Identifying Jungial Personality Type by the Instrument of Self-Report

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IDENTIFYING JUNGIAL PERSONALITY TYPE
BY THE INSTRUMENT OF SELF-REPORT

by

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This paper examines the instrument of self-report and its use in identifying and measuring the elements of the personality as defined by C. G. Jung. Jung's theory of personality is briefly explained, and self-report as a general instrument of personality assessment is critically examined. Selected research on the construction and use of self-report tests is reviewed and critically evaluated. The author asserts that the bipolar assumption that is often implicit in the construction of test items is not representative of the personality as Jung portrayed it. The author suggests revisions in the construction of test items and a scoring gradient for test items in order to improve the accuracy and sensitivity of the instrument of self-report.
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Charles Clay Livingston
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CHAPTER I

INTRODUCTION

Since the publication of Jung's *Psychological Types* in 1921 (republished in 1971 as Volume 6 of Jung's *Collected Works*), various researchers have developed the instrument of self-report as a means of identifying and measuring the personality types defined by Jung. This paper examines the efforts of some of those researchers and suggests modifications in self-report testing that may provide grounds for further research. In Chapter II, the author explains the essential elements of Jung's theory of personality, namely, the attitudes of introversion and extraversion and the functions of thinking, feeling, sensation, and intuition. The second chapter also provides a profile of Jungian psychoanalysis, the process of individuation, and Jung's scientific methodology. In Chapter III, a critical evaluation of self-report as a general instrument of personality assessment is presented. Chapter IV reviews research on the use of self-report tests as a means of assessing the elements of the personality. Modifications in the construction and scoring of self-report test items are suggested in Chapter V. The suggested changes may improve the accuracy of the instrument in identifying and measuring Jungian personality type.
CHAPTER II
JUNG'S THEORY OF PERSONALITY

The Personality Attitudes—Introversion and Extraversion

At the Psychoanalytic Congress in Munich, September 1913, Jung delivered a lecture entitled "A Contribution to the Study of Psychological Types" (Jung, 1971). It was Jung's first public presentation of his concepts of introversion and extraversion. These concepts represented the tendency of libidinal energy to be directed toward one's inner or outer environment. At the close of the lecture, Jung stated, "the difficult task of creating a psychology which will be equally fair to both types must be reserved for the future" (Jung, 1971, par. 882). Jung was involved in developing a theory of personality that gave just consideration to the ideas of Freud and Adler. "What with the sexual interpretation on the one hand and the power drive of dogma on the other I was led, over the years, to a consideration of the problem of typology" (Jung, 1965, p. 155). Jung considered the possibility of combining the salient elements of the theories of Adler and Freud.

The idea dawned on me that Eros and the power drive might be dissident sons of a single father, or the products of a single motivating force which manifested itself empirically in opposing forms, like positive and negative electrical charges. (Jung, 1965, p. 153)

Jung's impetus for developing his theory of personality seemed to spring from a desire to resolve differences between Freud's, Adler's,
and his own developing point of view.

In 1913, Jung's 7-year relationship with Freud also ended. No further work on the psychological types was forthcoming in the following years. Jung was in a state of disorientation that he described in a chapter entitled "Confrontation With the Unconscious." "I felt totally suspended in mid-air, for I had not yet found my own footing" (Jung, 1965, p. 170). By 1917, Jung had regained his footing and again began working on his type theory and on resolving his point of view with Freud's and Adler's. This led to the book Psychological Types, first published in 1921. Psychological Types was published in 1971 as Volume 6 of Jung's Collected Works. It is from this volume that the following account of Jung's personality types is largely drawn.

Jung distinguished two basic attitudes, introversion and extraversion, as the first dimension of his system of personality classification. He considered an individual's attitude as the element of the personality involved in the ongoing process of selecting information, judging events, and then directing psychic energy accordingly. Jung wrote,

The state of readiness, which I conceive attitude to be, consists in the presence of a certain subjective constellation, a definite combination of psychic factors or contents, which will either determine action in this or that direction, or react to an external stimulus in a definite way. (Jung, 1971, par. 687)

He considered attitudes to be innate, but subject to environmental influences.

The habitual attitude is always a resultant of all the factors that exert a decisive influence on the psyche,
such as innate disposition, environmental influences, experience of life, insights and convictions gained through differentiation. (Jung, 1971, par. 690)

Extraversion is defined as an attitude characterized by "an outward turning of the libido" (Jung, 1971, par. 710), or psychic energy. Jung amends Freud's concept of the libido or sexual energy to mean psychic energy in a more generic sense. The extraverted attitude, then, is identified by the movement of the greatest intensity of psychic energy outwards, toward the object, and toward the world that lies outside and surrounds the person. When the extraverted attitude is habitual or generally predominant, Jung spoke of the extraverted type or the extravert. The extravert is typically characterized as preoccupied with interactions in the external world of people and things, custom and convention, and political, social, and economic institutions. The extravert appears active and outgoing, typically the life of the party or the stereotypical cheerleader, for example.

Introversion, on the other hand, is defined as an attitude characterized by "the inward-turning of the libido" (Jung, 1971, par. 769). Psychic energy does not move outward toward the object, but rather inward toward the subject. The greatest intensity of psychic energy is directed inward toward the internal, private world of the psyche. When this is habitually the case, the person is said to be of the introverted type or an introvert. The introvert appears preoccupied with internal affairs, introspective, and withdrawn, typified by the socially reclusive individual.
Just as Jung modified Freud’s concept of the libido, he also modified the concept of compensation introduced by Adler.

Whereas Adler restricts the concept of compensation to the balancing of inferiority feelings, I conceive it as a functional adjustment in general, an inherent self-regulation of the psychic apparatus. In this sense, I regard the activity of the unconscious as a balancing of the one-sidedness of the general attitude produced by the function of consciousness. (Jung, 1971, par. 694)

So Jung asserted that compensation occurs as one attitude is manifest in consciousness and the opposite attitude is delegated to unconsciousness. He considered the unconscious attitude to be indirectly revealed in the dreams and images of the unconscious. Jung maintained that if consciousness is extraverted and directed toward the external world, then the inner world is not ignored, but becomes the realm of an unconscious, introverted-attitude.

