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DEVELOPMENT AND STANDARDIZATION OF A PROJECTIVE OCCUPATIONAL ATTITUDES TEST.

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TO HELP NONCOLLEGE-BOUND YOUTH MAKE SATISFACTORY OCCUPATIONAL DECISIONS, A PROJECTIVE OCCUPATIONAL ATTITUDE TEST WAS DEVELOPED. THE INSTRUMENT CONSISTED OF 10 DRAWINGS DEPICTING SCENES OF UNSKILLED AND SEMISKILLED MALE OCCUPATIONS. THE SCENES PORTRAYED ARTS, TOOLS, MATERIALS, WORKING ENVIRONMENTS, AND INTERPERSONAL RELATIONSHIPS. THE INSTRUMENT WAS USED FOR INTERVIEWS WITH 400 YOUTHS, 12 TO 18 YEARS OF AGE, INCLUDING JUNIOR AND SENIOR HIGH SCHOOL ENROLLEES, DROPOUTS, AND YOUTHS ENROLLED IN NEIGHBORHOOD YOUTH CORPS. THE INTERVIEWER SHOWED EACH DRAWING TO THE STUDENTS AND ASKED THEM TO RESPOND. INTERVIEW DATA WERE ANALYZED AND A FOLLOWUP INTERVIEW WAS TO BE CONDUCTED 2 YEARS LATER WHEN THE STUDENTS WOULD BE EMPLOYED. THE INSTRUMENT APPEARED TO PROVIDE A RELIABLE AND FUNCTIONAL INDEX OF OCCUPATIONAL ATTITUDES, BUT THE PRELIMINARY TESTING WAS CARRIED OUT WITH ONLY A LIMITED SAMPLE OF SELECTED PERSONS. FURTHER WORK ESSENTIAL FOR VALIDATION AND STANDARDIZATION WAS IN PROGRESS AT THE TIME OF REPORTING. THIS VOLUME REPRESENTS PART 2 OF THE 13-PART FINAL REPORT ON THE VOCATIONAL-TECHNICAL EDUCATION RESEARCH AND DEVELOPMENT PROJECT OF WASHINGTON STATE UNIVERSITY. RELATED VOLUMES ARE ED 010 652 THROUGH ED 010 664. (AH) 23

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Report No. 2

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December 1966

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

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**DEVELOPMENT AND STANDARDIZATION OF A PROJECTIVE
OCCUPATIONAL ATTITUDE TEST**

**Project No. ERD-257-65
Contract No. OE-5-85-109**

LeRoy C. Olsen

December 1966

The research reported herein was performed pursuant to a contract with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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State Board for Vocational Education, Olympia, Washington**

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INTRODUCTION

Purpose and Rationale

The purpose of this project is to develop and standardize a projective test that will provide a method of assessing attitudes toward major dimensions of selected occupations.

In a free society vocational educators have responsibility for providing and helping youth perceive and acquire occupational goals and competence congruent with both the nature of the work-world and their self-actualization. The processes by which pupils develop occupational goals and competence are inevitably affected by the nature of learners and by their perceptions of occupations. Conventional vocational counseling procedures which attempt to match traits with jobs do not adequately consider the psychodynamics that affect occupational choice and development of occupational competence.

We propose development of a projective test that will provide means for counselors and teachers to better utilize some of the motivational and developmental dynamics of learning.

Vocational counselors and teachers have need for more accurate information about pupils' attitudes toward occupations. In a world of increasing occupational diversity such as information, used in conjunction with facts about pupil traits and capacities, will enlarge counselors' abilities to help pupils make vocational choices more congruent with their rights for self-actualization. More adequate information about occupational attitudes will also enlarge the school's capacity to help pupils make occupational choices in which they are likely to experience both success and satisfaction. Such information will also help teachers facilitate and extend the development of pupils' occupational competence.

Because attitudes are deep-seated feelings which influence and direct behavior, an understanding of pertinent occupational attitudes is of importance to vocational teachers and counselors.

Review of Related Research

Existing means of assessing pupils' occupational attitudes have serious limitations. To a small degree Strong, Kuder, and Lee-Thorpe interest inventories reflect attitudes. But they provide only limited information about the deeper feelings a person may have toward the totalities of work, environments, and personal relationships involved in various occupations.

Any technique for occupational attitudinal assessment should be designed so as to symbolize all occupational components in ways that enable respondents to perceive them and relate to them. Generally, most work involves combinations of acts, tools, and/or equipment, materials, a working environment, and inter-personal

relationships. Consequently, to yield reasonably accurate measures of attitude toward occupational choice and adjustment, techniques or devices must be designed to measure the individual's perceived role within a situation comprised of all of those elements and his attitudes toward the total picture and all of those inter-related components.

For the above reasons, and to meet the above needs, we have begun work on a projective instrument that will assess pupils' attitudes toward the combinations of dimensions that constitute the realities of some major types of work in which substantial numbers of non-college bound youth are likely to find employment.

Background Concepts

The need for attitudinal assessment is indicated by Allport who notes that (1) "an attitude is a mental and neural state of readiness organized through experience exerting a directive and/or dynamic influence upon the individual's response to all objects and situations with which it is related." This definition places attitudes in the framework of the concept of needs, drives, and motives, and consequently, point to the fact that attitudes constitute a basic and important aspect of the person's motivation, emotionality, and self-concept. Attitudes tend to be definite and specific emotionally toned ideas from the standpoint of the object, person, or situation to which they pertain and the value to which they are attached. The person's self-concept may be thought of as essentially the sum total of the attitudes and the values by which he lives.

The work of Bloom, Davis, and Hess (5) indicates that when children learn that their basic needs cannot be adequately provided for in a dependable way, they tend to adopt a fatalistic attitude which generalizes to alter their patterns of living. Their ability to cope with their environment is impaired. Such passivity, defeatism, and possibly hostility caused by need deprivation is learned by the child from both the realities of living and from their parents who, through their daily behavior, communicate a general attitudinal orientation. This general attitude orientation can do much to give the child an outlook in which he expects to be frustrated in meeting his basic needs. Such expectations, in turn, determine his views about himself and his environment.

The need for adequate means of assessing pupils' attitudes toward various occupations and ways these attitudes effect occupational choice and adjustment have been recognized by vocational counselors for some time. The problem has been one of developing adequate instruments for attitudinal assessment.

McCabe (11) has appraised the trait-factor model as one approach to vocational counseling. In that approach assessment of aptitudes and interests plays a major role. The traditional vocational guidance approach has emphasized the matching of the individual to an occupation. However, that procedure does not give adequate consideration to the influence of non-rational, emotional factors in vocational choice and adjustment.

Goodstein (9) suggests that an adequate theory of vocational development, choice, and adjustment must take into consideration both external reality factors and psychodynamics. More recent attempts to deal with the psychodynamic, non-rational, emotional aspects of occupational decision making are the components

which distinguish modern vocational counseling from the less adequate concept of merely fitting the man to the job.

Lazarus conceives (10) the essence of the phenomenological frame of reference to personality as follows: "The cause of action is the world as a person apprehends it privately. This privately apprehended world is the core construct of the theoretical positions of such phenomenologists as Lewin and Rogers. The self theory of Rogers utilizes the concept of phenomenal field (analogous to Lewin's life space) and the core, or the most important aspect of that field, is the self-concept. It is the self-concept that determines his behavior. The individual responds to the objective environment in terms of what he perceives it to be. The self-concept is extremely complex and not only includes who and what one is, but also comprises central values and belief systems."

Phenomenological theory revolves around the properties of the person which intervene between the stimulus and the response. Trait theory is response-centered or stimulus-response centered. Thus the study of attitudes and their assessment, due to their influence on perception and the self-concept, would seem to be vital to the understanding of occupational choice and occupational adjustment.

Forer (7) suggests that a comprehensive occupational theory must account for the development as well as the nature of individual differences in aptitude, interest, and performance. He believes that theory should also account for processes and problems of developing skills, knowledge, efficiency, productivity, creativity, attitudes, and interpersonal relationships. Forer believes that a total theory must deal with the interrelationships of all of these aspects of the person and the natural or real situations in which he works.

