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RUNNING HEAD: TWO VISIONS OF PERSONALITY

A Tale of Two Visions: Can A New View of Personality Help Integrate Psychology?

John D. Mayer

Author Notes

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Abstract

Personality psychology studies how psychological systems work together and, consequently, can act as a resource for unification in the broader discipline of psychology. Yet personality's current field-wide organization promotes a fragmented view of the person, seen through such competing theories such as the psychodynamic, trait, and humanistic. There exists an alternative, *systems framework for personality*, that focuses on four topics: Identifying personality, personality is described here. The framework is applied to such issues as personality measurement, psychotherapy outcome research, and education. The new framework may better organize the field of personality and help with its mission of addressing how major psychological systems interrelate. (117 words)

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A TALE OF TWO VISIONS: CAN A NEW VIEW OF PERSONALITY HELP INTEGRATE PSYCHOLOGY?

The discipline of psychology emerged to address such questions as: "Who am I?" and "How does the mind work?" (Allport, 1937; Robinson, 1976). Today, psychologists ask more specific questions such as, "How is a sentence stored in memory?" or "Which traits predict on-the-job success?". Some psychologists believe that answering such questions most effectively requires a more integrated and unified view of the field. Integrated viewpoints promote the use of diverse perspectives, methodologies, and procedures in addressing a given question (Henriques, 2003; Magnusson, 2001; McNally, 1992; Staats, 1991, 1999; Sternberg & Grigorenko, 2001). Such integrations also require the use of a shared language and that can lead to the clearer accumulation of knowledge (Henriques, 2003, p. 151).

Psychology's founders viewed the emerging discipline as studying relatively simple systems such as sensation, perception, and learning, as well as the combinations of such systems into motives, emotion, memory, and intelligence. Wilhelm Wundt (1897, p. 26) remarked that the apex of such systems might be the "*total development of a psychical personality*." Since then, personality often has been viewed as the combination of major psychological systems (Allport, 1937; Mayer, 1993-1994; Wolff, 1947). Personality psychology, from this perspective, studies how psychological systems are organized as a whole.

The recent calls for integration, however, have largely ignored personality psychology's role. It isn't hard to see why. Disciplines can be characterized in part by their field-wide frameworks: The ordered list of topics used to present a discipline's subject matter. A field's framework creates an impression of what is studied and why. Whereas personality psychology was supposed to become a discipline that studied the collective action of other psychological systems, the discipline today often seems fragmented itself – if not pre-scientific (Derlega, Winstead, & Jones, 1991; Mendelsohn, 1993).

Today, personality's dominant field-wide framework is the perspective-by-perspective approach. This approach describes personality from a succession of theoretical perspectives such as the psychodynamic, humanistic, social cognitive and evolutionary. This framework was originally judged useful not necessarily because the theories were correct, but out of the hope that the conflict among them would generate important research (Funder, 2001; Hall & Lindzey, 1978, p. 705; Monte & Sollod, 2003; Pervin, Cervone, & John, 2005, p. 541). Since then, common interests among those who study personality have become apparent: For example, many personality psychologists are interested in the study of individual differences and traits such as the Big Five (Goldberg, 1993). Yet viewing the system from multiple perspectives may not adequately reflect such common pursuits.

In this article's first section, "A tale of two visions...", I will describe personality's perspective-by-perspective framework and its vision for personality. Then, I will describe a new framework: *the systems framework for personality*. This new framework's topics are: (a) identifying the personality system, (b) describing personality's parts, (c) understanding personality organization, and (d) tracing personality development.

In the article's second section, "The new vision: Identifying and studying personality," I describe the framework's first topic – its "opening act" – which includes defining personality, depicting where personality is, and examining the data that describe it. I also touch on the issue

of personality structure, and how conflicting structures can be accommodated in an integrated view.

The third section, "...Assessment, change, and education," provides a fresh look at the areas of personality measurement, psychotherapy, and the teaching of psychology. The final "Discussion" section, addresses how this new field-wide framework might renew personality psychology and contribute to a more integrated psychology.

