THE EXPERIMENTAL STUDY OF CLINICAL GUESSING

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One of the chronic points of tension between experimental psychologists and clinical psychologists has been on the question of prediction. The experimentalist contends that genuine science leads to prediction, and doubts that the clinician can achieve it. Clinicians who assert that they can make valid forecasts of the behavior of their patients rarely publish materials which prove this can be done.

When Adler described his clinical approach, he implied that he modified his impression of the patient as he gained data which disproved his initial, or general, diagnosis (4, pp. 326-327). According to his description, he tested his initial hypothesis, as any scientist should, and discarded it for another as necessary. He left little doubt that the proper application of this method should lead to prediction, asserting as early as 1923 (4, p. 193) that prediction is "the sole criterion of understanding."

The bulk of published materials on clinical prediction suggests (13), that the process is either not very accurate or is not superior to much simpler methods (for example, mechanical predictions made on the basis of psychological tests). The purpose of this paper is to describe an experimental method for the study and improvement of clinical inference-making, termed "guessing" by Adler, "predicting" by some investigators, "judging" by others. Experimental work with this method over the past few years will be reported, with the warning that the findings are at best only preliminary.

Adler's Views on Clinical Guessing

Guessing in clinical appraisal. In order to understand the specific life style of a patient, Adler spoke (4, p. 326) of a two-step approach. First the clinician forms an impression of the life style through guessing (or empathy or intuition). Second, he verifies this general diagnosis through carefully interpreting the various expressions of the patient, from early life to the present, comparing them with the initial impression.

The checking of one indication against another assumes internal consistency, and indeed such consistency is one of the key assumptions of Adler's theory of the life style. In clinical study, he said:

We are provided with a vast store of material. Every word, thought, feeling, or gesture contributes to our understanding. Any mistake we might make in considering one expression too hastily can be checked and corrected by a thousand

other expressions . . . In a way we are like archeologists who find fragments . . . and from these fragments proceed to infer the life of a whole city which has perished. Only we are dealing not with something which has perished, but with the inter-organized aspects of a human being, a living personality which can continuously set before us new manifestations of its own meaning (4, p. 332).

As the life style of a person is to a large extent unique, even though the ultimate goal of superiority is shared with mankind, the initial guessing in Adlerian theory can only be rough. Indeed, the word "guess" suggests a lack of precision in understanding. This initial lack of precision need not imply that the flexible clinician remains on this level, and Adler implied that precision is eventually attainable.

Training in guessing. Adler considered it "a prime duty to train my students in the art of guessing" (2, p. 141). How should such training proceed? Adler gave a clue in some remarks on how one learns to understand human nature through the practice of psychotherapy.

Error is followed quickly by punishment, and the correct understanding of the ailment is crowned by success in the treatment. In other words, a very effective test of our knowledge of human nature occurs in psychiatric practice. In ordinary life, an error in the judgment of another human being need not be followed by dramatic consequences, for these may occur so long after the mistake has been made that the connection is not obvious (1, p. 16).

Adler implied here that the practitioner learns whether he has assessed the patient correctly by being able to observe the patient's immediate reaction. Thus the practitioner profits from receiving direct feedback. Training in clinical guessing would, ideally, simulate this process. The trainee would make a judgment, and then receive immediate information (feedback) about the correctness. Can such a training approach be devised?

Basic Assumptions for Clinical Guessing

To devise an experimental method, one must be clear as to what he is simulating. Just what does the clinician do when he makes a guess or a prediction? How is it possible to make a correct guess, as Adler said one must eventually learn to do?

Patient's concern with the future. First, consider why prediction is possible. Adler could not think of personality as a static whole. Instead, the person is better viewed as a forward-moving complex, the movement being a manifestation of the coping efforts of the organism, and the direction of the movement, toward the goal of superiority. The behavior of the patient in carrying out this psy-

chological movement is progressively ordered into a life style, the general outlines of which are visible, according to Adler, during the first decade of life.

It follows from this assumption of Adler's that all psychological phenomena "may be conceived as preparations for some future situation" (1, p. 29). Thus, the person is constantly trying to do something, something far more enduring and deeper-lying than to solve only an immediate problem or resolve a specific need tension. It should be possible that long-range predictions *can* be made by a clinician once he has correctly assessed the goal and the life style of the patient.

