Discussion of Symposium on
Newer Approaches to Personality Assessment

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Personality assessment is an ancient craft. It began in the dawn of man's history and as he rose from his preliterate culture the soothsayer, oracle and diviner provided assessments of both present and future behavior in friend and enemy. Soon this function was taken over by astrologers, palmists and subsequently phrenologists, physiognomists, crystal-ball gazers, fortune tellers, and tea-leaf readers.

More recently we have seen the entrance of somatotyping, interviewing, self-report inventories, graphology, inkblots and other projective techniques. Currently cognitive style, psychophysical and psychophysiological based measures are entering the assessment arena. Personality assessment has proven its mettle and its survival value by living with each of these invaders, civilizing them, and absorbing them even as ancient China absorbed all its invaders.

Some of the ancient techniques still have their adherents today and one wonders why despite the advent of more scientific methods, they still persist. Some of the practitioners of the ancient crafts seem to satisfy their customers so well in clinic, court, industry, banking and government that one must conclude that since we do not have basic criteria by which to judge the reliability and validity of personality assessment, gifted individuals who utilize subjective intuitive evaluations of personality succeed; that is, receive acceptance of their endeavor, regardless of the particular technique they blame their success on.

In preparing this discussion I began to have a déja vu feeling, and in leafing through my bibliography I discovered that in 1954, some 17 years ago I participated in a symposium of the New York State Psychological Association with Anne Anastasi and Donald Super on Current Theoretical and Practical Problems in Measurement in which Anne spoke on The Measurement of Abilities, Don on Interests, and I on Personality. The summary of my presentation indicates what was going on 17 years ago: (Zubin, 1954).

The conception of personality as representing the unique pattern of qualities of the individual is no more than a scientific model. If it has ceased being a useful model we ought to discard it. If it is still useful in the attempt at predicting behavior, it ought to be retained. Viewing the matter historically, personality is apparently another example of a shrinking universe which contracts as measurement expands. As we all know, in the beginning, personality as a field of study had everything; then it lost its intelligence, and before it could recover, it lost its interests and its attitudes. It still feels, aspires, and has sentiments as long as they remain unmeasurable. Once they too fall under the psychometrician's ax, personality will be extinct, or will it?

The one thing that keeps motivation, feeling, and sentiment out of the psychometrician's reach is the absence of an external criterion, independent of subjective, self-referred judgment. Had not Binet utilized the criterion of chronological age to develop the concept of mental age, we would still be classifying people as "intelligent" and "unintelligent." Such subjective, self-referred judgments characterize all primitive measures. Height, weight, time, and warmth were evaluated subjectively long before objective measuring devices became available. Invention of such impersonal external criteria as yardsticks, balances, clocks, and thermometers permitted science to transcend self-reference as a criterion. We have not yet found external criteria for measuring motivation, feeling, and sentiment, which is

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why they, as well as certain of their aspects which remain unanalyzed, are still unmeasurable. When external criteria are found by which to measure them, they can be set apart from the total impression of personality, to be studied as separate entities and (to be studied) in relation to other factors.

Even if we were to vote personality out of existence, it would return to haunt us in some other form, as Knight Dunlap once said would happen if we exercised the concept "emotion." Personality, it would seem, is here to stay. Let us look for a suitable model for it, from which testable hypotheses can be drawn. No matter what organizational principles may be postulated (needs, traits, etc.), personality is interpreted from behavior. It might be interesting to classify observable behavior into its parts to recognize that sector for which a concept of personality is useful. Behavior includes parts which are overdetermined culturally and hence highly predictable, e.g., reflex action, imprinting, and other natively endowed behaviors. It also is composed of parts that are underdetermined culturally, e.g., language, food habits, and dress. While these two types of overdetermined behavior are highly consistent and characteristic, they do not differentiate among individuals in the normal and pathological subgroup. There is a third class of behaviors, which may be regarded as accidental or erratic and unsystematic, which are not useful in prediction. The rest of behavior may be sampled for its usefulness as measures of personality. What are the conclusions of our survey regarding this question? Personality measurement has borrowed and is borrowing heavily from the field of personality psychology, psychopathology, personality, and psychophysiology. The first two fields have provided methods and concepts which have been helpful in screening and actuarial prediction. But they have not proved sufficient for comprehending the unique nature of personality. The new field of psychophysiology or brain function and the older but dormant personality are now the most promising hope of personality measurement. With the objective indicators of brain function provided by simple psychophysical tests, and with the analysis of feeling and motivation provided by a scientific approach to the interview, personality is assured some exciting developments even if it never escapes from the very immediate threat of extinction by measurement. Whether measurement will ever render the concept of the uniqueness of personality superfluous is debatable. Recent development in psychophysiology and in personality indicate, however, that it is still capable of stimulating further efforts.