A TALE OF TWO VISIONS: THE PRESENT STATUS OF PERSONALITY, AND A POSSIBILITY OF CHANGE

The Dominant Vision

A field-wide framework is an outline for the contents of the field. Such a framework is employed by textbooks and by field-wide research reviews to order their topics (Mayer, 1993-1994, 1998a). Aspects of that outline – its introduction, organization, and contents – create a view of a field. When a field-wide framework works, it conveys the major contents of the field accurately and meaningfully.

The dominant framework of personality today, the perspective-by-perspective view, emerged gradually. Through the first half of the 20th century, theorists such as Sigmund Freud, Carl Rogers, Raymond Cattell, and Gordon Allport, each developed a wide-ranging description of the personality system. Each of these views was interesting, persuasive, and communicated one or another aspect of the human condition (e.g., Allport, 1937; Cattell, 1965; Freud, 1917/1966; Jung, 1953/1945; Rogers, 1951).

Hall and Lindzey (1957) then created a framework to present the work of those and others theorists. They began with a general description of what personality theories are. They then catalogued the theories one-by-one or in small groups, and presented each one with a bit of discussion and non-partisan evaluation. Over time, the theories grew in number and were combined into broader perspectives: The psychodynamic, humanistic, behavioral, and social cognitive (Emmons, 1989). Those views and others make up the perspectives approach today. The work of Hall and Lindzey was both respected and influential (Norcross & Tomcho, 1994) – but what does it say, exactly, about personality?

One of its implications is that personality is best viewed from conflicting world-views on human nature – views which often cannot be readily reconciled. Depending upon one's opinion, the irreconcilable differences emerge because the perspectives (a) are fundamentally philosophical rather than scientific, or (b) address different questions than one another (Funder, 2001; Monte & Sollod, 2003, p. 653; Pervin et al., 2005).

To be sure, some common ground exists in the field. For example, many psychologists study the Big Three or the Big Five – two sets of traits that include such examples as Extraversion-Introversion and Neuroticism-Stability (John & Srivastava, 1999; Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993). These traits, however, can provide only a limited view of the personality system by themselves To envision personality more fully in the perspectives framework requires either picking a view sympathetic to one's own, or picking and choosing the best ideas from each theory – but without guidance as to how to integrate them.

A New Vision

There exists an alternative vision for the field of personality psychology. Psychology's founders perceived that the discipline would focus on such mental systems as sensation, perception, learning, and memory, as well as larger systems that integrated them such as intelligence and social behavior. There was room for still higher-level systems that organized the rest. Early textbooks placed the self, the will, and similar topics at that pinnacle (Angell, 1908; James, 1892/1920; Wundt, 1897). These interests were gradually drawn together as the study of personality (Allport, 1937; Roback, 1927; Wolff, 1947; Woodworth, 1921).

Robert Sears (1950) provided a mid-20th-century perspective on such a systems approach in the inaugural volume of the *Annual Review of Psychology*. Personality, he wrote, could be studied according to its: "...development...dynamics of action...[and] structure" (Sears, 1950, p. 105). Sears' approach was employed by subsequent Annual Review authors (e.g., Child, 1954; Messick, 1961). Sears, however, had left the key terms "structure" and "dynamics" undefined, and questions arose over what the terms meant. Ultimately, the approach was abandoned (Holtzman, 1965; Klein, Barr, & Wolitzky, 1967).

In the fifty-odd years since Sears' simple formula, several advances have occurred that have opened the door for a more formal systems framework. First, there has evolved a slow but successful effort to translate various theories into one another's language (e.g., Dollard & Miller, 1950; Erdelyi, 1985; Mayer, 1995a, 1995b, 2001; Westen, 1991). This better indicates the shared concerns across perspectives.

