on it I try to figure out the easiest way to do it. Sometimes I think about what I'm going to do that night if I have a date or something. How to make the best of it. (Plan in advance) No, I never plan that far ahead. (Which of the three) Mostly I'm thinking of marrying someone. I believe if I were married I wouldn't be drinking so much.

Bri

I think about home--what's going on at home and what's going on at the store. Just wonder about one thing and another. I think about the medication I'm going to get or the length of time I'm going to be here. I try not to do too much of that setting around over there. (Prefer action) Yeah! I'll play cards or do something to keep myself occupied, 'cause if I didn't I'd soon go AMA (discharge, "Against Medical Advice). I get to thinking about home, business, the farm--I don't like to set around home and not do anything. I try to iron out the problems at work--the farm or the store--or plan my next day's work, one or the other I wouldn't say it was worry, a lot of times I can iron out a problem. I might worry some, too, if we had some bad debts we couldn't collect or something like that. Figuring out how to get it. There's been times when I pull a big deal or something, when I stay away and you could call it worry. (plan) Yeah, when I'm going to send the boys out on a selling trip, or I'm

going to buy some cattle. I even keep a little book...if I think of a guy's name I'll write it down. (daydream?) No, I think of getting enough money to get something. (Do you ever imagine you have enough?) No. I might think of what I could do, but never as though I had it. (plan) Oh, like going fishing if it is close to a trip, maybe I'll plan that. It has to be pretty close up, though. My wife and I decide on the spur of the moment to go somewhere. We never have a scheduled vacation, we just decide to go. (Mostly, you plan pretty close?) Yes, unless it would be like thinking of the money. I'm pretty sure or I don't plan it like ordering next year's allotment of tractors. On fishing trips I'm actually least sure...I can always change my mind. (Which of the three?) I'd say planning.

Bra

When I just sit around, if there's no disturbance...if there's anything going on I generally get into it. I sit around thinking only when there's nothing going on. I think about the past, about the family. I try to keep doing something, read or sketch. I try to keep from doing nothing. I find that if I'm active in the daytime, I have found that I think better. If I don't keep busy then I think about the past and the future. Just before I came in I thought about suicide...get a gun and blow my head off, but I knew I was going to go get cured. I thought it might be a good thing if I die (suicide), it might solve a lot of my family troubles. Then also in the last two months, more than before, I've been reading the Bible thinking that I might get some help. I never disbelieved before, but I always sort of thought that God helps those that help themselves. (daydreams) just last month. I'd like to be sober, thinking of my life. I'd be pretty well satisfied with life as it is if I could lick this liquor. (example of daydreams?) I wonder why I drink, think of what a chump I've been to let this drinking take over. When I'm not doing something, I wonder why I drink... there's no solution. They're like a conversation. These things... with my work, I see that. In my work if I have something to do I picture what I want in my mind, then I put it out. This is when I have a problem in my work. I sit down and visualize several different backgrounds, then select one I think is best. I work out problems when my aesthetic taste clashes with my judgment of what will sell. (other planning) Anything having to do with art or hobbies...instead of putting the actual object in front of me I put it in my mind. Then I make a choice. (plan other things?) No, uh uh. Oh, I sit around thinking about how things would be if I were sober. Right now I'm not making any plans but I am thinking about going to Florida to get a job. If I get dry and

if my wife doesn't refuse to go to Florida. I don't think I ever took a job that I didn't check on before and sit around thinking about before I went into the office. (Which of the three) Up until the last few months it was mostly about my work. Now it's practically all worrying. I haven't got a job to be thinking about.

Ca

I might be thinking about Kansas City, New York and what's going on there or most anything. Oh thinking of what's going on there, whether there's a job there. I'm a bridgeman. I prefer doing something to sitting around thinking, definitely. I might have something on my mind that I think about, anybody would. Might have happened today, might have happened ten years ago. (Example?) No, well, I've been thinking quite a bit lately about whether I want to go back to the shop. I follow machine work, too. Don't pay no money. (daydream?) No, I told you before I live with facts and figures. I never imagine things. (Worries?) Sure, most anything. Last year I threw away about everything I had. House, my automobile...I worried about how I was going to get it back. (Plan) If I make up my mind I'm going to do something, I'm almost going to do it. (said very emphatically). (plan steps?) Definitely. (which of the three?) I don't know. If everything's going all right, I don't worry about nothing. If everything's in a mess...you know what I mean.

Ce

Well, I think about a lot of things, but I can't get no answers. I can't figure anything out. I was thinking this morning about...I've thought my whole life over. I don't know how many times--when me and my wife was married. Every time I'd drink it would be things that happened before that'd be on my mind. I can see where drinking has been part of my trouble. I'd get depressed and low when I was thinking and drinking. More so than when I wasn't (drinking). When I'm right I'm always active, very active. (Now?) I'm not too active now. (Lot of time thinking?) Well, I don't know whether you'd call it thinking or worrying. I'm sure that a lot of it is, I've felt that I'm just worrying my life away. (daydreaming?) It's been a long time. Well, let's see--my wife and I talked over what we was going to do. I was going to school. I can honestly say that of all the planning we have done, very little has turned out successfully. I haven't done any daydreaming since I came into the hospital. (before?) I'd say very little. (Plan?) I've been awful disgusted. I'd plan things and then when the time came to do it I wouldn't feel up to it. There's nothing I can plan on--I've been disappointed so many times. Well, things are too uncertain, too many things. (which of the three) I'd say worrying.