The clinician observes a person constantly preparing "for some future situation," and in empathy with him can anticipate the outcomes intended. The ability to anticipate can be compared to the spectator's ability to project the trajectory of the javelin heaved by the athlete. He not only empathizes with the athlete hurling the javelin, but because he also feels an adverse wind, can estimate where the javelin will strike (even if the overly optimistic athlete does not), with his Adlerian sensitivity to the pressures of the environment!

Patient's internal consistency. As stated already, Adler assumed internal consistency. Thus, in reconstructing the life history of the patient, he looked for relationships. In the case of a 30-year old man who mistrusted his fiancee, Adler linked this mistrust to a childhood recollection in which the patient's mother set him down and picked up his younger brother instead. In this connection Adler suggested: "Let us plot the graph of this man's style of life . . . taking out one event in his life and seeking to join it up with his present attitude" (1, pp. 30-31).

In an earlier paper, I have followed these instructions rather literally to see whether they make the process of clinical interpretation more tangible and subject to analysis (9). My conclusion was that the preparation of the graph of a life history has these values in clarifying to the clinician the maze of inter-secting themes and trends in a life history: (*a*) A graph showing the psychological interrelationships between each event of the life and each other event permits one to see at a glance the totality of relationships making up the life pattern. (*b*) Some themes become apparent when this "grand design" of a life is visually plotted, which are not so apparent when only the fragments are viewed. (*c*) Heightened visibility is given

to conflicts and discontinuities, which are harder to perceive when the clinician's field of vision is too contracted. It is for these kinds of reasons that historians make visual charts of chronologies and geneologies.

The essence of predicting event X from event Y is, of course, the recognition of a relationship between them. Whereas the reconstruction of the patients' past life history is not prediction, the recognition of relationships reaching into his future would be prediction.

Clinician's ability to empathize. How is it that one can make predictions at all? Aside from the understanding which becomes possible when we study people who have had the same emotional crises we have had, or who come from our own culture, what fundamental reason is there for being able to predict the behavior of others? Again we quote from Adler. He said that we have

the faculty not only of perceiving what actually exists in reality, but also of feeling, of guessing, what will occur in the future . . . We call this faculty identification or empathy. It is extraordinarily well developed in human beings . . . The necessity for prevision is the prime condition of its existence . . . Our entire life is very much dependent upon the faculty of identification (1, pp. 59-60).

Adler finds the origin of this ability to "act and feel as if we were someone else" in an inborn social feeling: it is a "reflection of the connectedness of the whole cosmos which lives in us" (1, p. 60).

THE METHOD OF THE PROGRAMED CASE LABORATORY

While the design of the following experimental method was heavily influenced by my clinical experiences, most of the work has been carried out with normal persons. We describe mostly how normal persons understand other normal persons.

Our problem is whether we can measure the phenomenon of empathy and prevision which Adler said is a prime characteristic in all social life, and whether we can learn how to influence it.

Can we teach, through a laboratory method of learning, a variety of students, including clinicians but not limited to them, the understanding of human behavior?

The Programed Case Material

Influenced by the concept that clinicians understand patients through progressive approximation, and by a conviction that prediction is possible if a clinician understands the patient, we devised a way of presenting case studies in increments. The case study would

require S (clinician, student, or whoever was studying the case) to make a guess about the unknown future behavior of a person, and then would provide immediate confirmation or disproof of the inference.

Assuming that the understanding of a case is a slow process of accumulation of data and interpretation, we usually divide the case history into 10 to 15 segments, with an inference or guess required of S after each segment as to what would happen in the next segment. The guess consists in choosing one of three alternatives which are presented.

We call a series of ten or more programed cases a "laboratory" because it requires a very active form of learning by S. The Programed Case Laboratory is the paradigm, the model, for our thinking about the possibilities of large-scale educational application of our method.

Sources. The cases used in the programing were drawn from two sources: (*a*) published biographies, transformed by us into the format used in the experiment; and (*b*) case histories which we ourselves collected. There were 22 biographies and 17 case histories.

Our published biographies were of normal and eminent persons, some of them having undertones of minor emotional difficulties, including bouts with alcoholism, compulsive cleanliness, and paranoid trends. They included a news commentator, an actor, government officials, a U. S. Senator, a prince, a composer, an historian, industrialists, a union official, and a scientist, all men.