Second, has been the cross-theoretical use of concepts such as self-control, and positive and negative feedback from general systems and cybernetics (Block, 2002; Carver & Scheier, 2002; Karoly, 1999; Mayer, 1993-1994; Pervin, 2001; Shoda, LeeTiernan, & Mischel, 2002).

Third, a growing body of research findings have placed the study of personality on a firmly empirical basis and have made lasting contributions to what we now know (Cervone & Mischel, 2002; Hogan & Johnson, 1997; Livesley, 2001; Millon & Lerner, 2003; Pervin & John, 1999; Reis & Judd, 2000; Sheldon, 2004).

Finally, there has been a continued impetus to develop a clearer, more optimized systems approach for the field (Cervone & Mischel, 2002; Pervin, 1990, p. 12; Pervin, 2003; Sheldon, 2004). This has included the development of a formal field-wide systems framework for personality psychology (Mayer, 1993-1994, 1995a, 1995b, 1998a).

A New Framework: The Systems Framework

The systems framework discussed here evolved from an intentional re-focusing on the original scientific mission of personality: To study the individual's global psychological functioning. The discipline of personality psychology is outlined using a new set of topics. The first topic, *identifying the personality system*, involves defining the personality system, locating personality amidst its neighboring systems such as biology and the situation, and organizing the approaches taken to studying it (Mayer, 1995b, 2004a). The second topic, *describing personality's parts*, involves collecting and categorizing the most important parts of personality (Mayer, 1995a, 2003). The third topic, *understanding personality organization*, involves

studying the system's relatively long-term structure and chief dynamic functions (Mayer, 2001). Finally, *tracking personality development*, involves examining the parts of personality and their organization over time (Mayer, 1998a).

This new framework emphasizes the study of the personality system itself (rather than theories) and creates a new vision for the discipline. This vision can be introduced by examining, first, how personality is defined, positioned, and studied. Then, second, the new view of personality can be applied to such areas as personality assessment, change, and education. The next two sections will deal with each in turn.

THE NEW VISION: IDENTIFYING AND STUDYING PERSONALITY

Envisioning the Personality System

The first steps in envisioning personality are to define it and to locate it. Personality has been described here as a global system that emerges from smaller psychological subsystems. That is:

Personality is the organized, developing system within the individual that represents the collective action of that individual's major psychological subsystems.

The specific psychological subsystems will involve motives, emotions, intellect, and the self, among others.

To visualize personality further involves not only defining what it is, but also locating where it is. The fact that personality interacts with biological and social systems is generally agreed upon. For example, personality reads biological needs and then represents those needs as mental information (Cattell, 1947; Freud, 1930/1961; Maslow, 1970, Chpt. 3; Rogers, 1951, Chpt. 11). Personality then attempts to satisfy such needs based on the individual's model of how to behave in a given social context (Barkow, Cosmides, & Tooby, 1992; Buss, 2001; Cervone, 2004; Lewin, 1935, p. 79; Mischel, 2004; Rotter, 1954).

Understanding that personality connects the biological and social helps identify its location. The biological, psychological, and social systems are connected, in part, along a continuum called the molecular-molar dimension. The molecular end of the dimension refers to smaller systems of interest – at its extremes, sub-atomic particles. The molar end refers to larger systems – at its extremes, the entire universe as a system (Henriques, 2003; Levy-Bruhl, 1903). The middle range of this dimension separates psychology from its biological neighbors below and its larger sociological and ecological systems above.

These levels are illustrated by the horizontal lines of Figure 1. Systems interweave with one another in multiple strands of the molecular-molar continua (Mayer, 1998b). Some strands are inside the person and some are outside; this is also depicted in Figure 1.

The lowest level of Figure 1 contains smaller physical, chemical, and living things. At the next level up, are the brain inside the person and the outside elements of the situation – locations, possessions, and other objects and places. Up another level inside the person, personality itself is formed out of motives, emotions, knowledge, and other psychological subsystems. On the outside is the external situation faced by the person.