Goodstein supports Forer by noting that much theorizing has viewed occupational choice as an expression of personality without considering the important role of factors such as labor conditions, employment opportunities, hiring practices, and pay scales. Goodstein also shares Forer's view that an adequate theory of vocational development must include consideration of both external realities and psychodynamics. Psychodynamics is not the only dimension involved; but more valid assessment of attitudes will make a valuable contribution to a comprehensive theory of vocational choice, adjustment, and counseling.

A basic assumption in the use of projective tests is that every subject's responses are more than the consequence of sheer accident. They are also affected by psychological attributes of the subject. Anderson and Anderson (4) note that the fundamental characteristic of projective tests is the ambiguity of the task put to the subject: a task which permits him to respond in his own way. The assumption basic to this proposal is that since the projective device offers the subject wide latitude to reveal himself, the sample of responses supplied by the protocol will provide evidence of the subject's attitudes toward occupational situations.

Ammons, Butler, and Herzig (3) attempted to adapt the Thematic Apperception Test to vocational settings largely professional or semi-professional in nature. The authors attempted to measure vocational attitudes and interests. Test data were limited to forty college men and thirty-five college women; results were inconclusive but suggested possible methods of attitudinal measurement. Forer (6)

developed a diagnostic interest blank which consisted of a large number of statements about hobbies, reading interests, occupational interests, hopes, ambitions, and so on. From that data some values and attitudes could be inferred.

Steiner (18) found that the Rorschach Test contributed to the overall evaluation of personality when personality traits were well defined in terms of occupational success. Mindess (13) found that ego-strength as indicated by the Rorschach Test seemed significantly related to achievement in nursing training. Phelan's (16) study indicated that Rorschach Test and Thematic Apperception Test data proved to be the best predictor of promotion to administrative positions.

The OSS Assessment of Men (15), while not characterized by rigorous experimental design, did experiment with considerable latitude in utilizing projective techniques.

While the results of research to date do not appear to have produced significant results in all cases, certain facts seem apparent. First, most of the research has been conducted with college students or professional groups; second, standard projective devices have been used, rather than adapting or developing devices utilizing occupational themes; and third, projective devices have been used primarily for the purpose of studying personality rather than attitudes.

It is possible that the relationship between those personality and attitudinal factors affecting occupational choice and occupational adjustment of professional and semi-professional level personnel may be different than those affecting lower-level positions, especially unskilled or semi-skilled jobs. Goodstein has suggested that many lower-level workers seem to be motivated by economic factors, job titles, and even small increases in earnings. Such data indicates slight commitment to an "occupational choice."

When projective devices have been utilized in the prediction of occupational behavior, the empirical research findings have not been entirely encouraging. Roe and Mierzwa (17) have observed that while projective methods have contributed much to the development of hypotheses about the relationship between personality and occupations, once such hypotheses have been developed it is their belief that further research would be more useful if conducted with instruments more appropriately designed for hypotheses concerning occupations. The Rorschach Test, for example, has such a wide spectrum of responses possible that its value in focused application (occupational use) is doubtful.

Frank's (8) report of research in biochemistry may have implications for research in the psychology of occupations. Exploring the effectiveness of a pain-killer drug traditional investigations have examined the effectiveness of given compounds on experimental animals before testing them on human beings. Failures to produce the desired analgesic effects on animals have led to termination of further experimentation and drugs are discarded. In the instance cited by Frank, though the drug failed to demonstrate effectiveness as an analgesic in animals, for the first time in 80 years of research the investigators chose to go beyond the findings and proceeded to test the effect of the drug with humans --and it worked. This finding could call into question many conclusions regarding the psychological functioning of humans predicted on research with infrahuman or subprimate organisms. It could also raise questions about many conclusions

regarding various groups, levels, or classes when conclusions from one are generalized to the other. This was suggested by Miller and Riessman (12) whose work indicated that responses of low social class groups to projective tests tended to be interpreted as neurotic when in reality they were valid responses for those social groups. The stimuli presented by the usual projective test may not be applicable to the experiences of all people. Stimuli signifying elements of the world of work (e.g., tasks, unions, tools) may be more meaningful to pupils whose parents are engaged in unskilled and semi-skilled occupations.

METHOD

An interview instrument consisting of ten drawings portraying five major dimensions of common non-professional level male occupational situations is being developed. The dimensions portrayed are (1) acts, (2) tools and/or equipment, (3) materials, (4) working environment, and (5) interpersonal relationships.

Interviewers will show the drawings to pupils and ask them to respond with their impressions about:

How the persons in the drawings came to be in the portrayed situations.

How the persons pictured feel about the situations they are in.

What the pupils think the future holds for the persons pictured.

It is hypothesized that the instrument will provide means of assessing the following attitudes as they relate to occupational choice and work:

1. Attitudes toward various types of work as means of self-actualization.
2. Attitudes indicative of need satisfactions likely to be derived from various occupations...security, prestige, achievement, income, enjoyment.
3. Attitudes toward types of tasks and inter-personal relationships involved in some major types of work.

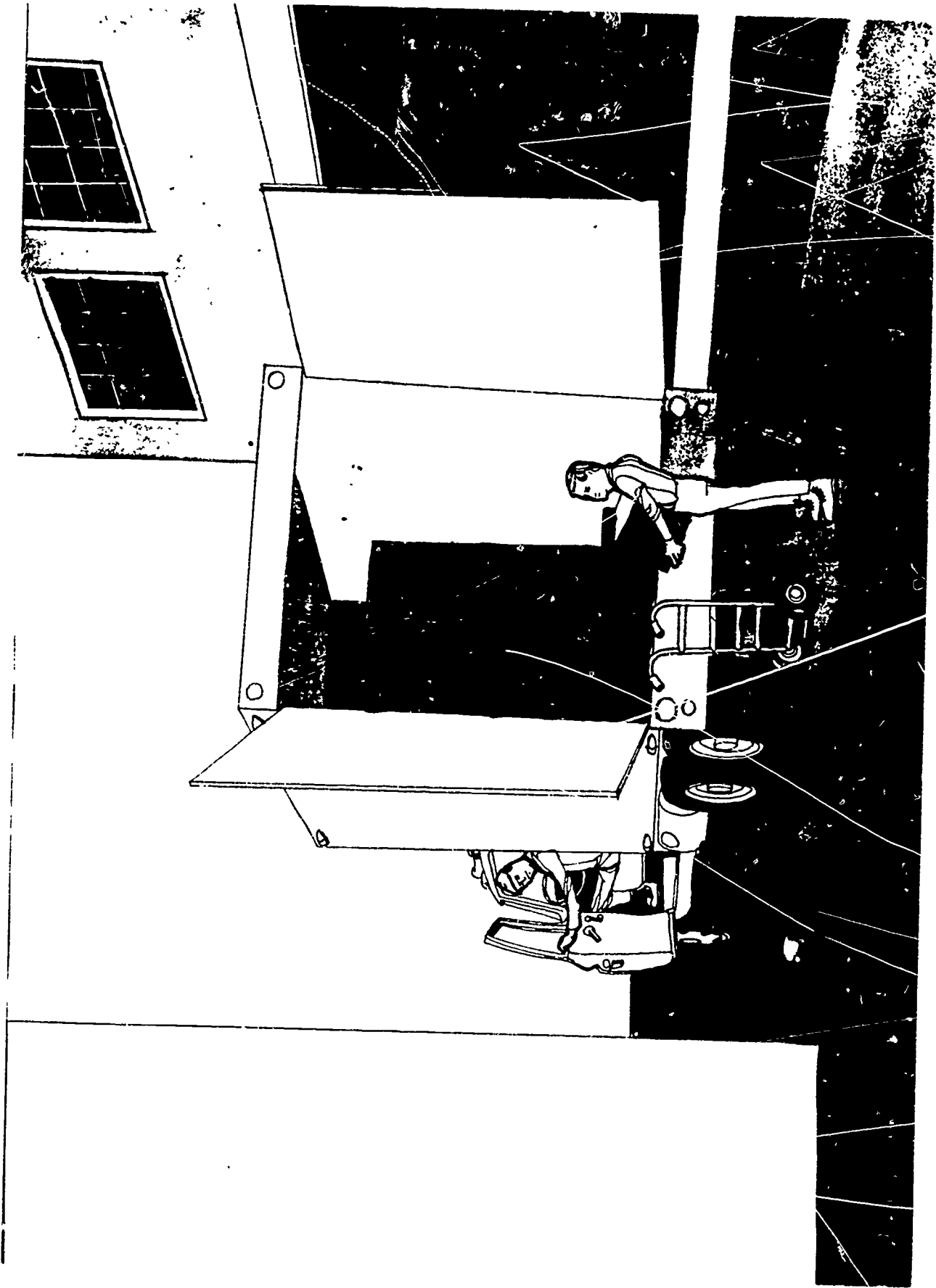
Ten drawings used as bases for interviews are reproduced on the following pages. The drawings will be pretested by interviews with pupils possessing various social, economic, parental, educational, and experience backgrounds. The instrument will be revised and used as a basis for interviews with a sample of 400 youth, 12-18 years of age with those same variations in background. The sample will include junior and senior high school enrollees, drop-outs, and youth enrolled in Neighborhood Youth Corps.