Gra

I very seldom sit around and just think. I usually try to read or do something. Just before going to sleep sometimes I work on a musical composition. I usually go to sleep, don't do much lying awake. Maybe I'm trying to work out some arrangement for a popular piece or some counterpoint or something. Quite often, if I have something to build around the house, rewiring or some project, I think about that and if I'm on the road doing mechanical work. Sometimes I wake up at night and think out a problem that I couldn't get to go right during the day. Sometimes personal problems. I wouldn't call it worry. Sometimes... I don't know, work problems such as, should I go to Wichita first or Denver. In the line of work. I couldn't say a person's mind works in any particular way. I've got to do something, I can't sit still. I do a lot of reading, but consider that doing something. I read everything from escapist stories to highly technical. I read detective stories. I like factual better than fantasy. Last week it was some new problems in chess. (Books) I got one on chess, one on golf and one on psychology. Any kind of daydream I do is in music in which I hear the music. A symphony, and that sort of thing. In fact, it would be better if it were more practical than that. I don't know exactly what you mean by daydream. (?) Not to a great extent. I go a certain distance with that then say foosy, what's the use of that...when it goes as far as fantasy. My little girl is good at that. Sometimes I imagine how a situation will go. As to the past, I have little time for that. It's done, and there is no use for regrets. If I have a problem to work out I'll just take out and walk. It works out better than if I'm lying or sitting. (worry?) Do too much about it. I worry about things that never happen. Worry is definitely a factor with me. Or stewing. Worry seems to be a relative affair. When I have a big worry, I wonder why the Sam Hill I worried about the little ones, but when I get it solved, then I worry about the little things again. It's as if I were carrying on a conversation with myself or talking to someone else. Not much visual or auditory. (which of three) It seems as though the worry side, but it may be that the worry is more pungent, so that it seems like more. I think worry is the most characteristic. There's a lot of things in worry; fear, inadequacy, uncertainty, etc.

Heaf

When I'm home I'm pretty busy, I keep my mind on my work. I prefer doing things to sitting around thinking. Since I'm up here, I've got my home on my mind. I wonder how they're going to make out with no money coming in. (worry) Yes, it does. Sometimes I think I'm going nuts, I wonder what's wrong, what's

going to happen. If there's any noise, I snap out of sleep. (daydream) Oh, I don't know. I'd like to have a nice home and so on. Since my sister put her house up for sale we have to move. (pretend) No, if I ain't got it, I ain't. (Plan) Oh, take a trip. I don't think much about it. We discuss it between us, but I don't think much about it. (which of the three) I guess you'd call it the worrying kind.

Hen

I think of my future. I just wonder what I'm going to do, how I'm going to get along. (worrying?) Yeah, in a way. I prefer doing something, try to keep active, busy. In this place you find a lot of extra time on your hands. I don't like it. When I get to thinking I get nervous. It's a worry...I ain't got no occupation, don't know nothing. I worry about what I'm going to do. (daydream) Probably do. I can imagine an easier way of life, but.....(gesture of impatience) I don't know what I think. (plan) Try to think it out, try to plan each step, sit down and think of proper channels and try to carry it through that way. (example) Yeah, just lately. My G.I. schooling. I'm going to scout around and see what I like. I found out I was eligible. I went to the VFW. I will scout around after I get out. (which of three) Worrying. Sometimes, quite often, I find myself doing something that I hadn't been aware of thinking about first. (He described his drinking in this way).

Jo

Oh, thinking about getting out of here, going home and getting back to work. And I wonder if treatment will work on me, how it works and if I will stop drinking. I just wonder if I'll save any money or just blow it all like I have. I spend it as fast as I'll make it. I'd rather be doing something. I usually keep busy. I'm usually sitting around reading, writing home, playing cards. If I'm working I'm usually thinking about my work. Don't do much sitting around. If I'm not working, I'm usually going somewhere or doing something most of the time. (example) Depends on what I'm doing. I don't know, if you got something you're doing, you don't have much time to think about anything but what you're doing. I might think what I was going to do that night when I got off work or if I had a day off next day, such as plan a fishing trip. Sometimes I might think of changing jobs, get a job to better myself. (plan) Yeah, some. Don't always work though, don't always think it out right. (worry) well, when I get to worrying about something that's when I go get a bottle. (worry much) No, not often. (planning more frequent) Why, sure, I'd think so. (daydream) Not very much. Very little, I'd say. I've thought of my life in later years. That maybe I'd have more than I have now. (which of the three) Planning.