The activity of consciousness is selective. Selection demands direction. But direction requires the exclusion of everything irrelevant. This is bound to make the conscious orientation one-sided. The contents that are excluded and inhibited by the chosen direction sink into the unconscious, where they form a counterweight to the conscious orientation. (Jung, 1971, par. 694)

The conscious extravert is, therefore, an introvert in the unconscious and vice versa. Finally, Jung, like Freud, asserted that the interpretation and translation of dreams and spontaneous images is the only means of gathering clues as to the contents of unconsciousness. A typical example of the concept of compensation might be the extraverted socialite who is preoccupied by dreams of solitary, contemplative moments.
The second important dimension of Jung's personality typology is the concept of the four personality types, i.e., thinking, feeling, sensation, and intuition. These functions "correspond to the obvious means by which consciousness obtains its orientation to experience" (Jung, 1964, p. 61). The functions are the means by which either the attitude of extraversion or introversion is oriented to conscious experience. Attitude and function differ in that attitude determines the direction of one's reactions to stimuli, while function determines the means or manner in which one's reaction is carried out. For example, one may react in an extraverted or outward direction according to a manner identified as thinking, feeling, sensation, or intuition.

Jung maintained that an individual has a tendency to favor one function over the others and is, therefore, characterized as manifesting the favored function in concert with one of the two attitudes. Also, as one function predominates and takes the greater share of psychic energy, Jung termed it the superior function, while the remaining are inferior functions. As to the role of the functions in the unconscious, Jung wrote, "It is best, I think, to express oneself rather cautiously in this respect, and I would not go beyond the statement that the unconscious, as far as we can see at present, has a compensatory function to consciousness (Jung, 1971, par. 904). The unconscious, then, known indirectly through dreams and images, is believed by Jung to play a compensatory role. The
compensatory role is exemplified by Jung as "in dreams, for instance, the unconscious supplies all those contents that are constellated by the conscious situation but are inhibited by conscious selection" (Jung, 1971, par. 694). Finally, the two personality attitudes are combined with each of the four personality functions to produce eight possible personality types, e.g., extraverted-thinking, extraverted-feeling, extraverted-sensation, extraverted-intuition, introverted-thinking, introverted-feeling, introverted-sensation, and introverted-intuition. Each of the four functions will now be considered in greater detail.

"Thinking is the psychological function which, following its own laws, brings the contents of ideation into conceptual connection with one another" (Jung, 1971, par. 830). The thinking function is rooted in the principles of logic and rational judgment in arranging the contents of conscious ideation. Logical reasoning is used to connect new contents with similar or existing contents, as in the logical "if . . . then . . . " propositions. The thinking types are great planners and organizers. They plot and follow each logical step in the performance of a task. Their attachment to conscious contents is based not in momentary experience but in a judgment of an experience as it fits into a logical sequence. Thus, thinking types may be accused of being cold, detached, uncaring, and lacking in spontaneity. They typically make decisions based on logical conclusions before they act. The thinking type might excel in a job as a computer programmer, research scientist, or historian. The extraverted-thinking type may be exemplified by the research
scientist relying on external objective data, e.g., Charles Darwin. The introverted-thinking type may be exemplified by the philosopher, such as Emmanuel Kant and his well-known dictum, "I think, therefore, I am."

Like thinking, "feeling is a kind of judgement, differing from intellectual judgement in that its aim is not to establish conceptual relations but to set up a subjective criterion of acceptance or rejection" (Jung, 1971, par. 725). Feeling is "a process, moreover, that imparts to the content a definite value in the sense of acceptance or rejection ('like' or 'dislike')" (Jung, 1971, par. 724). Just as thinking organizes the contents of consciousness under concepts, feeling arranges contents according to their value. In the case of the extraverted-feeling type, the value judgment is characteristically based in external situations and general or prevailing standards. This may be typified by the woman who loves her mate, and no one else, because he meets her expectations in terms of age, position, income, respectability, and so forth. In the case of the introverted-feeling type, the value judgment is based on totally individual, subjective criteria that are likely to remain unchanged despite current, prevailing standards in the external world. The nun who forsakes marriage, motherhood, and worldly goods for the life of a monastery and her love of God typifies the introverted-feeling type. It is the nature of the feeling type, in general, to place a high value on emotions and to intensify emotions in spite of resulting deficits in other functions.
Regarding sensation, Jung stated, "primarily, therefore, sensation is sense perception—perception mediated by the sense organs and 'body senses' (kinaesthetic, vasomotor sensation, etc.)" (Jung, 1971, par. 793). "Since sensation is an elementary phenomenon, it is given a priori, and unlike thinking and feeling, is not subject to rational laws" (Jung, 1971, par. 796). The sensation type is centered completely in the here-and-now and arranges conscious content in terms of its existential reality. The sensation type simply acts, without value or rational judgments, because action is the only appropriate response to the perceived stimuli. This type seeks immediate gratification, is impatient, and acts spontaneously. The extraverted-sensation type has a keen sense for external events and objective facts and, therefore, could be exemplified by a good combat soldier or successful nightclub entertainer who responds quickly to the intensity of external influences. The introverted-sensation type, however, is guided by the intensity of the subjective sensation excited by the objective stimuli. This type could be exemplified by several creative artists producing different paintings of the same scene, each guided by his or her own subjective sensations of the objective stimuli.

Concerning the function of intuition, Jung stated, "I regard sensation as conscious, and intuition as unconscious, perceptions" (Jung, 1971, par. 795). "In intuition a content presents itself whole and complete, without our being able to explain or discover how this content came into existence. Intuition is a kind of instinctive apprehension, no matter of what contents" (Jung, 1971,
Like sensation, intuition is irrational, that is, beyond or ungrounded in reason. "Both intuition and sensation are functions that find fulfillment in the absolute perception of the flux of events" (Jung, 1971, par. 776). There is no rational judgment or logical "if . . . then . . ." sequence involved in sensation and intuition. These two functions are irrational and are not contrary to reason, but rather beyond reason. They are immediate experiences unencompassed by the laws of reason. "Elementary facts come into this category; the fact, for example, that the earth has a moon, that chlorine is an element, that water reaches its greatest density at four degrees centigrade, etc." (Jung, 1971, par. 774).