The instrument will be validated as follows:

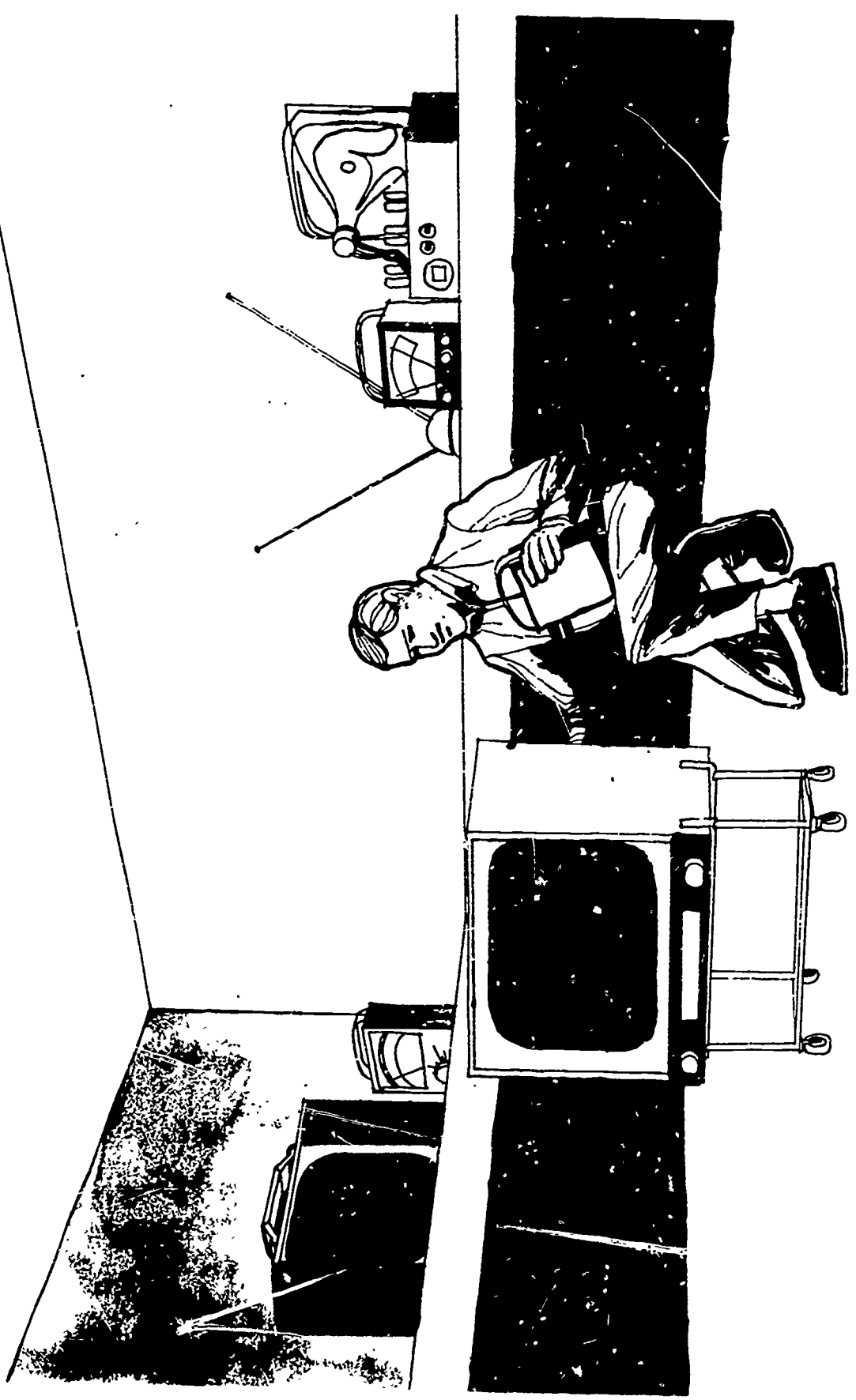
1. a random sample of the original group will be given extensive depth

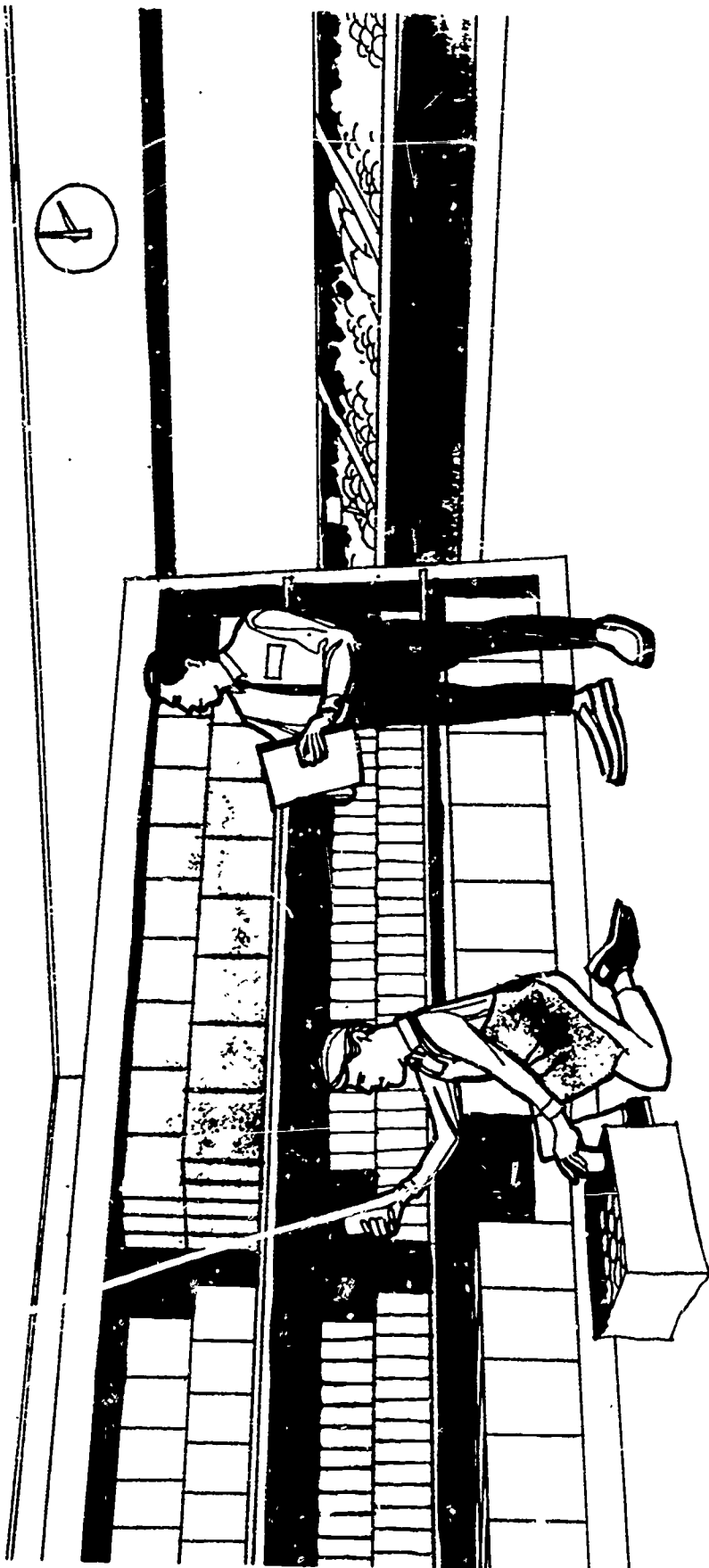
interviews for the purpose of obtaining validating data and/or validating criteria. Interview data will be analyzed for the purpose of developing attitudinal patterns, scoring criteria, and profiles.