Kel

I have a wild imagination. I build up wild scenes, and so on. When setting around and not thinking of anything else, I'm a terrible dreamer. (example) I discovered a uranium mine one time, back in the Arkansas hills. Sold it to the government for two million dollars. I had that one worked out to perfection. Good as reading a book. I have found I dream up stuff like that-- it's an advantage. Years ago I made speeches. I didn't need a script. After I had worked it out in my mind. I just got up and blabbed it out as if I had worked it up first. That's the only advantage I ever saw to dreaming. As a general thing, it doesn't mean anything. Most of my sitting around studying is like reading a fiction novel. It doesn't amount to anything. I do plan every job I've ever done. If I'm making an air duct or something, sometimes I have a blue-print and sometimes not. If I don't (have a blue-print) I have to be able to build a picture of it in my mind before I start it. (worry) No, not particularly. I used to, in my younger days, think about girls. I've just about quit all that, Might be girls I knew, might not,

La

Mostly it's about my family; their health. And my job, I think about it quite a bit too. What kind of work I'll do when I go out and compare myself to the other fellows on the ward. I try to differentiate their troubles in comparison to mine. That's about all. The main topics, anyway. (prefer action) Sure do. I try to keep busy. Either by writing letters or by reading something that might help me. I set around now, but not before I came in. I always kept busy. I usually tend to think of business I've contacted during the day or pertaining to tomorrow. It isn't worry in other words. With me, my main problem is my family and in my thinking I try to plan for the future. I know I'll have to make a home before I can get my family back. I know that I have to live a clean and good life. My planning has a tendency to try to work out the best means of accomplishment. That goes back to my job and...I've reached no definite decision. I can't tell you what I'll do. If I knew it wouldn't be planning any more. (worry) No, I don't. It's purely a matter of indecision with me. I'm seeking for the solution. (daydream) No, I can honestly say that I don't. I was trying to think of any time when I would have. I can't remember. I suppose I did as a child. I think mostly about my job or my family. I believe that my worry and my planning were in conjunction with my work. Have to do with things going on at the moment. No worry that's uncomfortable until lately. It takes worry and planning to accomplish anything. (example of plan) I had to submit bids which I wasn't sure of. A period of  $4\frac{1}{2}$  months before they announced their contract letting. I had hopes of receiving the contract. That

period of waiting could be classified as worry. (did you imagine you had it) Yes ma'm. That's planning. And if I didn't get it, I thought about the steps I would have to take if I got the contract. Build a warehouse for my company, worked out the estimates. You might call it a daydream at the start and then it worked into accomplishment. (which of the three) Planning.

Sh

Well, I think a lot about when I'm going to be able to start to work. That seems to be the biggest...I do more thinking about that than anything. I wonder whether I can do certain things or whether I should do something else. I have--I feel that--nobody's satisfied unless they're working, accomplishing something because without that there isn't anything. I used to do too much thinking about it, now I tend to keep busy. I mostly read when I'm on the ward. (mind not having anything to do) Yes, I don't like it. That's something else I've learned, I can't afford to be idle much of the time. If I keep myself busy, I can't build myself as many mental conflicts. Time doesn't seem to stand still so much either. Time would seem to stand still, like the minutes and hours wouldn't pass at all, and the first thing I'd know I'd get really frantic. (worry) Mostly I guess I worry about the future, how I'm going to get along, if there's going to be any changes made. (daydream) Not to speak of, most of mine's what you'd call an anxiety state or worrying. Most of the stuff doesn't amount to a damned thing if I'd just realize it. I never did much of that castle building. I'm too damned realistic for that, I guess, it would be pretty hard for me to do any. (plan) Well, it seems as though I used to do some of that but I've quit doing it. Don't make any plans now to amount to anything beyond a week or a day. (which of the three) I guess I do more worrying than anything.

Sta

Well, mostly I think about my family and that. Well, my wife and I been separated, she sent the kids back to Kentucky. I can't be with 'em, don't look like I will anymore. I just think that I won't be with them any more. That I've lost 'em. I think of things they used to do--playing with 'em, you know. Mostly it's unhappy thinking. (daydreams) Oh, I don't know, I don't think so. (plans) Depends on what I'm working on--not now I don't. Maybe if I have a complicated job to do, I'd try to figure it out. I'd try to figure out what the next step is. (leave hospital) I figure the first thing to do when I get out is to go home to my mother for a few months, then get a job doing something. I haven't figured out very much. I think about it very seldom. Not enough to let it bother me I don't think.

I'd rather be doing something. (what think before going to sleep)  
Nothing in particular. No one thing bothers me or keeps me from  
sleep. (which of the three) Mostly worrying about the kids.

Th

I usually think what I'm going to do in the future. I try to map out the best things that I should do, try to look at the past and sort of go over the mistakes I've made. I try to formulate a solution so that I won't make the same mistakes over again. (example) Right now, at the present time the most outstanding thoughts are where I should go when I get released from the hospital. I definitely am going to school for awhile and try to figure out the best place. Then another thing that's a problem to me is just what I should do when I feel myself tense and overly nervous and depressed. I like doing things. I like activity and lots of it. I keep busy all the time, even when I'm working I'm studying or building something. Before I do anything I usually plan it out. I usually do something, I don't believe in wasting time. (plan) Like when I go to school, I usually think the courses through before I take them rather than going at it haphazardly. (which of the three) A little of both (planning and worrying) I know what I want to do. I'm interested in what the environment will be like. I'm interested in what kind of activity I can get into. and in case I need help I'll have access to it. I have to make allowances for things which break into what you've planned. Everything I do I've thought out before. (daydream) Not much. I find myself thinking about the war. Wishing there weren't any. I wonder what I would be if I hadn't lost all my friends. I never daydream anything about....the thing is, you have to look at it the way it actually is and try to accept facts. You can't do anything about the world as a whole. I can only do my best to blend in with it. (which of the three) Planning by far. I'm always planning. Lots of things don't go through. Like plans for my little boy to go to Notre Dame...but now I'll have to give that up. I bought insurance and bonds, but I no longer have control of the boy and the situation. Plans for school...I plan to be going 5 years or more. I'll take up radio engineering or electronics, it has a much greater future than pharmacy has.