Because intuition is an irrational function and an unconscious process, its nature is very difficult to grasp. It may be consciously recognized by expectancy, by vision, by inspiration, or by apprehended possibilities. "The primary function of intuition, however, is to transmit images, or perceptions of relations between things, which could not be transmitted by the other functions" (Jung, 1971, par. 611). The extraverted-intuition type is characteristically very charismatic, tending to share his or her view of the future, thereby inspiring others. Joan of Arc and Martin Luther King are good examples. The introverted-intuition type, on the other hand, is the reticent dreamer who may have great difficulty in relating meaningfully and practically to objective reality. This type is guided by images of what will be, as in the reclusive Zen Buddhist or the Taoist master, who is guided by what is believed may come or may be possible in the future.
In the final analysis, Jung recognized that we are bound by our functions while in the very process of defining them. For example, in regard to the thinking and feeling functions, he stated, "the intellect proves incapable of formulating the real nature of feeling . . . , since thinking belongs to a category incommensurable with feeling; in fact, no psychological function can ever be completely expressed by another" (Jung, 1971, par. 728). The idea of classification, then, is a manifestation of the thinking function and therefore incompatible with feeling, sensation, and intuition. Jung, however, asserted that the validity of his formulations is maintained by his countless idiographic, clinical observations in psychoanalytic practice. In addition, regardless of how difficult it may be to scientifically define these psychological concepts, he maintained that "every language above the primitive level has absolutely unmistakable expressions for them. We can therefore be sure that these expressions coincide with quite definite psychic facts" (Jung, 1971, par. 949). If they were too abstract or nebulous, Jung claimed, they would not be so firmly rooted in language. All in all, Jung's typology offers an understanding of the ways in which people differ from one another. The types portray the manner in which individuals orient and adapt themselves, consciously and unconsciously, to the subjective and objective world.

Individuation and the Process of Psychoanalysis

Jung maintained that each individual is innately predisposed to a particular pattern of personality attitudes and functions. It is
"not a particularity that is sought out, but one that is already ingrained in the psychic constitution" (Jung, 1971, par. 761). He identified individuation as the process by which an individual's personality is distinctly formed in agreement with his innate predisposition. "Individuation, therefore, is a process of differentiation, having for its goal the development of the individual's personality (Jung, 1971, par. 757). An individuated person, then differentiates various functions and attitudes in various situations according to, in part, his or her innate predisposition.

An individual's innate pattern is, however, subject to modification by parental, marital, and other social and environmental influences. This modification may prevent individuation from occurring, and neurosis or psychosis may develop because the innate pattern of attitudes and functions remains undifferentiated. "Without differentiation, direction is impossible, since the direction of a function towards a goal depends on the elimination of anything irrelevant. Fusion with the irrelevant precludes direction; only a differentiated function is capable of being directed" (Jung, 1971, par. 705). For example,

Undifferentiated thinking is incapable of thinking apart from other functions; it is continually mixed up with sensations, feelings, intuitions, just as undifferentiated feeling is mixed up with sensations and fantasies, as for instance in the sexualization (Freud) of thinking and feeling in neurosis. (Jung, 1971, par. 705)

Social and environmental influences may impact on the individual by preventing differentiation from occurring. In a psychotic, for example, if rational thinking is undifferentiated from irrational
sensation and intuition due to social or environmental influences, then one might observe symptoms such as loose associations, incomprehensible speech, or flight of ideas. In this example, the psychotic's parents may have, for instance, continually berated or denied the rational thinking that was predominate in the psychotic's innate pattern of personality. This may have resulted in psychotic symptoms as the thinking function failed to differentiate from the irrational functions.

Jungian psychoanalysis is primarily a process of individuation for the analysand, facilitated by the guidance and interpretations of the analyst. There is no standard Jungian psychoanalytic method. "Psychiatry . . . is a dialogue between the sick psyche and the psyche of the doctor, which is presumed to be 'normal.' It is a coming to terms between the sick personality and that of the therapist, both in principle equally subjective" (Jung, 1965, p. 110). "Therapy is different in every case. Psychotherapy and analysis are as varied as human individuals" (Jung, 1965, p. 131). Psychoanalysis, then, is a totally individualized process whereby the analyst exerts his whole personality in interaction with the analysand to learn the language of the analysand, particularly the dream symbols representing the nature and strivings of the unconscious. Once the language of the analysand is understood, the analyst can pursue the therapeutic goal. "The aim of analytical therapy, therefore, is a realization of unconscious contents in order that compensation may be re-established" (Jung, 1971, par. 695). The appropriate compensation, or balance, between conscious and unconscious
contents is reestablished when the analysand becomes individuated according to his innate pattern of personality attitudes and functions. The Jungian psychoanalytic style is distinct from others in that it is considered necessary for the analyst to exercise an emotional identification and adaptation to the analysand's actions and words. This permits the honest and effective interpretation of the analysand's conscious and unconscious data that might otherwise be so unfamiliar as to be disquieting, bizarre, or incomprehensible from the analyst's point of view.

Jung's Scientific Methodology

Jung's personality theory was derived by the scientific methodology of his day—in particular, the science of psychiatry. Like Freud, Jung's studies were idiographic, i.e., based on intensive studies of individual subjects. His data were gathered at the Burgholzli Mental Hospital, in private practice, and in collaboration with colleagues. The relation of the data to any particular empirical variables was not specified. Jung's work with psychic material was, instead, based on psychoanalytic technique because that was considered the only operation through which the complicated, defensive personality could be reached. It was believed that the defense mechanisms of the personality, such as repression, projection, compensation, and sublimation, operated to protect the sensitive ego from anxiety, guilt, and shame. The psychoanalytic interview was conducted regularly over long periods of time. The cure and prevention of mental disorder was gained through an
understanding and interpretation of the dynamics of conscious and unconscious motivations and conflicts within the individual.

According to the scientific attitudes and psychoanalytic systems prevalent around the turn of the century, Jung's work was considered sound (Seifert, 1975). His personality theory was deduced from idiographic data that were gathered by naturalistic observations within a psychoanalytic setting. His formulations were not validated in the laboratory, but rather by the successive confirmations of his predictions and understanding of behavior in clinical practice. Jung observed psychological phenomena, such as conscious reports and behavior, as well as recorded dreams and symbols of the unconscious. He abstracted essential characteristics from his observations to define the personality attitudes and functions.

From the author's point of view, there are a number of difficulties with accepting Jung's theory as he developed it. First, Jung spoke of his countless impressions gathered from psychoanalytic practice, whereas we now speak of objective data and controls for experimental bias. The relation of his data to empirical variables was not specified. Jung's conclusions were not based on any formal experimentation whatsoever. Jung also claimed support for the personality attitudes and functions because they are amply portrayed in language, as well as in poetry, theology, and philosophy. This is unconvincing proof as there are certainly a number of myths similarly portrayed in language. Furthermore, his formulations regarding innate predispositions and the unconscious are defined in terms that are not amenable to objective, scientific proof by current
standards.