The case histories were collected by my colleagues and myself, in the form of taped interviews which were generally very wide ranging and autobiographic in scope. The 17 cases included 3 Colombians whose lives were collected by me in connection with a study of the training of Peace Corpsmen; 10 sales managers who were part of an industrial study; 2 printers, a trucking supervisor, and a woman executive. This diversity was deliberately sought to prevent the biasses which normally infiltrate case collections.

Editing and programing. The case material was edited to retain only episodes which describe fairly objectively what the person did or said in a particular situation, time, and place, and thus seemed unlikely to have been invented. In previous surveys of published biographies, I found that usually less than 5% of the total biography met this criterion, even in well-written biographies (10).

A case thus edited was approximately 1500 words in length and contained 15 episodes or events spanning the life history, arranged in chronological sequence. Whenever we had more than 15 episodes to choose from, we sampled events that were equally distributed over the life span. We accepted any material at all, assuming quite literally the universal expressiveness of human behavior which causes that "every word, thought, feeling, or gesture contributes to our understanding."

For each episode, two alternative events were constructed to serve as "distractors." These were usually based on actual events from other biographies but modified to resemble the situation of the person in the biography under study. These multiple-choice guessing alternatives were constructed by nine psychologists to prevent bias.

Procedure

Initial instructions.[1] Before S approaches a series of 10 or more programed cases he is given four steps for learning to understand a person and thus to predict or guess his behavior with greater accuracy than could otherwise be expected. (*a*) From among the alternatives presented S must note those that are significant, that is, events most likely to influence the person, and those which show an action or attitude which may be characteristic of the person. (*b*) S is instructed to interpret the data, that is, he should ask himself: What is the person trying to do? What kind of approach does he take in trying to do it? (*c*) S is asked to work toward forming an image of the person so that S can tell why that person acts as he does. (*d*) In face of the various alternatives with which he is presented, S is to compare the episodes with the working image he has formed of the person in order to judge which alternative fits the person best.

Guessing and feedback. After these initial general instructions, no didactic information or guidance is provided, except confirmation or denial of the guess, which we call "feedback." This is always factual in that S is only required to guess *what will happen* in the case. S is not asked to make a diagnosis or categorization.

To begin a case, S is told the occupation of the person, but not his identity, which is withheld until the end. Then S is asked to

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[1]This is a condensation of instructions contained in a separate booklet edited by Robert G. Wright (16, pp. 1-14).

discriminate or guess at the correct event among the three presented to him—the one which appears to him to have been taken from the life under study.

After this first guess, S is given immediate feedback—he is told what the first event was. This is from the person's childhood, often an early recollection like that which Adler sought. Usually this first guess is correct slightly more often than chance would permit (slightly better than 33%), presumably because the valid early life event usually fits the given occupation better than the other two events do.

Now that S knows the ultimate adult occupation and something of the early childhood, he attempts his second guess (choice among three alternatives), and then receives his second feedback or item information. In this fashion he proceeds through the case.

Scoring and time. After S has learned whether his guess was right or wrong he records this immediately on a separate score sheet. On this sheet also provision is made for plotting a "learning curve." Degree of accuracy in guessing, or predicting, is expressed as a percentage— the number of correct guesses divided by the total number of guesses made. The time requirement is about one hour per programed case so that ten cases require about that many hours of individual study by each S.

Sample from a Programed Case[2]

This man is an industrialist. You will be reading a short account of his life. However, instead of reading an ordinary, straightforward life history, you will follow a special procedure designed to help you see how well you understand him as a human being.

On each page there are several incidents, lettered A, B and C. Any one of these incidents could plausibly have occurred in his life. Your job is to decide which incident *did* happen.

It is necessary that you not read ahead, and that you make a decision before you go on to each next page. Then at the top of each page, you will be told which of the incidents which you just reviewed on the preceding page was actually true of the person's life.

As a result of this procedure, you will experience a gradual improvement in understanding this man. However, do not be discouraged if your understanding is inaccurate during the first few pages.

If the procedure is clear to you, please turn the page and begin.

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[2]The case material is contained in a large loose-leaf binder (15). The sample is from the beginning of Case 1.

PLEASE TRY TO CHOOSE THE TRUE EPISODE

A₁ As a child, he never took well to studies. Fascinated by carnivals, he left school early in high school to join a carnival troupe. He traveled about the country with them for several years, doing every possible type of labor but developing no special talent.

B₁ His parents were poor and he left school at eleven to help support himself and them. He ran errands for the local photographer. By the end of his teens he had learned the trade and saved enough to buy out his employer. He spent winters in Florida and summers at Lake Placid, New York, photographing the tourist trade.