Wi

Well, say for instance, when I was out of the hospital before I came here...I got a kid brother who is four years younger than me and I used to wonder how, he's deaf, and when I got out of the army he was selling real estate and had a house. I used to wonder how he could do it when I couldn't. Call it envy or something. I dwell on it. I sent money home after being in the army. My mother passed away and the money disappeared. I felt I got a raw deal out of that. When me and my wife separated, I wondered whose

fault it was. It takes two to break up a marriage. The average man wouldn't take on somebody else's kid. Then to, I married her too fast. I went with her one week, the next week I married her. (daydream) I never dream about how I would like things to be. (plan) I do sometimes. My plans blow up in my face and I go out drinking or something. It has been one of my greatest ambitions to go into some kind of business. I've run ice cream parlors, pool rooms, and so on. I like to deal with the public.

Reflective Thinking Protocols  
Normal Subjects

Bro

It's usually something pertaining to my future and the family's future, and that includes the health of the entire family, finances and happiness. One thing that goes through my mind; I have a girl that has cerebral palsy, and of course I think about her future and the effect that has on the entire family. Most of it is planning for the future. Daydreams consist of things you'd like to make come true for the future. (Action or thinking) I'd say preference is action. Well, have to give it some thought before you can take action successfully. I'd say it approached about 50-50. (worry) One of the main worries is the decision we're going to have to take concerning the girl with the cerebral palsy. The main thing is the decision whether we should take care of her in the home. (plan) I think about the most successful ways to manage our income so that we can pay off the mortgage. At the present time it isn't a worry, it's just figuring ways to handle it so we can have the necessities and a few luxuries. Another is to get our financial obligations under control so that if a depression does come things would be under control. Sometimes in planning I wonder if it would be wiser to continue employment here (at the hospital) or draw the money I have in annual leave and retirement or whether it would be wiser in the long run to continue working. (daydream) Oh, I think about moving from Topeka. My dream is to buy a farm so that I'd have more security. I kinda picture that in my mind...not farming on a big scale. I don't know just how to put that into words. I think of having a larger family than I do have. (the farm) Mostly stock and poultry. The part the family plays in a community, it's sort of like living in it. It's always possible, but it isn't a real plan. I never think of it in Kansas... somewhere more picturesque. (which of three) Most of it is planning for the future.

Bu

If you're away from home you think about home and the things you want to do, or you might think about something that's made you irritated during the day. Or planning a party or a vacation; it might run to that. No set thoughts run through your mind every night. (prefer action) I'd rather keep busy, be up doing things. I'm too nervous to sit still for very long. There are times I like to sit down, and just think, but generally I keep busy. (plan) Well, on our vacation this summer. I started

thinking about it about March. Thinking about how much money we can spend, where we should go. We went in September and pretty well did what I'd planned. Oh, not exactly, we didn't go trout fishing...I forgot my rod and reel. We went to the Colorado mountains. We planned to go to Denver, Colorado Springs, the Garden of the Gods. We didn't do everything we planned. I put some money away and figured on a bonus check. I was planning what I'd show my wife; explain a lot of things to her, see if she'd like it. I'd been there before. (worry) I worry about my wife while I'm here in the hospital. She had to work...her coming up here on the bus while she's pregnant worries me. I went home on pass last weekend and checked on how things were. I felt better. (daydream) If I read a book or a sports story I sort of daydream about being, oh, a ball player, something like that. I daydream about the things I'd like to do when I get well. I dream about it as though I was a baseball player, I can picture it as clear as a bell sometimes, sometimes I'm just thinking about it. Sometimes singing. I imagine what I'll sound like if I'm going to sing for church. (which of three) If I have a lot of time on my hands I daydream, otherwise planning. I worry about my wife mostly here...usually, daydreaming and planning are about the same.