Jung's type theory can, however, make a useful contribution to the study of behavior. Mischel (1973), for instance, argued that "trait labels may serve as summaries (essentially arithmetic averages) for categories of observed behavior" (p. 262). He claimed that personality traits do not cause behavior, but they serve as summary terms of typical behavior in the presence of particular stimuli. Mischel asserted further that the behavioral impact of situations depends on how stimuli are processed by the person. He termed this processing the "person variable" (Mischel, 1973, p. 279). While trait labels may have little predictive value, Mischel claimed that they may have value in terms of increasing a person's self-awareness, studying average differences in the personality of individuals, and in screening individuals who may, for example, want counseling.

The author believes that Mischel's analysis can be usefully applied to a consideration of the value of Jung's type theory. Jung's personality theory offers summary terms for the ways that individuals may differ in their adaptations to complex social interactions with the external world. The author suggests that in the chain of stimulus-response-consequences that portrays our interactions, the human mind is distinct among the animal world. Mischel claimed that a unique process of decision-making occurs, guided by various past experiences, personal constructs, expectancies, subjective judgments, and cognitive competency. The author asserts that what Mischel called "person variables" and what Tolman (1936)
called "intervening variables" are defined by Jung in his type theory. The personality attitudes and functions define the various ways that the individual may differ and adapt in the process of responding to various stimuli in the environment. Little predictive value is inherent in Jung's typology, but there is a value in the descriptive ability of the typology. The author accepts the judicious usefulness of the typology in the study of behavior within the limitations described.

The task of researchers since the publication of *Psychological Types* in 1921 has been to develop a means of measuring and indentifying Jung's theory of personality. His theory will continue to have impact in the science of psychology only if some accurate and reliable means to identify the elements of the personality can be developed according to the rigors of modern scientific techniques. In the remainder of this paper, the author will focus on the use of the instrument of self-report as a means for identifying personality type. The validation of the Jungian psychoanalytic method will not be considered because the absence of a standard therapeutic technique prevents empirical validation.
CHAPTER III

THE USE OF SELF-REPORT IN PERSONALITY TESTING

In research, since the publication of Psychological Types in 1921, efforts have been directed toward confirming the scientific accuracy of Jung's theory of personality. The self-report test is one method that has been used to operationally identify personality type. Self-report tests essentially consist of a number of stimuli, the test questions, presented to individual subjects. Each subject has the opportunity to respond in a limited number of ways, often "yes," "no," or multiple-choice, to each question. Test responses represent the subject's report of his or her likely behavior in response to the stimulus specified in each test item. Test items are constructed to measure a particular personality attitude or function, in the case of Jung's typology, and the test scores reflect the cumulative totals of introverted, extraverted, sensation, intuition, feeling, and thinking responses. It is presumed that personality type acts as an intervening variable between the stimulus of the test question and the response of the subject. Thus, an introverted type, for example, would be expected to show a tendency toward introverted responses as judged by test items constructed to represent introversion.

The self-report method is susceptible to several influences that may contribute to inaccuracy. Self-report tests ask the subject to report how he or she would behave in a given situation.
Yet, the subject's response may, in fact, show what the subject would like to be or how the subject would like to behave, rather than how the subject would really behave. Responses may also vary due to the subject's acquiescence to his or her concept of the test and its purpose, as well as the subject's desire to select socially desirable responses (Vernon, 1964). Other important conditions include situational or contingent conditions such as task difficulty, task relevance, and the interpretation of test language. These factors may also influence test results.

As a general instrument of personality assessment, self-report also presents difficulties in terms of reliability, validity, and the susceptibility to faking. Reliability may be difficult to establish because the personality may change from time to time, unlike mathematical ability or knowledge of vocabulary, for instance, that may be more consistent over time. This poor reliability leads to poor predictive power as well. Validity is also difficult to establish because self-report tests are formulated in terms of inferred psychological constructs, such as the Jungian personality attitudes and functions, and inferred constructs cannot be directly measured. Jung found validation for his concepts in his clinical practice and experience. He described his work in the forward to the first Swiss edition of *Psychological Types*.

> It grew gradually in my thoughts, taking shape from the countless impressions and experiences of a psychiatrist in the treatment of nervous illnesses, from men and women of all social levels, from my personal dealings with friend and foe alike, and finally from a critique of my own psychological peculiarity. (Jung, 1971, p. xi)
As we shall see in the following chapter, however, some later researchers have established the validity of their self-report tests based on criterion ratings by significant others and by clinical professionals as well as based on correlations with previous tests. Finally, there is always the possibility that the subject is faking in his or her responses. An institutionalized subject, for example, may want to fake good adjustment or normality in order to facilitate discharge from the institution. The lack of insight and poor contact with reality that may characterize psychotics also makes them poor candidates for accurate self-report testing.

Despite all of these possible influences and weaknesses of self-report testing, the method continues to find widespread use. In very practical terms, we must, at least to some degree, rely on the subject's report of his or her nature in our assessment and diagnosis. While such methods as direct observations and reports by significant others may be useful in the assessment of personality, it seems reasonable to somehow include the assessed individual in the assessment of his or her own personality. Self-report works best in situations not conducive to faking, such as screening people who want therapy or increasing the self-awareness of voluntary subjects.

As pertaining to Jungian personality theory and psychoanalysis, self-report may be useful in facilitating the process of psychoanalysis by providing general information on variations within the individual's personality. It may be seen as an attempt to standardize the initial clinical assessment of the individual that precedes
and aids more intensive analysis. A couple seeking therapy for a troubled marriage, for example, may demonstrate on self-report tests that one is an introverted-thinking type while the other is an extraverted-sensation type. This difference may provide useful information to the therapist who is interested in uncovering the sources of misunderstanding or disagreement in the marital relationship. Though it is an intrinsically crude method, the judicious use of self-report testing may have a great deal of important descriptive value. It may provide a description, in summary terms, of the general nature of an individual's personality. The following chapter presents a chronological account of the use of the self-report method by various researchers who have sought to identify the various elements of the personality.
CHAPTER IV

THE USE OF SELF-REPORT BY RESEARCHERS

Heidbreder and Guilford and Guilford

One of the earliest attempts to identify introversion, as defined by Jung, in the personality was carried out by Heidbreder in 1926 (cited in Allport, 1961). Heidbreder used the Freyd-Heidbreder single-trait test to measure the element of introversion in the personality. The self-report test asked the subject to rate himself or herself "+" or "-" on various expressions such as, "Keeps in the background on social occasions" and "Prefers to read a thing rather than experience it" (Allport, 1961, p. 428). A greater number of plusses to minuses indicated a greater degree of introversion. Since all test items were slanted in the direction of introversion and plus scores, there was clearly a danger of the subject developing a habitual response set. The stimulus conditions specified in each of the test questions were drawn from the researchers' translations of the descriptions provided by Jung in *Psychological Types*. No validation of the test was evidenced in the research.