MOLAR

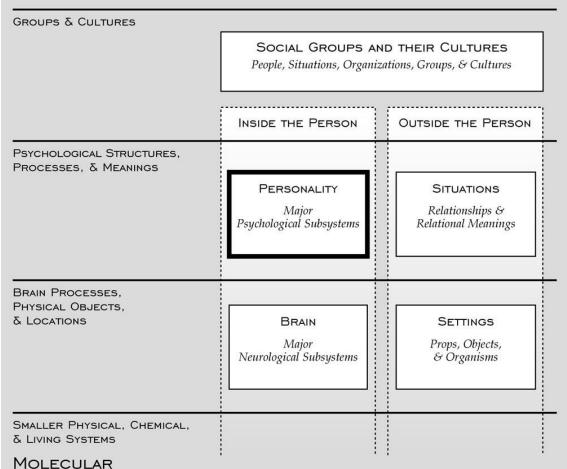


Figure 1. To Study Personality It Is Useful to Locate It Among Other Systems With Which it Interacts.

Note: The horizontal lines represent levels of the molecular-molar continuum (see text). The "inside the person" box shows personality and its emergence from major psychological subsystems and from the brain. The "outside the person" box shows the psychological situation and the setting from which it emerges. Both personality and the situation are incorporated within larger social systems (shown above them). The figure is a modified version of Figure 1 from Mayer (2004b).

The rationale for placing personality and the situation at the same level is that both can be understood psychologically. Personality is by definition psychological. The situation outside the person is physical and objective, *and* understood in terms of its psychological meanings. That is, as the individual acts within a real and objective environment, those acts typically are understood by the individual him or herself, and by any other observers and actors, according to their psychological significance (Hewitt, 2003). The dichotomy between personality inside the

person, and the outside situation in which it is expressed, corresponds to the distinction between private and public personality, and between covert and overt mental behavior (Henriques, 2003; Singer, 1984, 1987). The interaction between the person and the situation means that people often will express an action under some specific psychological conditions but not others (Cervone, 2004; Endler & Magnusson, 1976; Mischel, Shoda, & Mendoza-Denton, 2002).

Moving up still another level, one arrives at the groups and cultures within which both personality and such situations are embedded. These groups help define the collective identities with which personality, and surrounding persons, must deal (e.g., Church, 2001; Dana, 2000; Markus & Kitayama, 2003).

This diagram is consistent with most descriptions of what personality does. Personality must satisfy its biological needs. It must find good locations and settings to operate within. It must establish good relationships and accomplish tasks in the situation. Finally, it must find good groups with which to join.

Envisioning the Data

The diagram of personality and its surrounding areas just developed (Figure 1) was anticipated by the trait psychologist Raymond Cattell. Cattell (1965) had imagined a personality sphere surrounding the person. His purpose had been to conceive of the possible types of data that pertained to personality, and from where the data had come. Scientists must collect data about a system to better understand it; this activity is fundamental to measuring personality and its expression. Ultimately, Cattell divided data into three broad categories: Life data, Questionnaire Data, and Objective Test Data, a division that is still used today, and which has received some notable enhancements (e.g., Block & Block, 1980; Funder, 2001).

Cross-cutting Cattell's terminology were older terms such as "self-report," "paper and pencil tests" and "objective tests" that dated back to the 1920's (Laird, 1921; Roback, 1921; Spencer, 1938.; Terman, 1924). The term, "self-report data," however, has become so broad as to arguably obscure more than it communicates. It can refer to responses to projective tests and intelligence tests, reaction time responses, and giving one's name (Bordens & Abbott, 2002, p. 135; Heiman, 2002, p. 284; Shaugnessy, Zechmeister, & Zechmeister, 2003, p. 150). Despite their variety, self-report data often have been regarded as undifferentiated, and as eliciting, "deliberate faking, lack of insight, and unconscious defensive reactions" (Mischel, 1968. p. 236).