Ca

Well, out here in this place, before they operated I was wondering what was wrong and when they was going to operate. Another thing that goes through my mind was what the family was doing. Well, in fact, I'm a person...if there's nothing wrong with me I hardly ever wake up at night. I might wonder what the weather was doing outdoors, might be thinking about the chickens or I might be thinking about my garden work, I'm working on that on my off hours. (prefer action) I'm not the kind of person who sits around thinking or reading. I like to be doing something, repairing something or tinkering. I notice at home if I do try to sit around reading I'm snoozing. It don't seem to bother me not to have something to do. Oh, it has here in the hospital but not around home. (plan) I've been doing a little thinking here in the hospital. I just plan to build a chicken house. Small, 8 by 10. It's just going to be high enough so I can get in and work inside, and double up. I'm going to build it so that rats won't bother. I'll put heavy, small cubed wire on the bottom and on sills, then lay flooring on that so the rats can't gnaw through the floor on the bottom and I'm planning to sheet it up good and tight and put colored asbestos shingles and black paper on it. I'll just buy one window frame, to put on the South

and East ends of it and fix it so they'll drop in about six to eight inches and give ventilation if I need it. I'll have wire frames slanting over the top to keep the chickens off from roosting. I've gotta buy the biggest majority of the materials yet. (worry) One thing I try not to let bother me. I'm going to be an old man quick enough without worry. I guess I did do a little worrying about my operation and what it was when I checked in here. I worried all the time about what was wrong and hoped it wouldn't be too serious. I worried about it being a cancer and wondered whether it had gone too long. I worried about the family. (day-dream) I daydream a lot. When I was in the army I used to dream that when I got out of the army and met the right girl; and of the home I'd have and how I'd fix it up. Since I got married we have this home and a small acreage. I've dreamt of having 5 or 10 acre tract so I can have a cow and riding horses. My wife likes to ride. I don't know that you can picture the exact place, but you picture yourself and the cow and horse, I guess you sort of picture it. I dreamed of having a wife and family and having a home for 'em that all came true. The dream of a house that I would have isn't quite right. I've had dreams of how I'd like to fix it for my wife. Four more feet to the length and width of it, and rearrange the built-ins a little bit. (which of the three) I probably like to daydream about things I could do. I stay away from worrying. (He described his daydreams as things he intended to do when possible.)

Go

It's mostly what's on my mind right now, such as how my house is going to look when it is finished. Or, we only have one child; I wonder what the next one's going to look like, and whether I'll get my boy or not. In general, it's just the house and the family. I get a little impatient, I think for a little while then I want to do something. I get jumpy, up and down, (plan) I had a motorcycle once that burned up and I made an attempt to fix it up. I didn't know anything about it, but I got a paper and drew out the wiring, and thought about it, then got it fixed up. That was planning. The house is still in the process of planning. I change it now and then; see where I can save money. (worry) Before I came over here I was a little worried about how long I could go without having this done and how long I would be in, how much money it would take. My wife is working--it's the same kind of thing. You never know when your wife or you are going to get sick. When we sent the baby to the baby center I worried about leaving her before I got confidence in the woman. (daydreaming) Oh, maybe I would dream about a big ranch house in the country, or having a business of my own or a cadillac. I've

always wondered what heaven would be like in daydreams, or having a heaven on earth; with everybody loving each other without too much love for money. With my new house I imagine myself in it, living in it. I feel at home in it. (which of the three) Two of those could be thrown in one; I do more daydreaming than anything else. Like I daydream about doing something, if I don't I'm not disappointed, but I usually try to do it.

Ha

Usually, when I'm home it's concerning my work and the possibilities that could happen but aren't likely to happen. Oh, better living conditions and more money I guess you would say. Then I get to thinking once in a while I'd like to take a trip, just kind of enjoying myself. I wouldn't mind going back to the Phillipines, where I've been. I guess I kind of re-live the happy--or the more enjoyable times when I was overseas and the beauty I was able to see under those conditions. (daydream) Pleasant things. Oh, some of the other things run through my mind, occasionally some of the unpleasant things run through my mind. I don't think I concentrate on those as much as I do on pleasant things. I don't think of those things as much as I do when I'm talking about them. When I'm sitting around with some body the unpleasant things come up. Also sit around wondering about when my boys grow up, what they'll be like. (prefer action) At times yes, other times no. In the evening I'll be doing something or listening to the radio or reading or something. There's times when you get disgusted with things that I wouldn't say they were pleasant, but generally they are. (which of the three) I don't know as any one was more predominant. It's just more or less what's on my mind. It may be in the day's work or what somebody said. (day dream) I just kinda get to thinking that if I had more money, I'd--oh, lots of things. I'd just go buy them cause I wanted them, just to have them. Machinery, wrist watch, clothes, and so forth. If I think about it long enough I get myself talked out of it and realize it's kinda kid's whim. It's just something I think at the time would be nice, sort of an impulse. (fantasy) In a way, it's never very complete. Some things I visualize, yes. Such as maybe comparing a place in my mind with some other place I know, maybe from some newsreel. For instance, the ocean fascinated me. In New Guinea, for example. Sometimes I think I'd like to go to the coast; sort of hear the roar and see the ocean. (plan) You mean like that trip? For example, I've been building terraces for...it'll be 2 years next summer. I got 2 of them built right away; the rest of them you have to build waterways and seed them down. At times it seems like you're accomplishing something and at other times it doesn't seem like you're accomplishing anything very fast. Maybe, one day you think you're coming along fine, next day or 2 or three, you'll feel like hurrying up and

getting it over fast. The FMA laid out the plans, the waterways and terraces. Then it's a matter of working them through, sort of a step at a time. I sit around in the evening figuring how I can get so much done the next day. (worry) One of them might be the way my sister-in-law treats my mother and dad. That is, unrespectful. It T's me off and I get mad about it. It's mostly that its nothing I can say or do that will correct it. Occasionally I think about just what this world's coming to, the way they do and the way they think. About the crops, I think more about how it's always turned out all right in the past with extreme weather conditions, and so forth and think about it rather than worry about it. (which of three) I usually look on the bright side of things; it's more the dreaming kind of thinking.