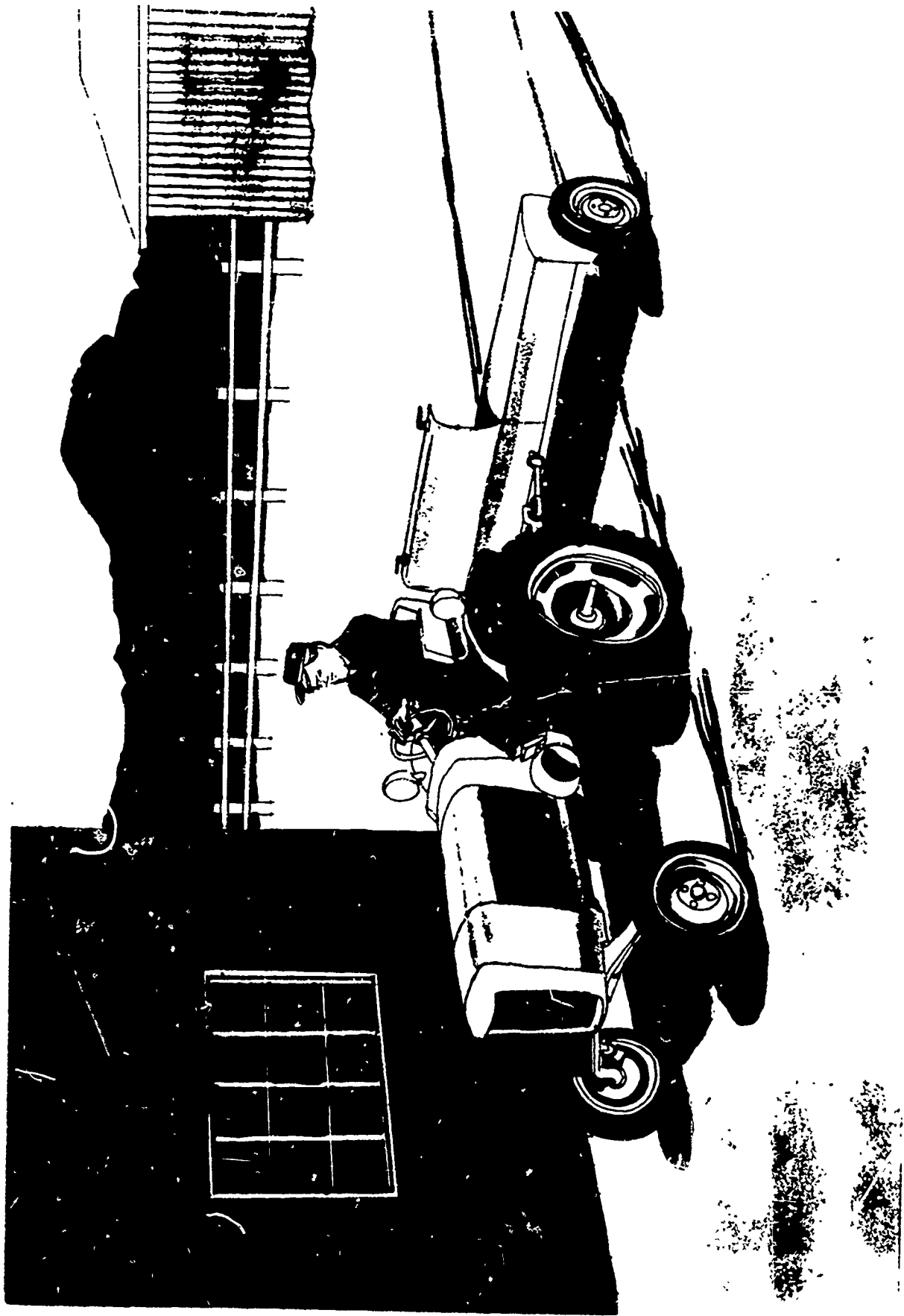
2. Two years later when pupils are employed, another sample will then be utilized for the purpose of follow-up and possible prediction. This will include interviews with the sample, their employers, and their fellow workers. The follow-up will also provide data for validation, reliability checks, and prediction of attitudes toward various types of work and satisfactions likely to be derived.

