

PERSONALITY PROJECTION IN THE WORLD TEST

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THE method presented in this paper is a new non-verbal projective technique for use with adults. It attempts to furnish findings which, when properly correlated and interpreted, serve to describe an individual's behavior pattern and the degree and manner in which he adapts to essential areas of life. It attempts to describe rather than to provide a clinical label, yet, anyone familiar with behavior patterns in the well-defined clinical groups can, without too much difficulty, reduce a personality description to a clinical classification. This differentiation between the description of an individual, normal or abnormal, and the mere labelling with a psychiatric tag seems necessary in view of the existing trend toward such labelling in many techniques of personality study.

The authors are well aware of inherent limitations of such an attempt. Personality is a gestalt and therefore essentially oversummative; completely adequate description of it in verbal terms is not possible. Within this theoretical limitation, however, are degrees of adequacy depending largely upon the medium used as a stimulus for projection.

If the definition is acceptable that personality is the pattern of an individual's reaction to his environment, then it seems that the most effective short-cut to his personality (and all projective techniques are but short-cuts) would be one which elicits the most significant sample reactions to as accurate a sample environment as can be produced in an experimental situation. The freer the experimental situation, the more spontaneous and therefore more significant the reactions; the more varied the medium, the more complete the personality picture which emerges in the projection.

The Material

The "Little World" material, which seemed best to fulfill these requirements, is by no means new as a psychological tool. Introduced into the literature by a writer (H. G. Wells, *Floor Games*, 1911) and not by a psychologist, child psychology and especially child psychoanalysis have made ample use of it. The English analysts Klein (4) and Loewenfeld (5) used it as early as 1932, and by 1938 it had found its way into many European laboratories of educational and experimental child psychology. Buehler (1) incorporated it into her psychometric and therapeutic work and in her recent publication

deals with it as a "measure of emotional disturbance in children."¹ Buehler's student, Margaret Van Wylick (8) was the first to attempt a standardization of the material for various age groups. The psychoanalytic approach has led to the extensive use of "world" material in therapeutic situations, and the study of the literature on play therapy yields many samples of a free or experimental use of similar material, including two studies on adult subjects (3) (7) which were carried out in this country. The main difference between them and the present study lies in the presentation of the material. While in all previous instances the adult subjects were instructed to create a dramatic situation, we believe that such an instruction unnecessarily narrows the scope of the subject's self-expression. Such procedure is justifiable when it is adopted in order to elicit specific content related to a known emotional problem; it is also justifiable in a therapeutic situation. But if the material is used as a medium of studying the personality as a whole, any restrictive or suggestive instruction reduces the spontaneity of the reactions and, in proportion, invalidates the results. Moreover, Van Wylick's results have already shown that spontaneous dramatic use of the material decreases after the sixth year of life. The results in our experiments clearly indicate that the dramatic form of use is hardly ever spontaneously chosen by adults. Dramatizations are apparently not in keeping with the essentially static character of the material.

The "Little World" set adapted for and used in this study consisted of 232 pieces which were distributed in varying proportions over the following fifteen categories: houses, trees, fences, common people, uniformed people, dogs, farm animals, wild animals, bridges, automobiles, trains, boats, planes, soldiers, and details such as lamp posts, soft drink stands, and so forth. The pieces were made either of wood or of metal; they were very simple, almost schematic, but colorful and attractive.

The subjects consisted of fifty men and fifty women who volunteered to take part in the experiment. They were of varied socioeconomic background; about 30 per cent had a college education and were members of professions. The others represented a cross section of urban occupations. Ages ranged from 18 to 70. They were normal individuals in the sense that at the time of the experiment none was under the care of a psychiatrist or neurologist nor an inmate of an institution. To our knowledge none had a criminal record.

Following a series of preliminary experiments in which optimal conditions had been established, the experiment proper was carried out with the help of the subjects. The material was offered in open boxes and placed on a large table in front of the subject. In order to keep the experiment as free as pos-

¹ See also J. C. Michael and C. Buehler, *Experiences With Personality Testing in the Neuropsychiatric Department of a General Hospital*. Dis. Nerv. System 6, 205-211, 1945. We regret that this article had not come to our attention before the present paper was accepted for publication, and could therefore not be discussed in the text.

sible and to obtain a maximum of spontaneous reactions, the subject was given only a single instruction which was repeated in various forms and elaborated if necessary. He was asked to do with the material whatever he liked, to use as much or as little as he wanted, and to feel entirely free to act as he pleased. Time on the experiment was unlimited.