Many of the items on the Freyd-Heidbreder test were later incorporated into a 36-item test developed by Guilford and Guilford (1934). The Guilfords accepted the Jungian typology and selected items from other tests as well, namely, "the Laird, the Marston, the Neyman-Kohlstedt, and the Northwestern" (Guilford & Guilford, 1934,
From their survey of all five tests, the Guilfords sorted out 35 items that were repeated on at least three of the tests. From this composite, plus one question to determine the subject's gender, the 36-item test was developed. The validity of their test was based on correlations with the previously constructed tests. On the Guilfords' test, the subject is instructed to "Think what your behavior has usually been and underline either 'yes' or 'no,' whichever describes your behavior better" (Guilford & Guilford, 1934, p. 381). Sample test items include:

13. Do you daydream frequently?

14. Do you prefer to work with others rather than alone?

15. Are you inclined to worry over possible misfortunes? (Guilford & Guilford, 1934, p. 382)

The Guilfords administered the test, first, to 930 undergraduate students, 430 men and 500 women, and then a second time, 1 month later, to 277 of the same subjects, 163 men and 114 women. The test-retest reliability was .81. The correlated results showed that "the so-called extrovert items and the introvert items as groups tended to cling together at two ends of a scale" (Guilford & Guilford, 1934, p. 398). After factor analysis of the results, 18 group factors emerged, such as "a tendency to fear the environment, to shrink away from it . . . , an emotional sensitiveness to the environment . . . , interest in self" (Guilford & Guilford, 1934, p. 398).

In conclusion, the Guilfords warned against projecting an overall factor, such as introversion, onto a group of variables when it would perhaps be more appropriate to consider the variables.
It is possible to find several closely allied dimensions . . . , and to project them upon a single more inclusive continuum, and give a name to that larger "variable" thus created. This is apparently what armchair psychology has done in the case of introversion and extroversion. But one who wishes to approach a real analysis of personality will not be misled by names. (Guilford & Guilford, 1934, p. 398)

The Guilfords' work may be noted for suggesting that more general concepts, such as introversion and extraversion, may lack the necessary practical and theoretical considerations necessary in delineating the elements of the personality (Eysenck, 1970).

Cattell

Cattell, like the Guilfords, developed a personality test based on and validated by correlations with tests previously developed by other researchers (Cattell, 1950). It was Cattell's hypothesis that primary source traits or dimensions of personality will in general reveal themselves with equal facility in the three possible media of observation, viz. behavior rating data, questionnaire data, and objective test data; a comprehensive factorization of the personality sphere was planned for each. (Cattell, 1950, p. 3)

Cattell examined the test data of 16 other researchers and developed an 80-item questionnaire representing "each reasonably established factor by at least two marker variables" (Cattell, 1950, p. 6), or test questions. The selection of test items represented factors identified in test data and designed to measure interest and attitude, in addition to simple self-ratings of personality traits. Cattell asserted that the most accurate assessment of personality must also consider the interest, attitude, and motivation of the
The test was administered to 370 twenty-year-old undergraduate students. Test responses were either "yes," "no," "uncertain," or multiple-choice. Factor analysis of the test results yielded 19 factors, four of which were considered residual. The hypothesis was supported and Cattell's results followed the suggestion made earlier by the Guilfords that many more specific personality factors may be more descriptive of the personality than the more generic terms of introversion and extraversion that Jung proposed. From the test's assortment of personality, interest, and attitude questions, there emerged 15 factors that appeared to represent personality traits. For example, Factor 6, termed "hard-headed rationalism," or "intellectual leadership," showed a positive correlation to the following questions:

29. Do you think that (a) sometimes the only way to get things done is by violence, e.g., by war or revolution, or do you believe (b) that gradual methods doing no harm to anyone can be found?

45. Do you unhesitantly complain to a waiter or the manager if you are served bad food in a restaurant? Yes or no?

47. If the following headlines appeared in equal size in your newspaper, which would you attend to more: (a) Great Improvement in Market Conditions; (b) Protestant Leaders to Consult on Reconciliation. (Cattell, 1950, p. 26)

The answers "a," "yes," and "a," respectively, showed a positive correlation to Factor 6. These questions represent attitude, personality, and interest items, respectively. Based on this work, Cattell established a standardized questionnaire for general use in
personality assessment (Cattell, 1950).

Cattell's work may be noted for suggesting that it may be possible to match factors from various studies and tests. The unifying concept of his personality test also gives due consideration to attitude and interest in personality assessment. He suggested that the judgments of one's typical behavior, as shown in personality assessments, may be aligned with judgments about one's typical attitude and interests, as shown in attitude and interest assessments. Like the Guilfords', Cattell's questionnaire relies on previous works. Unlike the Guilfords, though, Cattell advances the assessment of the personality by acknowledging interest and attitude as personality indicators. In terms of Jung's concepts, Cattell's work seems to reject the typology in favor of many more specific personality traits, rather than Jung's more general introversion and extraversion constructs.

Eysenck and Eysenck

Research by Eysenck and Eysenck reasserted the belief that the concepts of introversion and extraversion are worthwhile and amenable to measurement. The fairly high correlations existing between the primary traits demonstrate conclusively that higher order concepts such as extraversion and neuroticism are by no means ruled out" (Eysenck & Eysenck, 1967, p. 32). The Eysencks asserted that there are two main dimensions of personality, extraversion-introversion and neuroticism-stability (Eysenck & Eysenck, 1967). They believed, for example, that the depressive might be typified as
a neurotic-introvert, whereas an introspective "normal" might be
typed as a stable-introvert.

The Eysencks developed personality questionnaires based on the
work of the Guilfords and others that included questions about par-
ticular personality traits as indicators of larger dimensions.
"Higher order factors are made up of several first order factors,
and here inclusiveness is an important consideration" (Eysenck &
Eysenck, 1964, p. 1107). Their tests were validated by correlations
with tests developed earlier. They first used the Maudsley Medical
Questionnaire, and later, the revised Maudsley Personality Inventory
(Eysenck & Eysenck, 1967). Finally, in 1964, the Eysencks intro-
duced the Eysenck Personality Inventory (EPI), in a complete and
shortened version (Eysenck & Eysenck, 1964). The full 48-item EPI
was based upon factor analyses on intercorrelations between 108
items used in testing different populations. The belief was that a
constellation of different traits can be measured and appropriately
labeled in a larger sense as extraversion or neuroticism.