Hei

It depends, if a young feller has a child he's probably thinking of what he might do the next minute, or if his folks love him or not. Being's I'm single, I think lots of times of the girl I'm going with and I've got a car I'm making payments on. I've been thinking about getting a job so that I can make payments on time and keep the car and then again what I might be doing the next day or else thinking about the times I've had and what I done when I was younger. As a rule I like to have a job and be doing something most of the time because I get restless when I sit around. Oh, there's times I like to (plan) I've planned about, in the future to get married and have 2 or 3 children and raise them to be good citizens in the world. I planned when I got out of the Army to get me a job and get me a car and then see if I could meet a girl. I thought about getting work in construction because on a farm; it hadn't been paying out in the last year or two. I thought about coming down to Topeka and seeing about jobs. When I found that jobs were hard to find I was ready to take any kind of a job. (worry) Well, I worried a lot about getting a job because, well I'd bought the car and I was old enough to be out on my own. I hated to be living off my folks all the time. When you're worrying, you're kind of...oh, it's hard on your nerves and everything bothers you. When you're planning something you can always put it off until later on but when you are worrying you have something on your mind such as a bill that needs to be paid and you're worrying where you're going to get the money to pay the bill. When you're worrying you can't put it off and it keeps bothering. (daydream) Well, probably daydream about the job you're working on and about how you'd like to have that job or be the boss of that job, in other words. Or else you might dream about a home you want in the future. You'd probably daydream about the girl you just met or dreaming about having a nice car to take your girl out to give her a nice time. I kinda see it in my mind, just sometimes. Otherwise just sort of thinking about it. (which of the three) Right now it's partly worrying and partly planning. Mostly those two.

Jo

I think about things that I've done that day, maybe I run across something a little odd; some confusion, maybe my wife's attitude or maybe it was just something good that happened. If I'm sleepy I just think about sleep. (prefer action) I enjoy sitting around thinking. (dreaming) Well, might be a day come when I'll be in business for myself and won't have to work for the other fellow. Next thought: I'm interested in leather craft work and you think of a design. You want the oddest design, so you kind of doodle in your mind and then when an odd one appears, you grasp it quickly before it gets away. (plan) You plan a surprise for your wife. Maybe she's the type that likes surprises, but she's jealous to a certain extent and because you're sitting not paying any attention to her, she breaks into your thoughts and leaves you in a strain and you can't get your thoughts together because she wants to know your every move. After a long time of trying you just finally give up the idea. You've been shopping with her and she shows you a nice pair of shoes. You want to get it for her and have to save for weeks, maybe, out of what's left of your salary. (worry) Say you was walking down the street and a friend of yours had a serious accident and you come home with this worry on your mind. You can't do anything about it cause you're not in a position to, but you tell the home folk about what happened and they seem to take it in their stride but you can't take it in yours. (which of the three) Mostly the planning type.

Leo

Oh, I'm thinking about what I'm going to do the next day. Or what I intend to do whether it works out or not. Something to do around the farm there, something to save time or, maybe other times I think about how I'm going to make money to pay the bills-- what would be the easiest way or the quickest. Oh, I don't know. We don't go very many places, sometimes I might think about that. Might think about things that might make life happier, or--pleasure-- going to shows or visiting people. Usually, I'd rather be doing something, the biggest part of the time. Like now, when I'm sitting around I don't feel right. I feel I ought to be working but when I'm home I like to take it easy once in a while. I have quite a lot of bookwork that keeps me busy in the evenings, but... (daydream) I dream about what kind of place I'd like to have. What I'd like to have if I ever got one would be mostly farm ground where I could sow my own pasture and rotate crops and pasture. Like last year, you'd think about water basins more than usual. I'd have some dairy, the bulk in farm ground. I've always wanted to get one somewhere between Berryton and Topeka. I know one

place but I'll never get it now. I dreamed about that place. It had no buildings on it; I'd build them to suit myself. No fancy---just a rectangle shape house, six rooms, modern. I've seen other houses and I kind of pick one out and think I want one like that or something. I want the other buildings handy, want a grade A barn; not a big barn, but where I could milk a few cows and have a loafing shed away from the barn to keep the cows away and the barn clean. (plan) Yeah, that's right. It's something I want to work up to. (worry) Oh, sitting around, if you don't have anything to do you think about how you're going to pay your payments and where the money...I don't worry much. But, like my brother-in-law not showing up this morning (to drive patient into the hospital) I'll worry the next time I come in. (plan) Well, I go to this GI school and they require you to make a plan at the beginning of the year. I plan to hire someone to help me for Spring. There's a kid in Berryton and I might get him to drive one of my tractors. I might get him to help. I have to plan to do things a certain time so you're work'll come out right; like next month if the weather is right we'll sow oats, so I should start working ground in the middle of February. (which of the three) I'd say planning the present work or just planning the farm work.