A complete record of behavior and verbalizations was kept. All questions were answered by the examiner but conversation was not encouraged. The construction period was followed by a brief question period designated to supplement the subject's spontaneous explanations, observations and criticisms. At the conclusion of the experiment a schematic drawing of the construction was made.

Out of the wealth of data contained in the one hundred records, six distinct areas of reactions emerged: Choice, Quantity, Form, Contents, Behavior, and Verbalizations.

Choice: At the very beginning of the experiment the subject must make some fundamental choices. The first object he uses often determines the character of the entire construction. This first choice may be influenced by various factors such as esthetic considerations, the size of the object, some predilection stemming from the subject's life interests, and so forth. On the other hand, some objects, such as the houses or the bridge, tend to take the place of a plot or outline which organizes the available space in a clear and planned manner. This latter choice predominated with the subjects; a house or bridge were most frequently used as first objects.

The subsequent choice of objects may be primarily motivated either by the material itself, in which case the choice is flexible and unselective, or by factors within the individual, such as wish fantasies, or a desire to recreate a definite existing reality. This attitude leads to greater selectivity and rigidity, and occurs far less frequently than either the motivation by the material or a combination of the two motivations.

A direct result of the source of motivation is the type of construction which the individual produces. The majority of subjects build free fantasy creations. A small number of them, however, copy a remembered reality or create an overt wish fantasy, such as "my house," "my home," "my town," and the like. Here the subject considers the material almost exclusively in the light of his own personal needs and wishes.

As for the theme of most constructions, it seems that the material calls for the building of more or less elaborate human settlements, such as farms, villages, towns, and cities. Most other themes require the exclusion of a great number of categories which the average subject apparently likes to use.

Quantity: Each construction contained three distinct quantitative or measurable items—amount, variety, and space. Amount refers to the absolute number of all pieces used in the construction, irrespective of the number of categories or of the manner in which they are arranged in a given

space. The average amount was thirty-five to one hundred-twenty pieces, that is roughly 15 to 50 per cent of the entire set. The variety of a construction is determined by the number of categories rather than by the mere amount. A construction which consists of all available pieces of one or two categories might exceed the average amount and yet strikes the observer as much more monotonous than a construction built with fewer pieces which may represent many categories. The following ten categories were used in the majority of constructions: houses, trees, fences, common people, uniformed people, dogs, farm animals, automobiles, bridge, and details. Occasionally, one or the other was exchanged against one of the remaining five categories. Some subjects used more than ten categories, while others used fewer than ten. The ratio between the number of pieces and the number of categories determined the richness or poverty of the construction. Ratios most frequently found are:

Number of Objects	Number of Categories
35	6— 8
36— 70	8—10
71—120	10—12
120	12—15

Space is measured in terms of the portion of the available area which the construction actually occupies. It does not include any area which, in the subject's fantasy, might be part of his construction. On the average, half of the surface of the table is used. Smaller than average constructions were seen more frequently than larger ones.

Form: In any experiment which offers concrete material and requires creative activity, formal elements are mixed with contentual ones. Form, of course, can be evaluated in qualitative terms only; it cannot be measured or counted. Five types of formal elements were discerned in each construction:

1. *The geometric shape.* Here the principal choice lies between a quasi one-dimensional and a two-dimensional construction. One-dimensional arrangements, such as rows or other linear forms, are rarely found all by themselves. The frequency of two-dimensional constructions confirms the authors' preconceived idea that in our civilization spatial planning and distribution is based mainly on the rectangle. Square or rectangular forms either by themselves or in combination with other shapes are most frequent, whereas round forms and combinations of round and linear forms appear only occasionally. Some angular and amorphous arrangements were also observed.

2. *View.* This indicates the perspective from which the subject has built his construction and shows the relationship between the inside and outside of a construction. Most constructions are open on all sides and can be viewed from all angles. Constructions which have a definite inside and outside,

divided by barriers of one kind or another, and those which have a definite front and rear present unusual views and are rarely seen. The latter type which is built somewhat like a stage and seems to be concerned only with the front view was called a *façade construction*. It may be curved or straight, but always lacks depth. A city or village built in this manner strikes the observer as extremely unrealistic.