In one study, a shortened version of the EPI was administered
to 1,053 men and 874 women (Eysenck & Eysenck, 1964). This sample
included both hospitalized adults and normals. The results showed
a significant correlation to the elements of extraversion and neu-
roticism as measured by the method of principle axes. For example,
the test question "Can you usually let yourself go and enjoy your-
self at a gay party?" showed a .56 correlation to extraversion in
men and a .61 correlation to extraversion in women.
The work of the Eysencks may be noted for clearly reasserting the worth of the broader concepts of extraversion and introversion. This was contrary to Cattell's (1950) assertions. Their test, however, seems to be designed as especially sensitive to the element of extraversion and the level of neuroticism, without perhaps giving equal consideration to a clear indication of the element of introversion.

The work of Heidbreder (1926), the Guilfords (1934), Cattell (1950), and the Eysencks (1964) shows the development of the self-report test as a means for identifying and measuring the elements of the personality. Heidbreder identified the degree of introversion in the personality as measured by a single-trait test. The Guilfords revised Heidbreder's method to measure both introversion and extraversion. Cattell identified various personality traits that resembled introversion and extraversion to varying degrees. The Eysencks reasserted introversion and extraversion as concepts that may include a variety of individual personality traits. It should be noted that all of the research thus far cited has focused on the attitudes of introversion and extraversion, or other personality traits, and not on any of the personality functions defined by Jung. In the remainder of this chapter, the author reports on more recent research that has involved self-report tests designed to specifically measure the elements of the personality, both attitudes and functions, that Jung identified.
Stricker and Ross (1964) used the Myers-Briggs Type Indicator (MBTI) in research designed to assess the reliability of the MBTI and the bipolar assumption implicit in its construction. The MBTI is a test explicitly developed to measure the personality attitudes and functions proposed by Jung. The test consists of three scales pairing the attitudes and functions as follows: extraversion-introversion, sensation-intuition, and thinking-feeling. A fourth scale also paired judging-perceiving to parallel the rational-irrational dichotomy of Jung. The MBTI is a forced-choice, 166-item questionnaire, and the two possible answers to each question reflect the two elements of one of the pairs in a particular test scale. A sample test question reads, "At parties, do you (a) sometimes get bored, or (b) always have fun?" (Shapiro & Alexander, 1975, p. 51). In this case, the question measures introversion (answer "a") or extraversion (answer "b") and is scored on the extraversion-introversion scale. Bipolarity is implicit in each pair as one must necessarily indicate a preference for either extraversion or introversion, sensation or intuition, thinking or feeling, and judging or perceiving.

Stricker and Ross conducted a test-retest study of 41 college freshmen with an intervening period of 14 months between testings. They found reliabilities of .73 on the extraversion-introversion scale, .69 on the sensation-intuition scale, .48 on the thinking-feeling scale, and .69 on the judging-perceiving scale. They
suggested that a larger sample of an older population might produce
greater stability. Stricker and Ross, in a second study, tested the
assumption that a bimodal distribution would result when items for
each of the four MBTI scales were tabulated. They tested a compos­
te sample of students and teachers numbering 7,950. The frequency
distribution of scores on each of the four scales did not exhibit
marked bimodality. The author believes the bipolar assumption im­
plicit in the construction of the test questions may not be accurate.
The absence of a marked bimodal distribution of the test scores may
suggest this.

The research of Stricker and Ross on the MBTI is introduced
here for two reasons. First, it introduces the reader to the MBTI,
a test that has found widespread use by those amenable to its
Jungian type construction. Although the test did not show high
reliability in the Stricker and Ross test-retest study, it should be
noted that other researchers have had more favorable results.
Carskadon (1977) and Carlyn (1977) found test-retest reliability on
the MBTI generally ranging from .69 to .83. The Stricker and Ross
(1964) research also focuses attention to the bimodal assumption of
the MBTI. The test questions compel the subject to report himself
or herself as either one or the other of each possible element in
the pairs. Accepting one necessarily rejects the other. The re­
results of the Stricker and Ross research, however, showed that a
bimodal distribution did not emerge in a frequency distribution of
test scores. Subjects did not order themselves in a consistent
either-or fashion in the overall test results. The bipolar
assumption in the construction of test items will receive greater attention in the chapter that follows. The question remains as to whether the findings of Strieker and Ross suggest an error in Jung's typology, or whether the MBTI fails to represent the typology adequately.

Gorlow, Simonson, and Krauss

Research by Gorlow, Simonson, and Krauss (1966) examined the hypothesis that, in self-report, individuals will order themselves into the personality types postulated by Jung. They assembled a test consisting of 100 self-appraisal propositions. These propositions were drawn by three psychologists who studied Jung's works and formulated statements that they considered to be in accord with the type characterizations. Examples include the following:

I would enjoy being a logician.

I think clearest when left to myself.

I am more interested in theory than facts. (Gorlow et al., 1966, p. 110)

Each of the propositions represented one of the eight possible personality types identified by pairing each of the two attitudes with each of the four functions, e.g., introverted-feeling, introverted-thinking, introverted-sensation, introverted-intuition, and so forth. Each proposition was printed on a separate card for purposes of the test administration. No mechanism for the validation of the test was reported.
Ninety-nine college students, 64 men and 35 women, were instructed to sort the 100 proposition cards into one of 11 piles along a dimension from "most like myself" to "least like myself." In order to identify the characteristics of each subject, the placement of the propositions was correlated with scores on each of the eight personality types. Propositions correlated significantly to the types (greater than .30) were identified as characteristic of the cluster of persons under each type. For example, subjects identified as extraverted-feeling types reported themselves as warm, outgoing, responsive to feelings, and enjoying warm stories, while rejecting propositions requiring logical thinking, problem-solving, and working with ideas. Gorlow et al. concluded by claiming that the typology was supported. They suggested that the failure to identify three of the four introverted types may be due to the natural reluctance of the introverted types to reveal themselves. The author, however, believes that the failure to discriminate the introverted type suggests that the test is not an accurate measure of the Jungian elements of the personality.