What more could one ask of any model [p.163]?

**Joseph Zubin**

**Symposium: Discussion**

What progress has been made in personality assessment since the 1954 Symposium in the four models?

As far as the differential model is concerned, it is still largely taken up with self-reporting inventories for its techniques and with factor analysis for its statistical tool. The trait theory which it is largely occupied with has not lived up to the expectations of its constructors. The weak validity correlations lead one to conclude that there is something there, but not enough to warrant the great hopes of the earlier decades. The attempt to deal with underlying structures or state variables instead of overt traits, as is done by the psychodynamists, has led to even poorer values.

One way out of the dilemma of the low correlations characterizing the validity of the distribution of traits, fortuitously the distribution of traits. Fortunately, considerably headway has been made in developing such measures as distance functions between points representing individuals in hyper-space and powerful tools for decomposing mixtures of populations into their subpopulations have recently been provided. These are techniques for the indirect, but more useful in psychopathology, but their application to personality measurement seems quite apt (Fleiss & Zubin, 1969).

The impact of psychopathology on personality assessment has always been productive since most personality concepts have emerged originally from attempts at classifying abnormal behavior. However, personality must now pay back its debt to psychopathology by providing assessment of the personality as distinct from psychopathology of the mentally disordered as Sjöbring has attempted to do (Sjöbring, 1963). Psychopathologists in the past have behaved like bookkeepers who had only red ink available. It is high time the assets of patients were counted as well as their liabilities! In this connection, I would like to remind you of the recent study by Dohrenwend (Dohrenwend, 1966) and some other of the systematic structured interviews for psychopathology developed by our biometricians. The community leaders whom he studied showed a high degree of psychopathology, and had their records been read blind, the usual verdict would have been that they were suffering from mental disorder, had a measure of their assets been available, there would have been no doubt about their correct classification.

The hope that the clinically based projective techniques would produce better ways of assessing personality has had a curious denouement. Despite the continued barrage of negative findings, projectively the Rorschach, are still prospering and the latter has even given birth to an objective format — the Holtzman Blots — (Holtzman, Thorpe, Swartz, & Herron, 1961) which yields high reliabilities and, if it is claimed, also high validities. However, an examination of the bases for these claims indicate that it is largely based on a content analysis of the protocol rather than on the formal scores of the properties of the inkblot or, as Rorschachers call them, determinants (Zubin, Eron, & Schum, 1965). Dr. Noble Endicott has demonstrated the usefulness of such content scoring for depression, in this symposium.

The fact that Drs. Robert Spitzer and Jean Endicott of the Evaluation Section of our Biometrics Research Unit and Drs. Eugene Burdock and Anne Hardesty, former members of our Unit have succeeded in developing systematic structured interviews which yield scores on dimensions of psychopathology having high reliability and validity should encourage the personality researchers to develop similar approaches for personality. We are now attempting, with the help of Dr. O'Connell, Dr. Jenness and Dr. Barrett, to accomplish for the Sjöbring method what has already been done for psychopathology, that is, develop systematic structured interviewing.

It is interesting to speculate on the relationship between personality and psychopathology. Elsewhere (Zubin, 1965) I have pointed out that there are at least three interrelated aspects: (a) identity, (b) interference, and (c) independence. Thus, personality and psychopathology may be regarded as one and the same, the personality of the schizophrenic being his psychopathology and vice versa. Or, the two may be independent i.e., anyone, regardless of his premorbid personality, could become psychopathological, and psychopathology may represent an interference with a developing personality. Until Sjöbring's method came along, it was difficult to decide among these three possibilities. The survey by Essen-Möller (1956) in 1947 and subsequently by Hagnell (1966) in 1957, of the population nearby Lund, Sweden, by means of the Sjöbring interview threw the weight of the evidence in the direction of independence between personality and psychopathology. Those who were free of mental disorder in the first survey by Essen-Möller in 1947, and who developed a mental disorder in the succeeding 10 years, had a distribution of scores in 1947, before becoming mentally ill, which was quite similar to the general population that remained free of mental disorder.