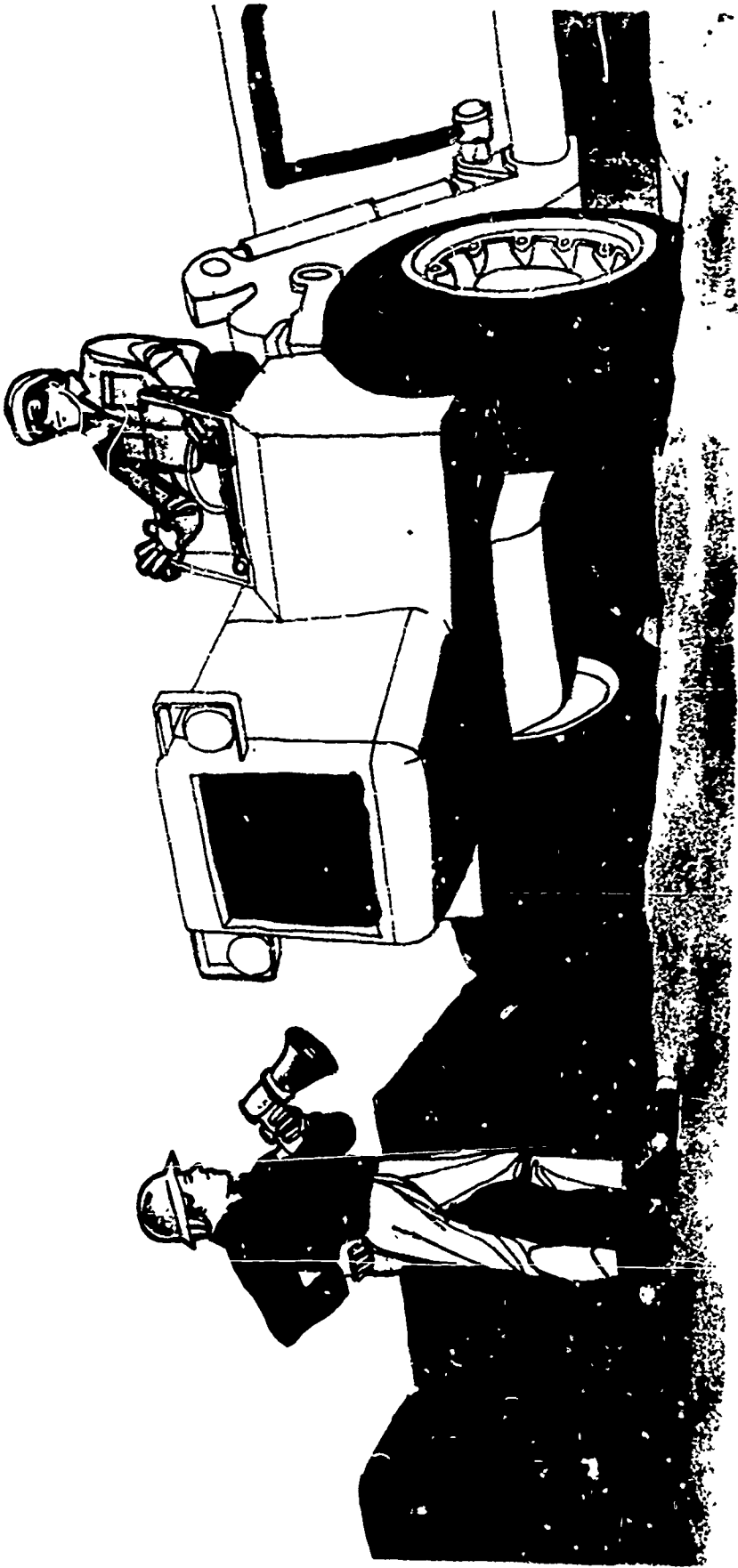


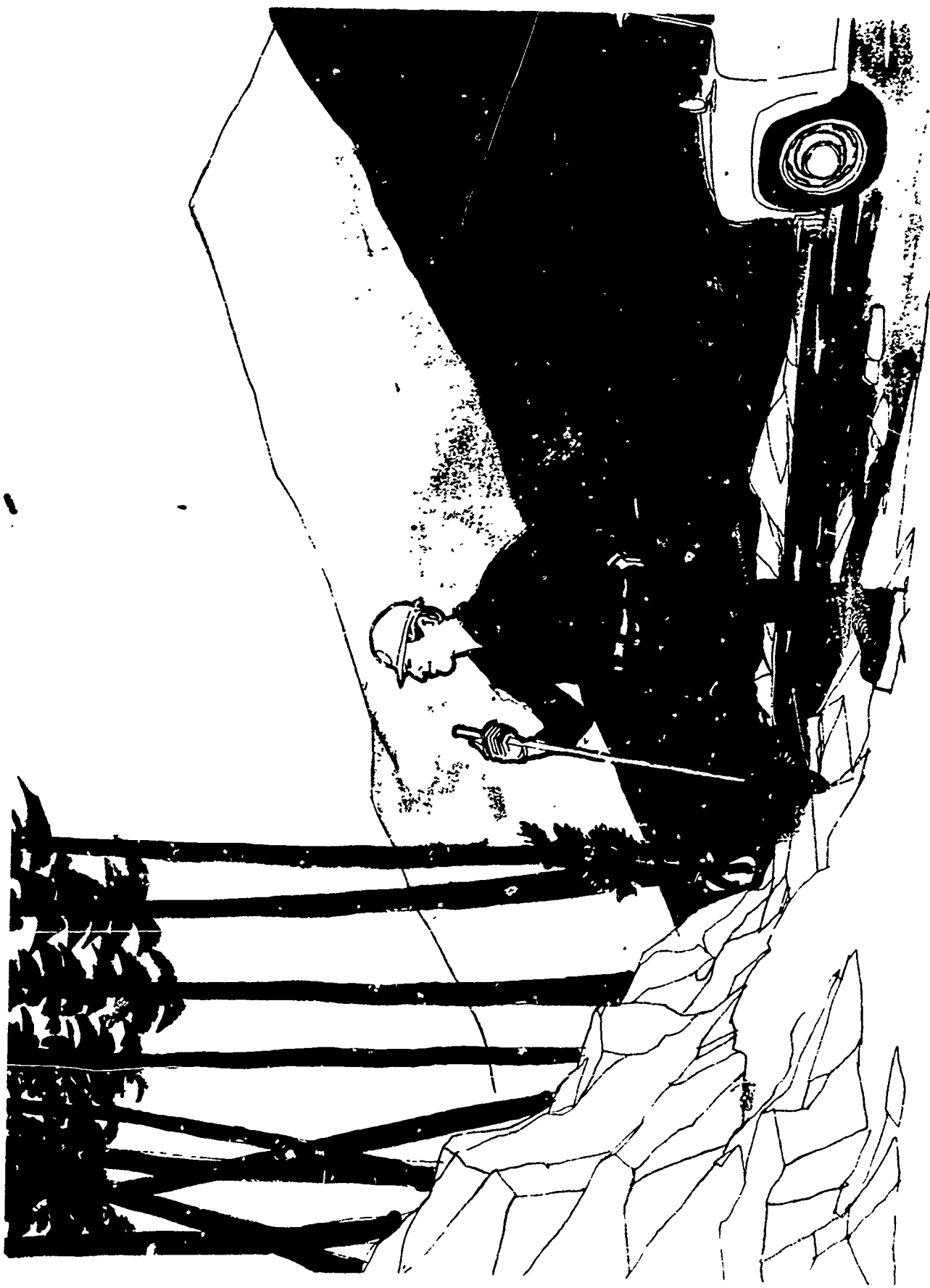


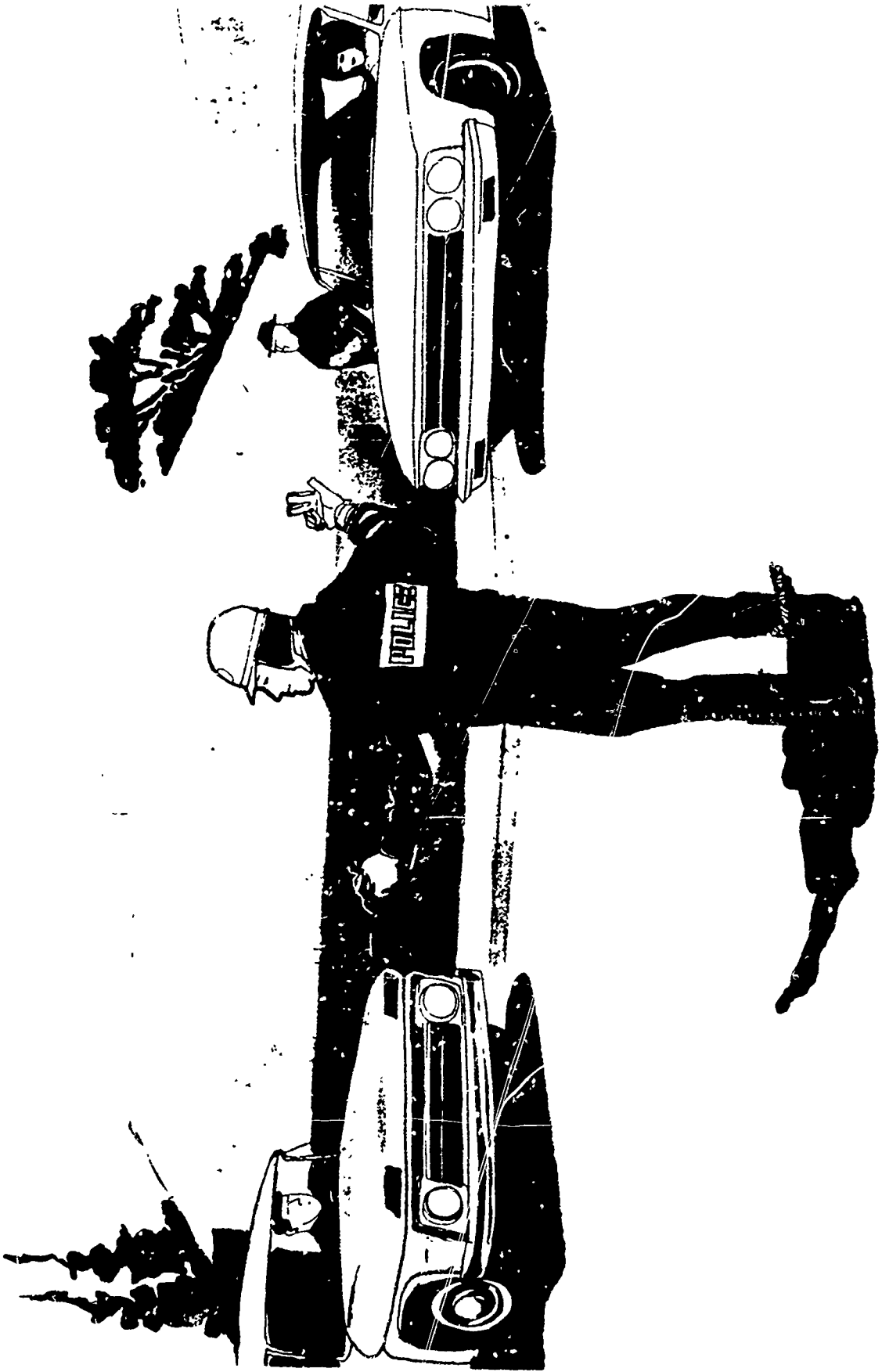


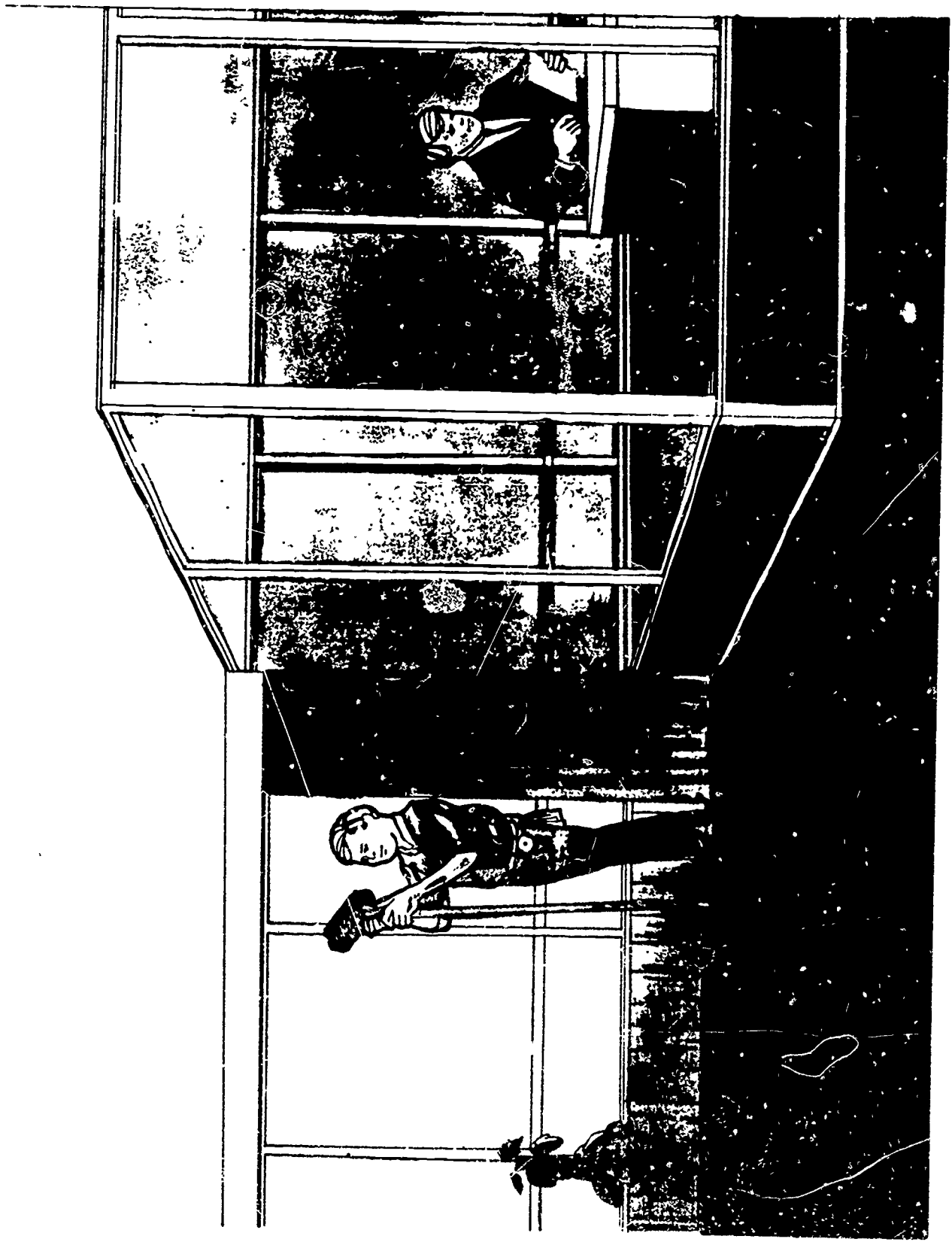


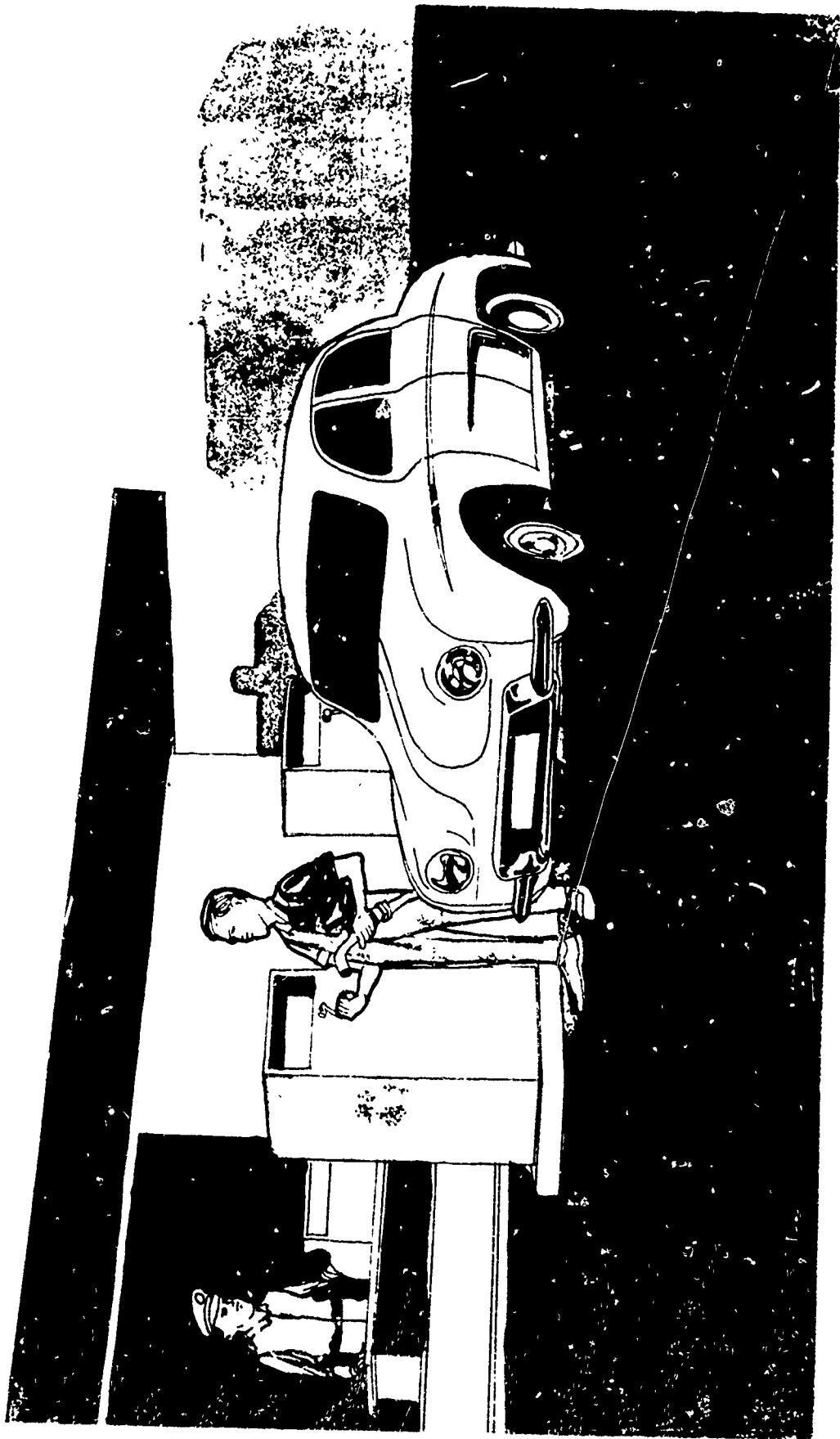












INSTRUCTIONS FOR INTERVIEWERS

Interview Considerations and Principles

Subjects in an unstructured situation often utilize all available clues to complete their projective task. Subjects not only use clues furnished by the cards but those supplied by the surrounding physical and psychological environment. Subjects also respond within the testing situation to preconceived fears and attitudes.