The test developed by Gorlow et al., unlike the MBTI, does not reflect a bipolar assumption in test construction and scoring. The Gorlow et al. test allows the subject to show a preference for a particular attitude-function pair without necessarily rejecting or denying another. The author believes that the research by Gorlow et al. suggests a method of constructing test items and test scoring that may be useful. It may be beneficial to construct test items and scoring such that a positive score on one attitude-function pair
does not necessarily deflate the score on other attitudes and functions. This concept will figure significantly in the suggestions made by the author in the chapter that follows.

Meier and Wozny

A study by Meier and Wozny (1978) relates the self-typing of a sample of 22 Jungian analysts with the objective results from the Gray-Wheelwright test. The Gray-Wheelwright test, introduced in 1946, represented an early attempt to identify the attitudes and functions of the personality as defined by Jung. Test questions were developed from existing items as well as some new items developed by the authors (Gray & Wheelwright, 1946). The 75-item test was assembled by means described as follows:

Many questions were eliminated because prejudicial in tone, others because obscure, others because duplicates. The remaining questions were mimeographed and submitted to our families and friends whose psychological types were clear clinically. The sets of replies were too few to permit refined analysis, but were compared with our clinical estimates, and progressively pruned. (Gray & Wheelwright, 1946, p. 10).

Thus the validation of the Gray-Wheelwright test was based on correlations with previously established test items as well as criterion ratings by significant others and clinical professionals. Some sample questions from the test include:

3. Do you wonder what is behind people's remarks? Yes, or, no?

19. Suppose you are going on a picnic with congenial friends. Are you happier with, half a dozen, or a dozen?

24. Mostly, do you prefer to be with, reflective people, or, good mixers? (Gray & Wheelwright, 1946, p. 11)
Questions 1-25 were designed to measure the dominant psychic attitude, either introversion or extraversion, and Questions 26-50 were designed to measure the dominant perceiving function, either sensation or intuition, while Questions 51-75 were designed to measure the dominant judging function, either thinking or feeling. The scored results showed the subject's dominant attitude, dominant function, and secondary function. Sixteen different types were possible using this scoring system, such as extraverted-thinking-sensation type or introverted-feeling-intuition type.

The results showed 16 of the analysts to have a conscious, typological appreciation of themselves different from the Gray-Wheelwright typing. In their self-typing, the analysts differentiated into 13 of the possible 16 types, while the Gray-Wheelwright test showed seven types. The strikingly different results on the two self-report methods questions the accuracy of one, if not both, of the measures.

The Gray-Wheelwright test, like the MBTI, includes an implicit bipolarity. Answers to the test items necessarily involve the acceptance of one attitude or function and the rejection of another. The results of the Meier and Wozny (1978) study suggest that the way that people see themselves may not be accurately reflected by the objective test results. The bipolar assumption implicit in the test construction and scoring may be the point of departure from which the different test results emerged. The following chapter examines this possibility further.
In the previous chapter, the author has surveyed the use of self-report as a method of identifying and measuring the elements of the personality defined by Jung. This survey of research since the publication of Jung's *Psychological Types* in 1921 has profiled seven different methods of self-report that have reflected Jung's personality types to varying degrees. Heidbreder (1926) used a simple single-trait test to measure introversion. The Guilfords (1934) assembled a test based on an assortment of questions gathered from other tests. They concluded that the consideration of more specific personality traits may be more accurate than the more general types of introversion and extraversion. Cattell (1950), like the Guilfords, used a composite test. Yet, Cattell's work rejected the concepts of introversion and extraversion from the outset in favor of a larger number of more specific personality traits. The Eysencks (1964) reasserted the worth of the introversion-extraversion typology in their work. Gorlow et al. (1966) constructed a test consisting of propositions drawn from Jung's writings in order to assess introversion and extraversion in the personality. Finally, work by Meier and Wozny (1978), as well as Stricker and Ross (1964), used the Gray-Wheelwright test and the Myers-Briggs Type Indicator, respectively. Both of these tests were unique as they were designed to measure the Jungian personality attitudes and
functions specifically. Each of the aforementioned self-report tests showed varied results with respect to identifying the personality elements conceptualized by Jung. With the exception of Cattell's research, all of the works cited in the previous chapter were based on an acceptance of Jung's typology.

The self-report tests cited in Chapter IV, excepting Gorlow et al.'s, were constructed with the common element of the bipolar assumption with respect to Jung's typology. In each case, the subject must make a response of either "yes" or "no," or, in the case of multiple-choice items, either this or that. Test items and scoring have been designed to show either introversion or extraversion, thinking or feeling, or intuition or sensation. One element of each pair is positively scored, while the second is negatively scored or rejected. This reflects a bipolar assumption for each of the pairs of attitudes and functions, and it necessarily produces a negative correlation between elements of each pair. Thus, if the subject selects a response indicative of introversion, then extraversion is wholly rejected. Items on the MBTI, for example, are based essentially on polarities such as people-no people or people-concepts. Tests of this type require that the subject report that he or she is either always or never likely to react in a specified manner to the conditions described by the test item. A sample question taken from the Gray-Wheelwright test reads "By nature, are you punctual? Yes or no?" (Gray & Wheelwright, 1946, p. 12). The question is designed to identify either sensation ("yes" response) or intuition ("no" response). Perhaps the punctual sensation type
would be sensitive to visual perceptions of wristwatches, clocks, appointment books, and so forth, while the nonpunctual intuition type might rely on time sense or impressions. In any case, the subject must accept one of the two polarities, sensation or intuition, as his or her most likely response at all times under the conditions specified in the test item. It may be, however, that the subject would manifest different functions to varying degrees at different times. Perhaps at work, the subject is, with respect to punctuality, likely to manifest the sensation function, i.e., wears a watch, keeps a tight schedule, while he or she manifests the intuition function during nonwork times, i.e., arrives late, schedules time casually, wears no watch. The bipolar assumption in test construction does not allow for the possibility of a differentiated response. Also, the responses are absolute and without a gradient to permit the subject to report his or her behavior in more moderate degrees.

The author believes that the either-or, bipolar assumption in test construction and scoring may not be an accurate translation of Jung’s concepts. The process of individuation, as defined by Jung, is a process of healthy differentiation by which the elements of the personality are manifest in varying degrees according to the prevailing conditions. The individuated personality may not be accurately represented by an either-or response to test items. It may be, for example, that an extravert predominately manifests one of the rational functions, thinking or feeling, in his or her interactions with the world, depending on the situation, and rarely manifests either of the irrational functions, sensation or intuition.
On test items constructed according to a bipolar assumption, though, this individual would necessarily reject either thinking or feeling because the items are designed to identify the predominate element of the pair. The individual would, likewise, be forced to select either intuition or sensation on a given test item, even though he or she may not be predisposed to manifest strongly either one of the pair. The author suggests that the self-report test items should be constructed to allow for a positive score or acceptance of a particular attitude or function without an accompanying negative score or rejection of the other attitude or functions.