C₁ His academic interests showed early signs of scientific talent. He spent hours by himself, searching for species of butterflies, bugs and plants to add to his various collections.

MAKE YOUR CHOICE BEFORE YOU TURN THE PAGE.

IF YOU CHOSE B₁: You were correct. His parents were poor and he left school at eleven to help support himself and them. He ran errands for the local photographer. By the end of his teens he had learned the trade and saved enough to buy out his employer. He spent winters in Florida and summers at Lake Placid, New York, photographing the tourist trade.

NOW DECIDE WHICH EPISODE IS TRUE.

A₂ It was the lack of a doctor who might have saved his mother's life that killed her at the age of 49. This left a deep impression on him.

B₂ Gradually his interest turned to animal photography. He brought all the injured ones home to nurse back to health. His efforts were so successful that his parents felt medicine might be his calling.

C₂ It was necessary to remove his tonsils and adenoids when he was five. His preparation for the operation was poorly handled and he was very sick afterwards. He developed a violent fear of doctors from this experience.

MAKE YOUR CHOICE BEFORE YOU TURN THE PAGE.

IF YOU CHOSE A₂: You were correct. It was the lack of a doctor who might have saved his mother's life that killed her at the age of 49. This left a deep impression on him.

EXPERIMENTAL FINDINGS

Improvement within a Case

To test for learning to predict within individual cases the average guessing accuracy of all Ss on early items in the cases was compared with their accuracy on later items.

In one study, briefly reported earlier (11), 43 Ss (business admin-

istration students, middle managers, and YWCA female adminis-
trators) worked on 10 programed cases of 15 items each.   In this
study scores were summed separately for the first 5 items, the second
5, and the last 5. When these totals were compared, a Chi-square of
19.5 (4 degrees of freedom) was obtained between amount of case
known, and guessing accuracy.   This is significant at better than
the .01 level.

A second study with 100 undergraduate students working on
12 programed cases produced similar findings. Guessing accuracy
improved from 40% for the first third of each case, to 54% for the
middle third, to 61% for the last third. A Chi-square of 66 (2 degrees
of freedom) was obtained, which is significant at the .001 level

These findings, and also individual learning curves within par-
ticular cases, are consistent with the view that the individual life
history can be defined as a subject that can be learned so that events
can be predicted. That assumption, of course, lies behind all the
ensuing discussion. To what extent these findings possibly reflect
an unintentional editorial bias in these particular experiments has
yet to be investigated.

Improvement from Case to Case

To determine whether *S*s were learning to guess, rather than to
respond to possible biasses of editing, 128 *S*s (85 undergraduate
students in business administration and 43 industrial managers)
were given 12 programed cases in various orders.   Thus order of
presentation was controlled for the contingency that "easy" cases
would inadvertantly have been placed last in the series, in which
event apparent "improvement" in guessing would be obtained on
a spurious basis.

TABLE I. IMPROVEMENT IN GUESSING ACCURACY WITH INCREASING EXPERIENCE
(N = 128)

Guessing accuracy percentages	Ordinal positions of cases					
	1 & 2	3 & 4	5 & 6	7 & 8	9 & 10	11 & 12*
M	44	53	55	54	59	61
SD	11.4	15.6	15.5	19.3	15.0	16.3

*The difference in accuracy between the first two and the last two cases is
significant at the .001 level.

The results are presented in Table 1. It shows that whereas *S*s
attained an average accuracy in guessing of 44% for their first two

cases in a series of 12, their accuracy rose to 61% for the last two cases. This improvement of 17% is significant at .001 level.

This study is a repetition of one reported earlier (11) where a Chi-square of 14 (4 degrees of freedom), significant at the .01 level, was obtained between number of cases S had previously completed in a series of programed cases and guessing accuracy.

Generality of Empathy

The preceding results suggest that S actually learns a skill which can be generalized or transferred to new cases, which may be assumed to coincide with a generalized trait of empathy.

Further support for the hypothesis of a general trait of empathy is offered by the following. Forty-five industrial managers were given a series of eight programed cases, and the four odd-numbered and four even-numbered cases scored separately. The two sets of scores thus obtained were than correlated and a coefficient of .75 was obtained (ordinarily of course understood as a reliability coefficient).