The clearer picture of personality and its surroundings described by Figure 1 can allow for a clearer view of psychology's data. Earlier-developed types of data can be integrated with such new forms of data as life space, act-frequency, implicit attitude, and others (e.g., Buss & Craik, 1985; Cunningham, Preacher, & Banaji, 2001; Mael, 1991; Mayer, Carlsmith, & Chabot, 1998).

Using the areas of Figure 1, each kind of data can be organized according to its source. Some data arise from systems outside personality: These data include biomedical data from the brain, setting data, observer-data from the situation, and institutional data. Collectively, these can be termed *external-source data* (see Ambady, Hallahan, & Rosenthal, 1995; Funder, 1995).

Other data arise from inside personality: From an utterance by or other signal from the person. These can be termed *personal report data*. Personal-report data can be further distinguished by the areas of knowledge from which they draw, such as from the person's

models of the world, or self-concept. They also can be distinguished according to the mental processes they draw on, such as imaginative integration, or self-judgment.

When these and other distinctions are drawn, about 12 frequently-employed classes of personal-report data can be distinguished: For example, *self-judgment* data involve subjective evaluations of the self. *Criterion-report* data are reports directed toward correct answers, such as those on ability tests. *Projective- or thematic-report* data stem from projective tests, and the like (Mayer, 2004a).

Each of these forms of data are demonstrably different, tell us different things, and are valid for different purposes (Joint_Committee, 1999, pp. 12, 14; Meyer, 1996; Paulhus, Lysy, & Yik, 1998). Data from an observer who judges an employee at work tell us something about the employee's reputation (Hogan & Shelton, 1998). Such observer-report data are often better predictors of job performance than are the employee's own self judgments (Atkins & Wood, 2002). Understanding the relative merits of a type of data in a given context can help psychologists improve their predictions. It also raises important questions: Why (and when) might observers be better judges of success at work? By knowing what each type of data tells us, our knowledge of how the personality system operates can improve.

Identifying Primary Divisions of Personality

Personality is too complex to study only as a whole entity. Philosophers and psychologists from Aristotle forward have understood that a further basic requirement of the field is to divide personality to promote its study (Allport, 1937; Aristotle, 1957/350 BCE). The division of personality into a few areas is often labeled a structural approach – because one is looking at stable, long-term, articulated areas of personality.

A seemingly simple question like, "How shall we divide personality?" generates a bewildering set of responses. Psychodynamic psychologists divide the mind into id, ego, and superego (Freud, 1923/1960); humanists into the false and real self (Rogers, 1951); social-cognitive psychologists into encodings, expectancies and beliefs, and self-regulating plans (Mischel & Shoda, 1995). Trait theorists employ the Big Five traits (although some regard this as more a structure of traits than of personality) (Block, 1995; Goldberg & Rosolack, 1994). Pre-dating them all, and still current, is a division of the mind into motivation, emotion, and cognition by faculty psychologists (Hilgard, 1980; Mayer, Chabot, & Carlsmith, 1997; Mendelssohn, 1971).

These different divisions may appear to reflect irreconcilable differences within the field. One drastic solution would be to abandon their use (Brenner, 1998). From the systems framework view, however, such divisions are essential. Structural divisions have the advantage of being neither so remarkably numerous as individual parts of personality, nor so abstract as personality dynamics. Such structural divisions represent a basic language with which to speak about personality – a language that conveys considerable information at a relatively low cognitive cost. The structures represent a form of "basic category" for the field which can facilitate our thinking about it (Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976).

Moreover, from the systems framework viewpoint, there is no problem in principle with employing more than one such division of personality. It doesn't trouble us that a building contractor thinks of a house in terms of its foundation, walls, roof, and plumbing, whereas a real estate agent thinks in terms of its dining room, kitchen, family room and bedrooms. The different divisions serve different purposes. There are, of course, better and worse divisions. We would reject a contractor who divided a house in terms of its wall paper, shelves, and automobile tires; no less so, we should reject divisions of personality that have relatively poorer correspondence to the system as it is understood.