In the same sense the examiner is also part of the available sample of cues that may bias test results. It is his task to obtain from each subject the best protocol the subject can produce through his own efforts without assistance or distraction.

The examiner must not only learn to avoid responses giving the subject biased structure, but must suppress unconscious acts which serve as cues to the subject.

The purpose of administering the test in a standardized manner is to obtain the most objective responses.

Interview Procedures

A. Preparing the subject

The subject should ideally be in a state that reflects his usual state of relaxation. On entering the office, it is suggested that he be met in a friendly warm manner. If he asks about the test, the examiner may reply, "This is one of the many devices being used to understand persons' views about various kinds of work."

B. Rapport

It is the examiner's responsibility to establish a relaxed, yet controlled atmosphere. The subject must feel at ease, yet should understand that certain tasks will be required of him.

C. Questions

The examiner should not volunteer information. Questions as to what the test will elicit are never answered by the examiner, original instructions may be repeated.

Questions very specific to the test properties may have to be handled by telling the subject that they will have to be answered after the test.

D. Physical Situation

1. Seating

The subject may sit across or to one side of a desk or table from the examiner. The chair should be preferably comfortable and sturdy. The subject should be able to rest his arms on the table or desk. The examiner should be close enough to observe the subject's facial expressions and ideally also be able to observe the card.

2. Lighting

The subject should have adequate glare-free and shadow-free lighting. The seating should be arranged so that light does not directly strike the test cards.

3. Materials for Administration

When the subject enters the testing room, the testing material should be arranged in the following manner:

- a. Cards arranged face down on the table in order of presentation. The presentation order is as follows:

<u>Card Number</u>	<u>Card Title</u>
1.	Store Clerk
2.	Service Station
3.	Farm Work
4.	Carpentry
5.	Janitorial Work
6.	Electrical
7.	Distribution
8.	Forestry
9.	Heavy Construction
10.	Traffic
11.	Blank Card

- b. Ruled paper for recording responses.
- c. Pen next to paper.
- d. A stop watch.

Arranging test material after the subject arrives may create apprehension and tension.

E. The Room

The room should be free of distracting features, especially noise and other similar disturbing elements. Interruptions during testing by others will adversely affect the subject's performance. A sign should be posted to keep others out of the testing room.

Timing

A. Time Notations

Three kinds of time notations are to be made.

1. Reaction Time: The time between the presentation of the card and the subject's first response to it.
2. Total Response Time: The length of time taken to complete the total test performance proper.
3. Total Response Time Per Card: The time is noted when the first card is presented to the subject, (1:00). As the subject gives his first response to card one, the time is recorded, (1:01-10"). Time is recorded when the response portion occurs. For example, the subject may say, "Well.....," (and then pause for several seconds before continuing). Time is recorded at the point when the actual response content is produced. Time is recorded when the subject has finished with the card. As the subject finishes, the examiner hands the subject the next card. Time will be recorded for the cards in this manner. Intervening delay is of significance as an index to interference with the subject's ability to state his associations.

Instructions for Interviewees

A. Recording

If a subject becomes anxious about recording responses, the examiner should reassure him by saying, "It is impossible to remember everything that you say; and, since I want to remember everything you have said, I will write your responses down."

B. Free Response Method

The instructions for the Free Response Method will be limited to telling the subject the following:

(E) "I have some cards here with pictures on them. Tell me a story about each one."

C. The Free Response Method will be followed by the subject's impressions about the following:

1. How the persons in the drawings came to be in the portrayed situations,
2. How the persons pictured feel about the situations they are in, and
3. What the persons think the future holds for the persons pictured.

(E) "Could you give your feelings as to how the person or persons came to be in that situation?"

The subject is then presented the first card. After he has responded to the question, the examiner asks the second question. At this point the examiner should be fully satisfied that the subject has completed his response.

(E) "Now, how do the persons feel about being in this particular situation?"

After completion of the response, the examiner gives the third question.

(E) "Now, what do the persons think the future holds for them?"

After responding, the examiner hands the subject the second card. The examiner repeats the same instructions for the second card. At this point the subject should be acquainted with the task and proceed on his own accord. If the subject fails to respond to any one of the initial impression instructions, he is reminded of these instructions for each card.

After all the cards with pictures have been presented, the subject is given the instructions for the Blank Card. (Note Blank Card instructions)

D. Instructions for the Blank Card

Instructions to the Blank Card will be standard for each instructional procedure.

1. With a work cue

(E) "Think of some picture of a person working and tell me a story about it."

2. With a positive work cue

(E) "Think of some picture of work you would like to be doing and tell me a story about it."

Presentation of the Blank Card will occur at the end of the series of cards and will be numbered Card eleven.

E. Indication of Card Preference

For an indication of preference for the selected stimulus card occupations, each subject will rank the eleven cards (including the Blank Card). The subjects will rank the cards from the one liked best through the card liked least.

Instructions:

(E) "Now that you have seen all the pictures, put the cards in order from the card you like best to the one you like least."

If the subjects ask, "The Blank Card too?", the examiner may simply say, "In any way you like."

Handling Responses

A. The Subject's Role

The cards will be placed face down in their proper order.

(Information regarding proper order is given in section II. -D. -3., Materials for Administration.)

Card one is on top and card eleven is on the bottom. Each card will be numbered on the back for clear identification by the examiner. The subject will be given the first card to hold and is informed by the examiner to continue holding it until he is finished with it. When the subject is finished with the card, it shall be handed back to the examiner, thus indicating readiness for the next card.

B. The Examiner's Role

The examiner should not be a disturbing element while the subject is responding. He should be as unobtrusive as possible.

Questions should be handled in a non-leading manner. Questions asked after the initial instruction period are to be recorded along with the examiner's response.

(S) "Am I supposed to use my imagination?"

(E) "Do whatever you like," or "Tell me a story about the picture."

After a subject has given two or more responses to a card and has indicated response completion, the response may be considered adequate. However, the examiner should not remove the card. If the subject makes only one response, he may be encouraged according to the instructions in the Free Response Method administration phases. The examiner may say, "Take more time if you wish."

Under no circumstances may the subject be aided by the examiner by any suggestions relating directly to card content. The examiner should reply to questions with a comment like the following: "Just respond as you wish."

C. Recording

Responses are to be recorded word for word. It may prove necessary to develop a shorthand method. A two-column page may be useful for recording responses. The left-hand side for recording the Free Response and the right-hand side for the follow-up impressions. It may prove helpful to

leave space between responses as the impressions may require more space than the response proper.

The responses are to be numbered with arabic numerals beginning with 1. In this way the total number of responses for each card and for all eleven cards may be easily examined. The first response for card one should be recorded as 1:01, the second response 1:02. The first response for card five as another example should be recorded as 5:01 and 6:10.

As indicated in section IV-A, if the subject becomes anxious about recording responses word for word, the examiner should reassure him by saying, "It is impossible to remember everything you say; and, since I want to remember what you say, I will write down your responses."

The subject should not see what the examiner writes down; if this is difficult, certain things may be written after the test has been completed. Recording should be kept as inconspicuous as possible. The examiner should make note of all unusual nonverbal behavior that may affect test behavior during the response phase.

D. Card Turning

After the first card, nothing is said about card turning. When the subject finishes one card, he gives it to the examiner who hands him the next card. If the subject asks, "May I turn the card now?", the examiner may simply nod his head or inform the subject by saying, "It is all right to turn the card if you want." The subject then gives the card to the examiner and is presented with a new card.

E. Rejections

Any tendency by the subject to reject a card without responding or less than two responses (tentatively), may be encouraged by the examiner's saying, "Look at it a bit longer", or "Give yourself plenty of opportunity." Two minutes is considered the minimum time a subject holds a card before permitting a rejection.

F. Withdrawing

After five minutes of nonstop responding, a card may be diplomatically removed from that subject by the examiner suggesting that is enough for that card, unless the examiner feels the responses being produced are important.

Termination of the Test

After completing the test, a subject may ask, "Well, how did I do?" The examiner may reply, "Since we are in the early stages of development, we will try to explain later when the information has been studied." This information in itself should be satisfying to the subject. Since other follow-up data may

be desired at a later date from the subject, explicit test information should be avoided. An insistent subject may be handled by the examiner pointing out that this is an example of how people behave in a situation in which they have had no experience. It may be more important at this time to find out why the individual is anxious about the test than answering specific questions about the test. At any rate the parting should be friendly and relaxed.