3. *Use of the foundation*. Most subjects considered the surface of the table on which they built merely as a foundation and were not interested in its shape or in the details of design in the wood, and did not include the table or any detail of it into their construction. In a few instances, however, the table was considered as part of the material.

4. *Direction*. All objects within each construction which are imagined to be moving or at least capable of movement, such as people, animals, vehicles, and so forth, necessarily have to move into a direction. In most records these objects are found to move freely into various directions and no preference was apparent at the time of the recording. A few, however, do seem to prefer or even to use exclusively one direction—all objects pointing either toward the subject or away from it.

5. *Symmetry*. Symmetrical or pseudo-symmetrical constructions were observed very infrequently. The great majority of all constructions were asymmetrical.

Obviously, one of the most essential aspects of this study is the analysis of the actual contents of each individual construction, that is, the organization of the chosen material, its quantity, and the preferred shape, into a meaningful gestalt. The analysis was based on the assumption that each item may be used realistically as a miniature model which in the construction functions and behaves as would in real life the object, animal, or person that it represents. It was also assumed that the usual functions of all objects represented in the "little world" are well-known to any normal adult or any child above age 12.

The towns and villages built by the subjects were real towns and real villages. They had streets and squares, parks, bridges, public buildings such as churches, schools, town halls, hospitals, general stores, taverns, and fire houses; there were roads and transportation, and recreational facilities. The rural settlements had barns and animals and fields and water. In almost all constructions the people acted as they do in real life; men and women and children, single and in groups, working and playing. There were ordinary people and those whose attire indicated a special function, such as doctor, policeman, minister, and so forth. All constructions had bushes and trees. Finally, in most of them was an element of beauty deliberately achieved by various techniques.

The relative emphasis on each of these elements varied in degree from con-

struction to construction. Some subjects concentrated on the concrete practical problems of arranging houses, providing supplies, and distributing labor. Others were more interested in abstract structural problems, such as the interrelationship of roads and traffic. Some others built the entire construction around the social organization of a community. In some, the greatest prominence was given to nature and the natural drives of humans and animals. A few subjects seemed to stress the esthetic aspects of the construction, subordinating all other considerations to problems of style, shape, and color. These areas will henceforth be referred to as practical (P), logical (L), social (S), vital (V), and esthetic (E).

As a rule, the subjects intended to use the material in a realistic way, and for the most part succeeded. Almost every construction, however, contained some unrealistic elements which had their origin either in the subject's inability to visualize abstract relations, or in an individual interpretation of the functions and purpose of the material which differed from the commonly accepted interpretation. Thus the presence or absence of certain objects, the degree of realism with which they are intended to be and are actually used, the areas selected for special attention, and the type of failure, are the significant elements in the construction.

No less important than the subject's creative activity is his behavior during the experiment. Four main items of behavior were selected for interpretation: willingness, work method, speed, and certainty.

By willingness is meant the subject's inclination to take part in the experiment after he has definitely committed himself to do so. Reactions to the experiment and the material ranged from rejection to obvious and verbalized enthusiasm. However, reluctance of any kind was rather unusual and enthusiasm and immediate absorption by the task was the most common response.

As for the work method applied by the subjects, two distinct approaches were observed. One was characterized by more or less careful planning of a whole into which, as the construction grew, details and small complete units were incorporated. The other consisted of the addition of more or less complete independent units without any previously organized plan. Borrowing the terms from child psychology, the first method was called analytic, the second, synthetic. The analytic approach was by far the most frequent.

Certainty in the sense of both mental and muscular coordination and speed in the sense of individual tempo are fundamental personality traits. In the experiments they were related to some extent and seemed to gain special importance when considered together. Medium speed and medium certainty with a slight tendency toward slow speed and good certainty characterized the average performance. The combination of extremes, on the other hand, either homogenous or heterogeneous was very rare and must be considered a significant approach.

Verbalizations in themselves are not essential for the experiment. Our records, however, show that some types of verbalizations are very common and that completely taciturn behavior throughout the experiment is quite unusual. At least one spontaneous comment is found in most records, concerning either the construction in general or one particular item. Most subjects ask at least one question, prompted by their need for some specific object or category. Verbalizations other than spontaneous explanations and requests for objects do occur, but are too varied and too unpredictable for any attempt at a quantitative evaluation. They may be used as additional information and can be grouped under the following headings: introductory phrases, recurring clichés, comments on the experimental situation, and concluding phrases. In addition to the construction and the subject's behavior, these verbalizations help to complete the personality picture and often reveal significant material.