Psychologists recognize a given mental area according to its logical coherence. The cognitive area includes a person's long-term memory, as well as the person's capacity to reason, because a person often reasons with material stored in memory. This connection among parts is based on far more than the correlations among them. For example, long-term memory storage and intelligence do not correlate highly across people (e.g., Dulaney & Ellis, 1991). For that reason, techniques such as factor analysis – which operate only with correlations – cannot be used to divide personality into its major areas.

Structural divisions of personality can nonetheless be evaluated according to observable standards and criteria. A recently introduced set of such criteria can help distinguish better from worse divisions. In a nutshell, these criteria include that a division be: (a) small in number (e.g., between 1 and 10) because larger numbers of divisions might blend into specific personality parts, (b) that the areas be relatively distinct from one another, (c) that they comprehensively cover the personality system, and (d) that they map onto brain and/or social functions (Mayer, 2001).

Using these criteria, many divisions appear reasonable, particularly so the trilogy of mind – motivation, emotion, and cognition – and its variations (Buss & Finn, 1987; Hilgard, 1980; Mayer et al., 1997). By contrast, a different structural division – say, perception, memory, and cognition – would be a non-starter due to its overlapping areas and omissions of motives and emotions.

The Systems Set

The further possibility arises that a new generation of divisions can be developed. To explore this, a set of commonly discussed psychological subsystems of personality are arranged in Figure 2. These areas were identified in an earlier pan-theoretical review of approximately 400 parts of personality. They include motivation, emotion, consciousness, the self, cognitive intelligences, models of the world, social actions, and the like (Mayer, 1995a). Each subsystem is illustrated with one or more examples of its parts. Systems that communicate with the environment are toward the right, systems that are more complex (molar) are toward the top, and related systems are near one another (where possible). Figure 2 represents a suggestion of personality's major systems rather than any definitive diagram. Such a beginning, however, may be enough to make visible personality's more important areas.

The systems next were divided into four areas: the *energy lattice*, *knowledge works*, *social actor*, and *conscious executive*, as represented in Figure 2 by the dashed lines. The energy lattice includes the motivational and emotional systems shown in the lower left of Figure 2, and joins motivation and emotion (e.g., Freud, 1923/1960; Mayer et al., 1997; Murray, 1938). The knowledge works includes many of the systems that stretch vertically through much of the center of Figure 2. These include mental representations of the self and the outside world, and the intelligences that operate on them (e.g., Kelly, 1955; Rotter, 1954). The third structure, the

social actor (Figure 2, right) represents the expression of personality in a socially adaptive fashion. It includes social skills, role knowledge, and emotionally-preferred expressions (e.g., Hogan, 1982.; Jung, 1953/1945; Singer, 1987). The fourth structure, the conscious executive (Figure 2, upper left) represents the function of executive supervision over the rest of the parts (e.g., Glickauf-Hughes, Wells, & Chance, 1996; James, 1892/1920; Jung, 1953/1945). Collectively, this fourfold division is referred to as the *systems set*.

PERSONALITY: Major Psychological Subsystems



Figure 2. To Study Personality It Is Also Useful to Divide It

Note: Each psychological subsystem in the diagram is depicted with a few examples of its possible parts. Each subsystem performs a unique set of psychological functions. Systems related to the external aspects of personality are to the right; those related to internal processing are to the left. More complex, learned systems are toward the top; smaller more specific systems are lower in the diagram. As much as was possible in two dimensions, related systems were placed close to each other. These systems blend into one another and often operate in parallel with one another. The figure is a modified version of Figure 2 from Mayer (2004b).

In this model, unconscious processing occurs whenever the conscious executive has no communication or access to mental operations taking place in other areas. Conscious access is limited across systems and can be further disrupted, for example, by defense mechanisms. This allows for multiple forms of unconscious influences on the individual (Bargh & Ferguson, 2000; Kihlstrom, 1987; Niedenthal & Kitayama, 1994).