In another study, 41 Ss (16 industrial managers and 25 personnel students) were required to make inferences from brief family descriptions in 10 programed cases of sales managers. Ss were asked to forecast how the sales manager would deal with people and cope with his job. The forecasts were scored against the known performance of the sales managers. Accuracy scores on these cases and on programed cases described earlier were correlated. A Chi-square of 19.4 was obtained, significant at the .001 level. The r was .55. This again suggests a general talent, one that is administratively relevant at that.

From the study of Peace Corpsmen, reported below, comes additional support for the generality hypothesis. When the accuracy scores achieved with three programed cases of Latin Americans were correlated with the accuracy scores for programed cases on Anglo-Americans, a Chi-square of 7.4 was obtained, with one degree of freedom, significant at the .01 level. Thus the generality extends to cases from another culture.

While these findings and a recent study by Fancher (12) support the hypothesis of a general talent, we favor the concept that this is a talent which can be educated rather than a skill which naturally exists. But it would, of course, take more of our laboratory time to develop this talent to its fullest than the 10-15 hours the present Ss devoted to it.

Correlation with Other Variables

Fifty Peace Corpsmen in training for service in South America were given a series of programed cases including three of Latin Americans mentioned above. These Corpsmen were rated by their instructors on a number of variables, including proficiency in language learning. They received an intelligence test and the MMPI which was given a blind interpretation by Philip Marks, a clinical psychologist. The MMPI interpretations were encoded by us on a 4-point scale of spontaneity-defensiveness.

The results were: (*a*) Guessing scores were not related to intelligence or to language learning proficiency. (*b*) "Spontaneous" Corpsmen probably made more accurate guesses than "compulsive" or "defensive" Corpsmen. The Chi-square was 7.4 (4 degrees of freedom), significant at less than the .10 level with a two-tailed test. Behavioral observations supplementing the MMPI seem to improve this relationship.

These findings are consistent with the hypothesis that interpersonal understanding or guessing skill is more related to personality variables than to intellectual variables.

Relation to Direct Empathy

Many investigators in the field of empathy and "person perception" concentrate upon the study of emotional responsiveness of one person to another. For example, the parent winces as he extracts a splinter from the child's hand. This feeling resembles "empathy" as classically conceived. Other investigators (5) concentrate upon the study of liking and acceptance between persons.

In our procedure, however, the *S* seeks to inter-relate the different parts of a life. He may relate a childhood event to an adult symptom, or early relationships to the mother to a later choice of marriage partner. We attempt to determine the sensitivity of *S* to the other person's whole style of life. The other approaches measure *S*'s responsiveness to the other person in the here and now, while our procedure measures *S*'s responsiveness to events from the entire span of life. Do the results from the two procedures agree?

Using six ten-minute films of interviews filmed with the hidden-camera technique by Cline (6), we obtained a small sample of measures of the empathetic talent in this momentary situation. In watching the film, *S* could see and hear an interviewer discuss a person's

present life circumstances with him (a normal volunteer of adult age).

Sixteen managers viewed the series of 10-minute films of interviews with six normal adults. After each film, the managers were asked to complete adjective checklists depicting the characteristic behavior and self-percept of the person in the film. These inferences were scored against the consensus-opinion of the person's friends and family.

We found no correlation between the empathetic responses to the film interviews and performance on the programed cases, although both Cline's measures and those of our case-guessing scores are reasonably reliable. It is quite possible that empathy shown in interviewing and the reconstruction of personality from the life history are two entirely different psychological processes. However, Cline (7) found, as we have, some generality in empathy.

From these results we consider it possible that other measures of empathy, such as attempting to imitate a person's responses to a personality inventory, will not agree with our results. We do not expect a close correspondence between our results and those from studies using trait ratings and test scores.

Q-Sort Guessing

It might also be asked whether the person merely learns to recognize "correct" answers, and does not cumulatively learn about the individual person. One way to answer this question is to determine whether the cases provide a clear focus on the person as an individual—is there something there to be learned?

Our measure of "clarity of focus" is based on a Q-sort checklist in which the judge describes the presence or absence of each of a series of personality traits, after completing the case. The traits embrace such dimensions as love-hate, dominance-submission, etc. In our study, two Ss independently read each case and "Q-sorted" their impression of that case on a series of 48 traits. The separate sortings of the two Ss were compared (correlated) on the same cases, and also for different cases. If the programed cases contain a clear focus on an individual, the Q-sortings by the two Ss on the same case should show a higher degree of agreement on the traits of that person, than when one S's Q-sort on one case is correlated with the other S's Q-sort on another case. We found inter-correlations on same-case Q-sorts ranging from $+.48$ to $+.81$. The cross-case correlations

varied from −.25 to +.43. Ten cases were used. We conclude: the individual is there to be learned, if S can succeed in doing so.