Scoring

Before the method of scoring is discussed, it might be helpful to summarize the results of the experiment in the shape of a composite picture of a "normal" performance. By normal we mean a performance which was observed in not less than 50 per cent of all cases. Henceforth a normal performance will be referred to as N.

In an ideal N construction the subject's first choice would be a house or bridge. Subsequent choices would follow the lead of the material rather than being motivated from within. The subject would build a free creation which would be a town or a village. He would use houses, including a church, but not necessarily any other public building. His construction would contain trees, fences, common people, special people, dogs, farm animals, automobiles, the bridge, and at least one detail, such as a horse-and-buggy or a soft-drink stand. There would be a road somewhere in the construction. He would take thirty-five to one hundred and twenty pieces and distribute them over eight to ten of the categories just mentioned. The construction would be square or contain mainly square elements. It would be wide open on all sides; the table would be used as a foundation only; all figures would move freely into different directions; arrangement would be asymmetrical. This miniature town would be realistic; people, animals and objects would be represented as the subject sees them act in real life.

The subject's behavior would be characterized by enthusiasm, or at least good cooperation. He would approach his task analytically and work rather slowly but with considerable certainty. He would not talk much but would explain what he is doing and occasionally ask questions about the material and inquire for an object he would like to use but could not find.

Needless to say, all records contained deviations from this ideal N performance. Deviations were either quantitative; that is, the subject used

more or less than N of the measurable items, or they were qualitative; that is, choice, form, relative emphasis on and successful performance in various areas, behavior and verbalizations, were other than N. Most records contain both types of deviations.

A scoring sheet was used for the scoring of each performance. All N elements were scored N; all quantitative deviations were scored + for more, and - for fewer and less than N. All qualitative deviations were scored D and the type of D was stated. The scoring of the actual contents of a construction presented a somewhat difficult problem. Obviously, a plus-minus score was inappropriate. A simple classification based on N on the one hand, and D on the other, was also inadequate because of the great variety of solutions. If only a very broad distinction between "normal" and "abnormal" had been sought, it might have sufficed to score all realistic representations N and all others D, but for a more subtle analysis a different method seemed desirable. A system of classification was needed which indicated the area represented or signified by each piece of the material and, at the same time, indicated whether or not the piece had been used realistically within the area. The technical solution was to provide two columns on the scoring blank; one for realistic, the other for unrealistic representations and to sub-divide each column into five, one for each of the five areas. Thus each object could be checked in the appropriate place and the total of checks in each column would yield a profile indicating both the distribution of realistic and unrealistic (or very unusual) representations and the relative emphasis on each area. In addition to the realistic P, L, S, V, E, and the unrealistic p, l, s, v, e, profiles, a final profile P'L'S'V'E' was obtained by subtracting the number of unrealistic representations from the number of realistic ones. In order to make the scores and profiles directly comparable, the raw scores were weighted. Percentile ratings were determined for the P'L'S'V'E' scores.

Interpretation

In translating the results of each experiment into a personality picture, the principle was observed that no N as such requires special interpretation. In each case, the +, -, and D scores were assembled and weighted against the N within each group of reactions. The profiles were analyzed for number and type of realistic and unrealistic approaches within each area as well as in the whole construction for the degree of emphasis on each area and for the level of intensity measured by the total number of representations. The subject's verbalizations were analyzed qualitatively and integrated into the picture.

The deviations from N seemed to be related to certain layers of the individual's personality and differed considerably in significance. Choice, form, and behavior seemed to express the deepest layer, quantity and the profiles