Pa

Lots of different things. For instance, a person thinks of homes, a better job, better finances, security in general. And lots of times I find myself thinking about whether to go back in service or not--for a career. (prefer action) Other than being in this place, I generally like to keep busy. If I do think it's usually about some automobile I've got tore down and how to put it back together the quickest way. (daydream) At one time or another every man wishes he was a millionaire. I'd have a big mansion, 5-6 automobiles, be very generous to people who was less fortunate. I'd have about a 20 room stone house, 2 acres in immediate grounds around the house, shrubbery, lawn and so forth. The total acreage would be about 50 acres and there'd be nice gardens, lots of shrubbery and an exceptionally nice bar. It's not too clear; sometimes I can see it rather clear. I imagine the family in it, but that doesn't play much of a part. (plan) Well, I would like to be a master diesel mechanic and if I had the opportunity I'd go to school right now for it. I don't know; finances is the main obstacle. I had one course in diesel while I was in the Navy. That was the first step toward it. I didn't have to take it but I had the opportunity to take it. If I'm working on a car I generally stop and

think through what I'm going to do. Sometimes I even write it down. I think it out step by step. (worry) Oh, I guess most of my worries right now consist of debts. Being 700 dollars in debt and nothing to show for it worries me. I wonder how I'm going to pay it off and I wonder about the people I owe and how they feel about it and one recent worry is what the judge is going to say when I go to trial for drunken driving. (which of the three) I'd say planning. Daydreaming mostly here. I work at night and during the day I work at a used car lot where we have some cars that are junk and some that I'm going to fix. During the night job I'm generally thinking about what I'm going to do the next day with the cars so most of it is step-by-step planning.

Po

Oh, I don't know. Lots of times I think of what's going on tomorrow, definite dates I've made plans for, things in the past. I don't know. Sometimes I make plans for something coming up. If something should be done I make plans for it. I thought up a little deal the other night of getting me a chroming set and set up a chrome shop to make a little money. (prefer action) I usually try to do something at home. I work on my car or odd jobs. Maybe go hunting or something like that. In the summertime, I might go swimming or play baseball; hunting or fishing. (plan) I don't know as I've ever made definite plans. Like overhauling the car; I fix it up like I want it while I can't work. Well, I made two trips to the Lake of the Ozarks and made plans for them. We stayed four days. We set the date, figured how much money, laid out fishing tackle we'd need, figured which cabin we'd stay in. We had no definite plans where we'd go until we got down there, we figured out which road to take but we got lost in K.C. going out. We didn't really care, we knew which road we was going to take. (worry) Oh, thinking about the boy, or if I want to do something and can't do it because I have no money. What to do about the boy is the biggest thing on my mind right now. It gets me down sometimes. (Po is separated from his wife and son). (daydream) Well, I've always thought of...I want to live in my own house. I think about how I'd like to have it, where I'd want it to be, and different things around it. It's a ranch type, five rooms with a garage on it. I can just picture the house there and me looking at it. Picture of shrubbery around it. It's something I'd like to do, but it seems far away. I daydream about an electro-plater that I could use as sort of a hobby. I'd be able to make enough money to pay for the equipment, not make any real money, just a little extra. I sent for a booklet on it and was thinking how I could make the electro-plater out of odd parts. (which of the three) Really, to me it's more doing things with my hands and thinking how I'm going to do them. Like wood-working and things like that. (Plan) Yeah, just thinking of different things I can do with my hands.

U1

Well, sometimes its financial and I guess once in a while I stop and think who I haven't treated fair or something. Lots of times I think about the past; what I did in younger days and such. (Prefer Action?) Well, this winter I've kind of enjoyed just sitting. Usually, I enjoy activity; sports, cards and so on. I don't care what it is, just something to occupy my mind if I wasn't working. (plan) Well, something I've always thought I'd like to do is start a business, probably a roadhouse. They take in more money than anything else, considering. I never advanced far enough to consider it to seriously. I was brought up to disapprove of liquor, my mother is strongly against it. (plan or daydream) Not entirely an impossibility. One thing, I'm a realist. I don't believe except in what I see. Of course in farming you have to think out in advance what crops you're going to put out. When you use crop rotation, one thing is that you have to think out what crops you're going to put out for years ahead. (worry?) The most worries I ever have are financial. I wonder where the next dollar is coming from. Well, if you have money borrowed from the bank and don't raise the crop you'd planned on, you find it hard to pay the money back. (day dreaming) I don't believe in daydreaming. I want a nice place, not a flophouse. I want an eating and drinking establishment. Another fellow and I did talk about building one but we didn't do anything about it. Close to my home town, but it's a college town and I can't get a liquor license to operate; they don't allow saloons. (which of the three) I suppose planning. I don't worry too much. I think mostly in terms of what can be done. I like to deal in something you can do something about.