The personological model, too, has not lived up to its promise and though Existentialism has developed in the meantime, as well as Sensitivity-Training and Encounter Groups, the contribution of these movements to scientific assessment of personality is still in the future. Drs. Flanagan and Schoenfeld's contribution belongs here and their intraself-dialogue for analyzing the internal conflicts promises well for the future. Unfortunately we
have no evidence yet for its reliability nor for its validity. It may still belong as do most personological attempts to the pre-scientific area of hunch gathering or hypothesis seeking. Once the concept emerges, however, perhaps objective methods for dealing with it will become available (Flapan, 1969).

The neurophysiological and psycho-physical approach seems to have developed most prominently during the last 17 years. Here we can place the work in cognitive style which is reflected in perceptual tasks which identify sharpeners and levelers, augmentors and reducers, field dependent vs. field independent, etc. This school has provided us with many new techniques which apparently differentiate people but the significance of such differentiation for personality remains in the future.

Meanwhile, developments in the area of more direct brain functioning as revealed by evoked potentials, pupillogrammetry, reaction times, brain wave dynamics, auditory masking and localization techniques have begun to reveal concomitants of arousal, attention, anxiety, depression, uncertainty, thought disorder and other characteristic behaviors which may play an important role in the classification of personality.

All in all, the verdict regarding overall progress in the field of personality assessment is rather guarded at best or negative at worst. We should perhaps be brave enough to give up the concept of personality as obsolete and relegate it to the museum of discarded concepts like soul and will. However, the fault may not be with personality but with our criteria for evaluating it. Whenever we established limited specific criteria we usually succeeded. Thus, screening devices for personality adjustment in the war situation worked quite well. The same tests applied to life situations outside of military camps failed. Apparently life adjustment is too vague a criterion and has too many situational unknowns to permit good prediction. When we treat personality variables like we do ability variables we tend to succeed. Why do we fail when we try to measure personality in general terms? Is it that personality is specific to situational variables or is there something else that we are overlooking? Walter Mischel (1968) in his recent book on personality assessment has made a strong case for concluding that even stimulus conditions and treatment manipulations are either weak or ambiguous, then individual differences arising from past history in similar situations (i.e., personality) are most predictive of behavior. Thus in a study by Mischel and Staub (1965) when expectancy of success was manipulated through simulation techniques we found that you were the individual failed to be effective in prediction and instead was swamped by the effects of the manipulation. They conclude that when stimulus conditions are potent, predictions based on them alone are often better than those based on the knowledge of the individual's past behavior.

This is reminiscent of the model which Zubin and Katz (1964) provided for the drug dosage curve affecting a given behavioral measure. Assuming that the drug tends to depress behavior, the performance before drug administration will reflect the normal personality of the subject. As the drug dosage increases, the universal depressive effect of the drug will begin to make itself felt until the flex point in the dosage curve is reached. At that point, personality and drug effects are in balance. After that, the drug takes over until the behavior is completely extinguished when the dosage overpowers the subject. There is one caveat I would like to enter here, however. Even when a group of individuals is felt until the flex point in the dosage curve is reached. At that point, personality and drug effects are in balance. After that, the drug takes over until the behavior is completely extinguished when the dosage overpowers the subject. There is one caveat I would like to enter here, however. Even when a group of individuals is exposed to the same stimulus condition, will not their response be at least partly determined by their personality characteristics? For example, will not those who have higher resistance to the depressive drug postpone the flexion point longer and will not those who are accustomed to success in Mischel's experiment still tend to be differentiated by the experimental person? Is it possible that all patients get well, and the reason why we do not recognize this fact is that after the illness departs the patient returns to his premorbid personality. If that was poor he will still look sick despite the disappearance of the illness. Whether the end result of such behavioral analyses would wind up with the kind of traits that we have inherited from the past of personality research is at least debatable, but it certainly offers a new challenge and a clean slate. Perhaps a taxonomy of environmental contingencies will be needed before progress can be made.