TABLE 1. THE WORLD TEST FOR ADULTS
RECORD SHEET

Name: Mrs. V. H.
Occupation: None

Age: 58

Date: 1938

Examiner: LF

Choice	Theme Village \textcircled{N} D																	
	Type Free Invention \textcircled{N} D																	
Content	First Object House \textcircled{N} D																	
	Motivation N \longrightarrow D																	
D Elements:																		
No.	Category	Norm	+	-	P	L	S	V	E	p	l	s	v	e	Remarks			
25	Material														Selective			
33	House	x			x		x			x	x							
—	Tree	x						x	x									
—	Fence			x											Policemen rejected			
22	People	x					x	x										
4	Sp. people	x					x	x				x						
—	Dom. An.			x														
6	Dog	x					x	x										
—	Bridge			x			x	x										
—	Auto			x														
1	Detail	x			x		x											
—	Train																	
—	Wi. An.																	
—	Boat																	
—	Plane																	
—	Soldier																	
—	Functional			x														
x	Water																	
x	Road	x																
—	Square		x				x		x									
—	Invention																	
Total	91	6	7	1	5	2	0	7	6	2	1	1	1	0	0			
Quantity	Number of Objects		\textcircled{N}	+	-										Behavior	Willingness	\textcircled{N}	D
	Number of Categories		N	+	\textcircled{N}											Method	\textcircled{N}	D
	Size		N	+	\textcircled{N}											Certainty	\textcircled{N}	D
	Space		N	\oplus	-											Speed	\textcircled{N}	D
Form	Shape		N		\textcircled{N}										Verbalization	Quantity of Speech—Much		
	View		\textcircled{N}		\textcircled{N}											Type of Verbalization—Statement		
	Foundation		\textcircled{N}		D											Details Observed—No		
	Direction		\textcircled{N}	\longrightarrow	D Away											Proportions Noticed—No		
Total		Profile:		RS	WS	PR										Objects Missed—"Sun"		
N 17		P'	1	7	21													
+ 1		L'	-1	13	20													
D 2 (2 tend.)		S'	6	28	76													
— 7		V'	6	38	88													
		E'	2	16	55													

the next, while the verbalizations revealed half-conscious and manifest material.

The one hundred personality descriptions based on the experiments were checked against biographies of the subjects and in addition, wherever possible, against descriptions of the subject by intimate friends.

In order to evaluate cultural factors, at least to some degree, experiments were carried out with groups varying from twenty-five to seventy-five subjects in Central Europe, Scandinavia, Brazil, and the United States. The differences found were negligible and mostly related to minor details of content. Choice, behavior, and form were not touched at all.

Sample Protocol: Don't mind me, I am very happy. This is charming. I don't have to make it small, do I? (houses, church, trees, very great speed, very certain.) This is beautiful, beautiful. (Laughs all the time; pushes objects back because space not big enough.) I don't want any animals. They have no business in a city. Many, many people; they go in pairs because they love each other. These are nice people. This is heart-warming. Here is my avenue. It leads to the church. The people promenade here, but not alone. I don't like them single. I don't need the police. I don't give a damn for order. But more people . . . from all sides. They are glad to go to church. A few are already in front of the church. I need lots of people. I have to have a lot of life. They always walk together. There just can't be enough people, there . . . there is life. More trees . . . an avenue around the tower. People shall all have gardens. The trees are cut a little, that's good. (Takes man.) You are alone; you'll have a woman. Now I have all the people. (Takes dogs.) People must have dogs, nothing else. Cows and pigs are just food at best. Goats . . . who the hell needs goats. Oh, here is the stupid policeman. Out with him. Such a lovely free square. The sun can shine here. A few more trees . . . some more green trees. Now I have used up everything. I don't need anything technical. A soft-drink stand, all right, but a few people to go with it. A stand without people is no good. More dogs. They, too, must be in pairs. Another dog, next to a house where he does what every decent dog does. Then he'll join the others. Another one with him. This is a beautiful game.

Description: Mrs. H.'s construction is a "village on Sunday morning." It is a free creation, not a copy of reality and is not based on any overt wish fantasy. It contains six essential categories: houses, trees, common people, uniformed people, dogs, and one detail. Four important categories are missing: fences, domestic animals, automobiles, and the bridge. The construction is round, almost completely closed in and practically inaccessible from the outside world. It occupies a large portion of the table on which it is built. Viewed from Mrs. H.'s seat the figures seem to move in a direction away from her. The church represents the physical focus of the construction; the emotional emphasis, as verbalized by Mrs. H., is on the fact that the people and dogs all go in pairs and "have a good time." No details, such as identifying inscriptions on public buildings or significant attire of people, are observed. Both public buildings and uniformed people are used in incongruous functions, except for the policeman who is recognized and violently rejected. In her behavior Mrs. H. was enthusiastic and quite elated. She worked analytically, rapidly, and with great certainty.