We

One good thought that I would have; most generally I'm thinking about what I'm going to do the next day or what I should do or what I have done. It's planning for the future. In my line of work, I'm a farmer, so I think maybe how I'm going to meet some financial problem. (prefer action) Most generally I do more thinking when I'm out by myself riding a tractor and I don't have much to do. I have a few thoughts of some kind. (plan) Well, I've planned a lot of things and done a lot of them. Well, on my place--it happens that clearing the brush and building fences has been quite a problem to me. I most generally plan to do so much of it...which I've followed. It's most generally how much I can get done in a certain time. This year I had a certain area to clear of brush. I thought about when I could do it. (worry) Well, I can give you a little example of worrying in here. About getting

my oats sowed. I got called in here about the time I should have been doing it. It just more or less goes through your mind. (daydreaming) I don't do much daydreaming as far as that goes. I had a few daydreams about leaving the farm and going back and making pretty good wages, you don't have to work so hard. Most generally in the city you can depend more on what you're going to make. You never know on the farm what you are going to do. I've imagined I'd go to work in an aircraft factory like I did before. I visualize myself back in those factories. I'd like a new house. We've been needing a new house. I know I can't do it but I sort of think about it. Never go very far with it 'cause I know there's no hopes, really, much. (which of the three?) Planning.

Yo

I'm thinking of wanting to get out of the cafe business and either go back to the phone company or I've been thinking about wanting to go into civil service. I've been thinking of this for the past year. The cafe business is too hard on the Mrs. I'm not the type that can sit around. Course, when I do, I'm comfortable as far as that is concerned. I usually like to be doing something. At home there's no time for thinking. We lock up about 12 (midnight) and go home and go to bed. (Plan) Getting into some good job like civil service, where it's the security of the thing. A while back I joined the civil service school for tests when they do come up. I found out that you can go to the Post Office and probably get a good job. I've been talking to some of the patients about it. They said that I could probably get a good job. The job's nothing big but I want the security of it, like sick leave, for example. As soon as I get out of here I'm going to the Post Office and find out what steps there are to go through. You see, what worries me is that my wife has arthritis and it's hard for her to be on her feet. (worry) I don't worry. I don't have nothing to worry about outside of those things. I guess I did worry about this thing before I came up and had the operations. (daydream) My wife and I were thinking awhile ago how it would be if I got this job in K.C. I took the test for that. We were thinking about how it would be in K.C. and about the house we'd buy. I kinda picture those things out and imagine how you'd be home in the evenings and out working in the yard, and you'd get days off, and so on. I never thought too much about the house, just a nice little house. Most of the new houses are. (which of the three) On the job is what I do most of. (plan or dream) They're kind of mixed. I do as much of one as the other. I hope they come true but don't expect them to.

Zw

Oh, I'd say...right now most the thoughts that go through my mind is getting out of here and what I'm going to do when I get out. Sometimes I think of the wife, wonder how she's getting

along, what she's doing. Most of the time I think about...oh, somebody I want to go see or some way of promoting business, some way of getting a new car. Which I just got, so I won't be thinking of that for awhile. Some way to sell feed; business, more or less. I don't like to just sit down and think; I keep busy while I think. (plan) Say we was going to load a truck. I kinda see it and plan where I'm going to put the stuff and how I'm going to unload it. Figuring out--it depends on how much a man makes. I thought if I could make a certain deal, if I could sell a guy, then I could get the car. There were just about two such cases where I planned for the car. (worry) I never do any worrying; if I can't do anything about it, I forget about it. I always think of worrying as something that I was scared of. (asked about his earlier description of thinking about his wife) Not worried. She's making as much money as I did. 'Course she's operating our business. I don't call that thinking worrying. There's nothing I can do about it, but it doesn't worry me. (daydreams) I suppose a guy always wants something better than he's got. If he didn't, he wouldn't be human. That's what you work for; like a house, car, furniture. Oh, I suppose a guy always dreams of a big ranch type house and everything that goes with it and a time when he won't have to work and can take it easy and go fishing. I don't visualize it because I can't buy it. There's no use thinking about it. It's no more than here and now and gone. It's a pipedream, like taking a trip and going fishing...like when you're getting ready for a vacation you might play with going places you know you couldn't. (which of the three) Most of it is probably planning what you're going to do tomorrow. You plan a week or so in advance. Don't plan too much until the night before, because things come up that change plans.

Appendix

Normal

	RT	CT	ET
Br	43	75	117
Bu	41	61	137
Ca	49	83	123
Co	57	83	158
Ha	55	82	145
Hei	64	78	170
Jo	87	133	288
Leo	68	82	142
Pa	47	66	112
Po	51	75	179
Ul	41	61	99
We	61	102	198
Yo	50	72	135
Zw	52	81	143

MRT = 52.23  
MCT = 77.00  
MET = 142.92  
MET-CT = 65.69

Alcoholic

	RT	CT	ET
An	44	74	172
Bra	58	155	181
Bri	49	78	136
Ca	49	65	129
Ce	136	235	211
Gr	31	69	120
Heaf	62	95	145
Hen	44	76	177
Jo	73	88	162
Ke	77	176	186
La	41	63	102
Sh	90	133	201
St	51	174	180
Th	49	79	124
Wi	70	85	146

MRT = 56.29  
MCT = 100.71  
MET = 154  
MET-CT = 53.57

Table of the raw data and the means from the three parts of the Stroop test.