This leads me to an alternative model of etiology for personality -- the ecological model. Just as the learning theory model assumes that because all infants are reinforced and that reinforcement holds the key to personality, the ecological model states that the environment is all -- you are merely a node in the web of ecological forces that impinge on you. If you are to understand the origin of your personality you must investigate the ecological niche which you occupy in the world. Your personality will be moulded by the parameters of your ecological niche.

Thus, some niches will produce delinquents, some schizophrenics, others produce scholars and still others produce executives, and the development of such individuals is to be sought in the characteristics of the niche, all other things being equal.

The third model is the developmental model which stipulates that personality is moulded at the interfaces between the various stages of development from the moment of fertilization of the ovum through the intrauterine stage, neonatal, childhood, adolescence, adulthood and senium. In passing from stage to stage, the presence of crucial events or supplies determines the course personality takes. Thus, the presence or absence of suitable peers in passing from childhood to adolescence will determine the type of emancipation from family dominance that will occur and the dependency attitudes that develop. Isolation experience in passing from adulthood to the senium will determine the type of adjustment to old age.

The next model is the genetic model, which stipulates that the genes determine the fate of the personality, so that if you
do not have the predisposition for being an introvert, don't try to be one, you'll never make it!

The next model is the internal environment model which stipulates that your internal metabolism and body fluids determine personality. Excess hippocric acid is essential for executives and other biochemical components such as noradrenaline will determine one's mood swings. Perhaps the most avid proponent of the role of the internal environment in personality is Roger Williams, erstwhile president of the American Chemical Society, who has described his point of view in his book, Biochemical Individuality (Williams, 1956).

The final scientific model, is the neurophysiological or brain function model which stipulates that the way one processes information is the key to his personality. Here, most of our information comes from psychopathology, but the cognitive style approach we discussed earlier falls into this category.

It can be seen that the kind of assessment of personality that one undertakes will depend upon the etiological model he adopts. But in addition to providing models for personality itself, we must also provide a model or models for the development of assessment techniques, i.e., the criteria for evaluation.

Unfortunately, little progress has been made in the provision of such criteria, and except for the general route of follow-up studies, little discussion exists in the literature. Why should this be so? Perhaps the answer lies in the fact that each scientific model must provide its own criteria.

Thus, for the ecological model, certain expectancies may be postulated for the variety of niches that men occupy ecologically. An evaluation of personality will then consist of determining how well a given subject lives up to these normative expectancies. Unfortunately, a taxonomy of ecological factors describing the niche is not yet available and therefore such criteria are still in the future.

The developmental model's criteria will be determined by how well the individual has progressed through the various stages. Life history methods and other developmental techniques are most urgently needed to test the various hypotheses emanating from this model. Similarly, the learning theory models demand a better taxonomy of behavioral contingencies so as to be able to transcend the specific limits of any given situation.

The genetic model will have to be fitted with criteria that will measure the behavioral characteristics attributable to genotype as opposed to phenotype. The internal environment will develop criteria which will reflect the importance for behavior of the various substances now being considered biochemical influences on behavior. The neurophysiological model will similarly have to develop criteria for gauging the importance for behavior of the various indexes of brain function and processing of information.

Furthermore, the tools we use for testing hypotheses emanating from these models will be dictated by the models themselves. The criteria for these tools will have to be developed by the modelers themselves. This would require either a special workshop or a special conference.

**Summary**

Perhaps the day of the grand imperialistic global theories of personality is over. The tools which the great pioneers blazed through the forest were good enough for their day but are too primitive to carry today's scientific traffic. We need a more testable model than that which the pioneers provided.

Perhaps personality, like light, has more then one scientific model. Just as the particle theory of light and the complementary wave theory reflect the instruments used in the experiments which gave rise to them, so too, in personality research, the model is highly dependent on the instruments used in the experiments that give rise to it. Thus, as Fiske and Pearson (1970) put it:

> several personalities may be constructed: that conceived by the self, that observed by lay associates, that based on adequacy of performance, that inferred by experts from a psychodynamic viewpoint, that derived from psychophysiological indices, etc. We seem to be approaching the limits of what can be achieved by measuring operations derived from current assumptions and orientations. The time is ripe for giant steps, for bold reorganizations of our thinking for creative innovations in the constructing of personality and its measurement [p. 77].

I suspect that the etiological approach to personality development is a good candidate for the next step and I offer the ecological, developmental, learning theory, genetic, internal environment, and neurophysiological models as starting points for the new endeavor.

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