Scores: While the theme and type of the construction are N, the scores show a slight deviation in choice indicating that Mrs. H. is more intensely motivated by her own desires than stimulated from the outside by the material. Her choice of objects is based entirely on the amount of pleasure she derives from the corresponding object(s) or person(s) in real life. This highly selective approach results in a deviation in quantity. The number of objects is

adequate; the number of categories, however, is too small. This discrepancy, especially in a construction which occupies larger than average space, suggests some inner emptiness covered up by pseudo-richness. There is considerable deviation in form. The construction is almost completely closed in and has a round shape—both unusual forms and often observed in subjects who have some neurotic conflicts in the sexual area. Except for the complete and unrealistic disregard for the function of public buildings which are used as though they had no special function, and the rejection of the policeman, there are no deviations in the actual content of the construction. However, the comparatively low practical and logical score and the disproportionately high vital score show the emphasis on biological functions. Characteristically, this is combined with a high social and a relatively high esthetic score. There are no deviations in behavior except for the generally elated mood, and no unusual verbalizations.

Conclusion: Mrs. H. appears to be motivated almost exclusively by the pleasure principle. Her considerable vitality and expansiveness find expression only in the biological sphere and the most superficial aspects of the social area. She rejects all restrictions or demands imposed by society and lives in an unrealistic, immature, and fundamentally unproductive world of her own. While she is probably unable to form any deep or permanent attachments or to develop any lasting loyalty to any cause, she is gay, generous, and a protagonist of the "live-and-let-live" ideology. She seems well adjusted on her own level and in her own social setting, and will probably continue in this pattern successfully unless outside forces make it physically impossible.

Biographical Data: Mrs. V. H. was born in 1880, the third of four children. The family was wealthy and had high cultural standards. In keeping with the traditions of the time and her social class, her education centered around languages, art, and music, and included no vocational training. She was exceedingly popular and showed unusual social talents very early in life. She was described as charming, fascinating, and sparkling. At 18 she fell in love with and married a cousin several years her senior. After a few years she discovered that her husband was sterile and that she could have no children with him. She became restless and began to travel. To her a child seemed to be the achievement of female sexuality and childbirth appeared as a superorgasm. She "did her best" to become pregnant and finally succeeded. She divorced her husband, who was very understanding, and married the father of her expected child. Soon after the birth of her daughter her second husband developed signs of very advanced syphilis and died a few years later. Following his death Mrs. H. led an extremely gay and active social life. Her home became a meeting ground for international celebrities. Her parties were famous for both the brilliant company and lavishness of entertaining. She traveled extensively, had many love affairs of varying duration, including one rather prolonged lesbian relationship. Her daughter was raised by an old French governess and private tutors because Mrs. H. insisted that the girl was subnormal because of "meningitis in her childhood." Actually, there was no evidence of the girl's alleged retardation, but gossip had it that Mrs. H. had used up most of her funds and was in a precarious financial situation. The obvious interpretation was that she wanted her daughter committed in order to be in control of her inheritance. However, shortly after her twenty-first birthday the daughter returned from a trip to Spain and announced that she wanted to marry a young man she had met there. Mrs. H. consented without any noticeable resistance. At this time she was fifty-three years old and still led an active sex life. Soon after her daughter's marriage she was forced to give up her house and went to live with her second husband's mother. There Mrs. H. was reduced to a somewhat secondary role, but soon found an outlet for her social needs by joining several women's clubs in which she was very active. In an interview taken at the time of the experiment, when Mrs. H. was 58 years old, she revealed that she looked

upon her life as a chain of love and sex relationships. All the high-lights were sexual episodes. She denied any deeper sense of life: "Other people are diligent little animals, I am a lazy one."

Summary

An adapted set of "Little World" material was presented to a group of one hundred adults, of varied socioeconomic backgrounds, ranging in age from eighteen to seventy. The subjects were instructed to do with the material as they pleased. The majority used the material to represent every-day life as they saw it. Norms were established for theme and type of construction, choice and motivation, form, quantity, realism of representation, and relative emphasis on five selected aspects of life in our culture. The evolving patterns were compared with the established norms and gathered into personality pictures which were checked against complete biographies. Validity was found to be high and not influenced by cultural differences. Experiments with clearly defined clinical and vocational groups are in progress.

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NOTE: A comprehensive presentation of the statistical material, a scoring manual, and scoring blanks are ready for publication.