TEST BEHAVIOR RATING SHEET

Name _____ DATE _____
 School _____ Identification No. _____

1. Orientation to Examination
 _____ Seems to have complete understanding of nature and purpose of examination
 _____ Shows some insight as to purpose
 _____ Accepts the explanation of purpose of examination
 _____ Occasional evidence of distorted ideas
 _____ Completely misinterprets situation

- | | |
|--|------------------|
| 2. Initial Adjustment | Final Adjustment |
| _____ Completely at ease, makes good social contact | _____ |
| _____ Better than average social confidence | _____ |
| _____ May show some anxiety, but manages to control it | _____ |
| _____ Rather anxious and poorly poised | _____ |
| _____ Extremely ill at ease and apprehensive | _____ |

3. Interest
 _____ Enthusiastic and absorbed
 _____ Definitely interested in the test
 _____ Shows an adequate amount of interest
 _____ Lack of interest shown
 _____ Completely uninterested

4. Cooperation
 _____ Cooperates enthusiastically--does everything requested
 _____ Cooperates readily, offers no resistance
 _____ Generally good, but may resist certain assignments
 _____ Somewhat negativistic
 _____ Negativistic and uncooperative, reducing reliability of the test

5. Attention
 _____ So attentive to test as to be oblivious to external stimuli
 _____ Relatively undisturbed by extraneous stimuli
 _____ Moderately attentive
 _____ Easily distracted by extraneous stimuli or inner preoccupations
 _____ Almost impossible to get and hold attention

6. Self-Confidence

- Extremely self-confident, gives replies with assurance
- Rather self-confident and assured
- Somewhat confident, but evidences doubts
- Definitely inclined to distrust ability
- Painful uncertainty and vacillation

7. Effort

- Consistently expands maximum energy to attain success
- Works diligently on most tasks
- Strives for success, though possibly not at full pitch
- Works perfunctorily
- Lackadaisical, listless, indifferent

8. Further comments by the examiner:

Pilot Tests in Progress

Three doctoral students are presently at work testing the above instrument and procedures with three populations. William H. Venema is comparing the attitudes of non-college bound high school students and Neighborhood Youth Corps Enrollees. Gordon L. Erickson will obtain data on adults engaged in occupations covered by the instrument. James Flynn will obtain similar data from adult Vocational Rehabilitation Clients.

Experience derived from this experimental work will be utilized to revise procedures and to develop instruments capable of providing similar information for typically female occupations and for populations not included in the present project.

Planned Schedule for Development and Validation of the Technique

Testing of sample, December 1966 - January 30, 1967

Statistical analysis, February 1, 1967 - April 30, 1967

Development of a manual and scoring procedures, April 1, 1967 - June 30, 1967

Prediction and follow-up, July 1967 - June 1968

DISCUSSION

To date, this Projective Occupational Attitude Test has been developed and tested with a relatively small number of selected individuals. The test, and procedures for its administration have been refined to the extent possible at

this exploratory stage. There is now need for more extensive testing with larger and more varied samples. Arrangements have been made with authorities to obtain more subjects with varied backgrounds. Samples of the following types are available as a result of these arrangements: Job Corps Training Center enrollees, Vocational Rehabilitation clients, high school dropouts, Junior College enrollees in terminal vocational programs, and individuals from selected occupational levels. During the second stage of Project ERD-257-65, we plan further testing and refining requisite for validation and standardization.

CONCLUSIONS

Preliminary work with the Projective Occupational Attitude Test indicates that the test does provide an index of occupational attitudes. However, the preliminary testing has been carried out with a limited sample of selected persons. Preliminary results are promising, but until the instrument is used with larger and more varied samples and additional results analyzed, it is impossible to draw conclusions or to generalize concerning the instrument. Prediction and follow-up research will also be necessary if predictive capabilities of the instrument are to be adequately evaluated.

SUMMARY

To help non-college bound youth make occupational decisions most likely to yield satisfaction and success, teachers and counselors need information about their present attitudes toward basic dimensions of occupations in which they are most likely to find opportunity. Consequently, we have begun development of a Projective Occupational Attitude Test, administration procedures, and scoring procedures.

The instrument consists of ten drawings depicting scenes of unskilled and semi-skilled male occupations. The test is designed to measure attitudes toward five basic dimensions of work--tasks, tools, equipment, inter-personal relationships, and work environments. The drawings are shown to the subject by an interviewer who elicits free responses. Then the interviewer asks the subject a series of three questions to evoke further response.

At its present stage of development, the instrument appears to provide a reliable and functional index of occupational attitudes. Further work essential for validation and standardization is in progress.

REFERENCES

1. Allport, G.W., "Attitudes," in C. Murchison (ed.), A Handbook of Social Psychology. Worcester: Clark University Press, 1935.
2. Allport, G.W., The Nature of Prejudice. Cambridge: Addison-Wesley Press, 1954.
3. Ammons, R.B., Butler, M.N., and Herzog, S.A., The Vocational Apperception Test, Louisville, Southern University Press, 1951.
4. Anderson, H.H. and Anderson, G.L., An Introduction to Projective Techniques, New York, Prentice-Hall, 1951.
5. Bloom, B.S., Davis, A., and Hess, R., Compensatory Education for Cultural Deprivation, New York, Hold, Rinehart and Winston, 1965.
6. Forer, B.R., A diagnostic interest blank, J. of Projective Technique, 12:2, 1948, 119-129.
7. _____. Framework for the use of clinical techniques in vocational counseling, Pers. and Guidance Journal., 43:9, May 1965, 868-872.
8. Frank, G.H., Biochemical implications, American Psychol., 19:1, January 1964, page 54.
9. Goodstein, L.D. Some comments on clinical appraisal in vocational counseling, Pers. and Guidance Journal, 43:9, May 1965, 882-883.
10. Lazarus, R.S., Personality and Adjustment, Englewood Cliffs, Prentice-Hall, 1963, 60-63.
11. McCabe, S.P., Hazards in the use of clinical techniques in vocational counseling, Pers. and Guidance Journal, 43:9, May 1965, 879-881.
12. Miller, S.M., and Riessman, F., Social class and projective tests, Journal of Projective Technique, 22, 1958, 443-439.
13. Mindess, H., Psychological indices in the selection of student nurses, Journal of Projective Technique, 21, 1957, 37-39.
14. Mouly, G.J., Psychology for Effective Teaching, New York, Holt, 1960.
15. Office of Strategic Services Assessment Staff, Assessment of Men, New York, Rinehart, 1948.
16. Phelan, J.G., Projective techniques in the selection of management personnel, Journal of Projective Technique, 26, 1962, 102-104.
17. Roe, A. and Mierzwa, J., The use of the Rorschach in the study of personality and occupations, Journal of Projective Technique, 24, 282-289.
18. Steiner, M.E., "The Search for Occupational Personalities: The Rorschach Test in Industry," Personnel, 1953, 29, 335-343.

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ERIC DOCUMENT RESUME

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The objective of this research was to develop and standardize a projective attitude test which would provide a method of assessing attitudes toward major dimensions of selected occupations.

A projective instrument consisting of ten drawings portraying five major dimensions of common occupational situations has been developed. The dimensions include (1) acts, (2) tools and/or equipment, (3) materials, (4) working environment, and (5) interpersonal relationships of workers.

Activities are underway to validate and standardize this instrument and procedure. If this test can adequately elicit and measure occupational attitudes and the ways in which the individual views himself in relation to occupations, a new perspective on the interaction between personality dynamics and occupational development will be available. Added insights and information that may be gained can aid counselors and educators in helping youth more nearly reach self-actualization in their chosen work.

16. RETRIEVAL TERMS (Continue on reverse)			
Attitudes, occupational Vocational self-actualization Counseling, vocational Guidance, vocational Projective tests Interest measurement, vocational		Measurement, vocational interest Self-actualization, vocational	
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12. RETRIEVAL TERMS (Continued)

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