Much of Jung's research prior to the publication of [*Psychological Types*](#) was based on his clinical experience with hospitalized individuals. It may be that hospitalized, mentally ill individuals, who are perhaps not individuated, tend to manifest the personality attitudes and functions in the extreme. The healthy, individuated person, however, may be characterized quite differently. Jung portrayed the attitudes and functions as pairs of opposites in the conceptual sense. For instance, he defined two rational and two irrational functions. These concepts have been translated in test construction as a bipolar assumption in test items and scoring. The author does not believe that Jung's typology is also intended to suggest that the elements of the personality are present in an either-or fashion in the personality itself.

The author believes that the individuated person, who differentiates varying degrees of personality attitudes and functions in different situations, may not be reliably assessed by test items...
constructed on a bipolar assumption. According to Jung, "Differentiation consists in the separation of the one function from other functions, and in the separation of its individual parts from each other" (Jung, 1971, par. 705). He did not speak of differentiation always occurring in the pairs of attitudes and functions. Though Jung conceptually defined attitudes and functions as pairs, he did not identify bipolarity as manifest in the personality itself. It is by the process of differentiation that the different attitudes and functions are selectively manifest under varied conditions and at different times. The author asserts that the bipolar assumption denies this process of individuation and differentiation that is an essential element of Jung's personality theory. The bipolar assumption in test items and scoring may artificially inflate or deflate personality elements that Jung conceptualized as pairs.

The author asserts that test items would more accurately assess an individual's personality type by attending to the possibility that an individuated respondent may manifest attitudes and functions that are not aligned as pairs. Consider, for example, the following item selected from the Gray-Wheelwright test: "In forming judgments, is your mental process mainly, (a) to look for guiding principles, or, (b) to declare your personal valuation?" (Gray & Wheelwright, 1946, p. 13). This item is designed to identify the function of thinking (response "a") or feeling (response "b") in the personality. The individuated subject, who most often differentiates thinking and feeling, for example, and is generally predisposed to both of these rational functions would, nevertheless, be required by this test
question to select one over the other. This same individuated subject would similarly be compelled to indicate a preference for intuition or sensation on other test questions though that may not be his or her innate predisposition. Thus, the overall test score would not accurately represent this subject’s overall preference for both of the rational functions.

This same sample test question from the Gray-Wheelwright test could be rewritten, without great changes in content, to allow a differentiated, individuated response by the subject. The test item could be reconstructed as two test items to allow for a positive score on one function without necessarily producing a negative score on the other. For example, one might read, "In forming judgments, I like to look for guiding principles," and the second item might read, "In my mental processes, I rely on personal valuations in forming judgments." These two test items, answered "yes" or "no," would allow the respondent to show a preference for a particular rational function without being forced to reject the other. The author suggests that revising existing test items to measure each attitude and function independently could improve the accuracy of the measurements while maintaining validity by the correlation with established test questions.

By combining each of the two attitudes with each of the four functions, eight personality types are possible, i.e., introverted-sensation, introverted-intuition, introverted-thinking, introverted-feeling, extraverted-sensation, extraverted-intuition, extraverted-thinking, and extraverted-feeling. Test items should independently
assess each of these possibilities and, therefore, stay sensitive to the process of differentiation that Jung identified in the individuated personality. By eliminating the bipolar assumption in the construction of test items, the subject's self-report would be unbounded and unbiased by the attitude or function pairs that have characterized bipolar test items. The subject would be able to report independently on each of the attitudes and functions. The author believes that this would provide a more accurate reflection of the individuated personality.

The study by Gorlow et al. (1966), cited in Chapter IV, suggests one further change in test construction and scoring that may enhance the sensitivity of self-report measures of the Jungian typology. Gorlow et al. developed a test that allowed the subject to respond on an 11-step gradient ranging from "most like myself" to "least like myself." It may be appropriate to adopt a similar scoring system in addition to the changes already suggested. The Likert-scale, for example, allows a response of strongly agree, agree, undecided, disagree, or strongly disagree (Anastasi, 1954). A response scale such as this would not compel the subject to make an absolute, all-or-nothing response. The scored results on such a response scale would show a profile of the subject's response tendencies in both personality attitudes and functions. The author asserts that a more sensitive gradient of possible responses would more accurately assess the differentiated response pattern that Jung identified in the individuated personality.
In this chapter, the author has suggested that modifications in the construction and scoring of self-report test items would present a profile of the personality that would be unbiased by the bipolar assumption. It is asserted that the bipolar assumption is present in Jung's conceptual definition of personality types, but not in the dynamics of the personality itself. Previous researchers have often translated the personality attitudes and functions as pairs in the construction of self-report test responses. Responses have been constructed such that a positive score on one element of an attitude or function pair necessarily resulted in a negative score on the second element of the pair. Jung, however, identified the individuated personality as responding differentially under varying conditions. The process of differentiation in the individuated personality allows for a wide range of personality types that are unbounded by mutually exclusive pairs of attitudes and functions. The construction of self-report test items needs to be sensitive to this possibility. Furthermore, it is suggested that the scoring of test items should not be absolutely "yes" or "no." A scoring gradient, such as the Likert-scale, would be more sensitive to the differentiated response pattern that Jung characterized in the individuated personality.
REFERENCES


Carskadon, T. G. Test-retest reliabilities of continuous scores on the Myers-Briggs Type Indicator. Psychological Reports, 1977, 41, 1011-1012.


Seifert, T. Necessity and possibility of scientific methods in the field of analytical psychology. *Analytische Psychologie, 1975, 6*, 26-44.


BIBLIOGRAPHY


Carskadon, T. G. Test-retest reliabilities of continuous scores on the Myers-Briggs Type Indicator. Psychological Reports, 1977, 41, 1011-1012.


Mann, H., Siegler, M., & Osmond, H. Four types of personalities and four ways of perceiving time. *Psychology Today,* 1972, 6(7), 76-84.


Seifert, T. Necessity and possibility of scientific methods in the field of analytical psychology. *Analytische Psychologie,* 1975, 6, 26-44.