DISCUSSION

Suggestions for Further Research

One possibility for improving the speed and validity with which the clinician comes to appreciate the style of life of the particular patient may lie in experimentally substituting various types of data in alternate forms of the case history. Then one can measure the differential effects on the learning curve, if any. I contend, for example, that in a rapidly changing industrialized culture, the value of childhood events for later guessing is less than in a more primitive economy. The importance of more data on adolescence, for example, might be documented experimentally with the programed case laboratory.

Another research problem would be to investigate whether predictions of the future do not reveal the increasing order of the style of life better than does reconstruction of the past? May we not answer this question by reversing the direction of the programed case (now presented in chronological order): what learning curve is obtained when S attempts to reconstruct rather than predict?

Altogether, the results presented here must be considered as essentially preliminary, and studies with further controls need to be carried out. Thus the chief function of this paper has been to make the reader acquainted with the method as such and its underlying theory, and to present some tentative results.

Advantages of the Programed Case Laboratory

Advancing concrete, idiographic psychology. In many clinical centers, one begins his studies with theoretical inquiries ranging from personality theory to experimental psychology. In the United States, this conception of clinical education appears to have resulted in a preoccupation with Freud and other articulate theorizers about behavior. Many a young clinician spouts Fenichel almost before he sees a patient, and there is at times doubt as to whether he actually "sees" a patient or only a combination of signs. Gordon Allport once called for an orientation to "concrete psychology" before the student undertakes the study of "theoretical psychology," and his proposal is the reverse of the conception of clinical study conventionally pursued (3, p. 56). Our proposal is like his.

When Adler said, "I consider it a prime duty to train my students in the art of guessing," we may take his statement literally. It is the prime duty in the sense of something that should be done *first.*

Thus, there is an important place for the programed laboratory in clinical training. May we not hope that the appreciation of human behavior in its natural concreteness, and the measurement of understanding of that appreciation by the young clinician, will of necessity put the study of individuals in its rightful place in the professional curriculum? By the same token the method also advances the idiographic versus the nomothetic approach to case material.

Validation of inferences. The example of surgery might be cited. It is well-known that in many medical schools, surgery is the "glamour" subject. Might this not be because many medical students—perhaps people in general feel this way—prefer to learn techniques which provide immediate and tangible feedback?

In the programed case laboratory, the student is always given a validating fact after his forecast. This fact is from the person's life. It is not a theoretical statement or an opinion of the instructor; we avoid this in order to simulate the conditions under which clinicians do function. The practicing clinician, it seems to me, may not ask a superior authority the correct interpretation of something that is happening in a case. The clinician is an autonomous professional. The only authority he should acknowledge is the facts of the patient's own life, and that is where he must learn to test his hypotheses. We are hopeful that the programed case laboratory does teach clinicians to validate their inferences.

Generating ideas. Linus Pauling emphasizes the conjectural and "guess work" characteristics of stochastic hypotheses, in an interesting paper on the "Genesis of Ideas" (14). The unconscious origin of ideas is implied by the term "guessing," and Pauling calls for more vigorous study of the genesis of scientific ideas. Especially does he call for "a penetrating study of the principles of the stochastic method."

Our version of the stochastic method may help understanding of the "genesis of ideas." Though our laboratory does not deal with scientific ideas, in a broader sense, I believe we are examining a process which will lead us where Linus Pauling wants to go. For the clinician who guesses and checks against fact immediately is following the stochastic method, doing with human behavior what Pauling does with crystals.

SUMMARY

Adler suggested that the clinician, by sharpening his observations, by guessing, and by constantly checking his guesses, arrives at his understanding of an individual. Using this as a starting point, we devised the Programed Case Laboratory as a method of improving this process. The rationale of this method is discussed. The programed cases are life stories arranged chronologically in episodes such that S guesses at each step what the next will be (choosing from among three alternatives), and his prediction is checked directly. The results of several groups of Ss taking this training are reported, with all the results confirming the hypothesis that the skill of guessing can be learned in this way, and that a generalized trait of empathy is indicated. Some advantages of the Programed Case Laboratory are presented.

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