THE NEW VISION: ASSESSMENT, CHANGE AND EDUCATION

Which Areas of Personality Are to Be Assessed?

The last section concluded with the idea that divisions of personality were useful for organizing the study of personality. This section will examine some applications of such divisions and the framework more generally. One application of the structural division is in organizing traits. Structural divisions may be useful, in fact, according to how well they categorize traits – a specific purpose to which they are sometimes put (Bellak, Hurvich, & Gediman, 1973; Buss & Finn, 1987; Cattell, Cattell, & Cattell, 1993).

To see how well the systems set division performed in this capacity, nine judges were employed to sort roughly 70 traits into its structural areas. When the even-and odd-numbered judges were compared, agreement as to trait assignments were close to 70%. Energy lattice traits included *sensation-seeking*, *neuroticism-stability*, and *need for achievement*. Social actor traits included *self-monitoring* and *introverted-extroverted*. Knowledge works traits included *internalexternal locus of control*, and *verbal and spatial intelligences*. Conscious executive traits included *absorption* and *private self-consciousness*. In addition, a few traits were reliably associated with the whole person, including *masculinity-femininity*, *mature-immature*, and *propriate striving*. Judges were willing to assign most traits to one of the systems set areas of personality. Both their rater agreement and the number of traits assigned (vs. "did not fit any area") compared favorably with an alternative structural division chosen for its widespread use (Mayer, 2003).

Today, the field of personality is fortunate to possess a widely-used set of traits, called the Big Five. These traits were identified by the lexical hypothesis, which states that the most important personality traits can be found by searching the trait terms of our everyday language. A careful search of trait terms in English yielded five big traits: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness (Costa & McCrae, 1992; Goldberg, 1993). The traits are referred to as "big" in part because each can be analyzed into smaller traits. For example, extraversion (or surgency) can be divided into such facets as sociability, assertiveness, and adventurousness (Saucier & Goldberg, 2001).

The Big Five has provided a useful standard for the field. Still, the set has its limits: The Big Five excludes such traits as *locus of control*, and *private* and *public self-consciousness* although they are widely studied; also missing are *absorption*, *verbal intelligence*, *sensation-seeking*, and *masculinity-femininity* (e.g., Carroll, 1993; Deaux, 1984; Roche & McConkey, 1990; Smith, Trompenaars, & Dugan, 1995). The lexical hypothesis simply has not identified such traits as important, based on the language.

What if psychologists selected traits according to the areas of the personality instead? Contrast the lexical hypothesis with a structural-area hypothesis: "An optimal set of traits...should be drawn such that they sample from each of the central areas of personality, the most prominent blends of areas, and the whole" (Mayer, 2003, p. 396). Such a structural approach to traits would ensure that all the areas of personality are assessed.

A criterion set of supertraits, referred to as the "Big Four Plus," can be identified accordingly. The Big Four are (a) Pleasant-affect—depression (from the energy lattice), (b) High versus low intelligence (from the knowledge works), (c) Social competency-incompetency (from the social actor), and, perhaps, (d) Organized versus diffuse awareness (from the conscious executive). The "Plus" of the Big Four Plus refers to additional traits of interest associated with blended areas (e.g., emotional intelligence; practical intelligence) and with the whole person (e.g., masculinity-femininity). Although these certainly cannot replace *lingua franca* provided by the Big Five today, they represent a potentially useful alternative for the future (Mayer, 2003).

McAdams (1996) has characterized personality traits as an abstract language we might use to describe a stranger. In McAdams' view, traits are but a first step toward knowing another. To better understand someone involves learning more about his or her current concerns and goals, and how they are expressed – the person's dynamics.

The Dynamics and Development of Personality

Dynamics of Action

The expression of personality in the environment concerns dynamics that begin with organismic, bioevolutionary needs and motives (Buss, Pervin, & John, 1999; Tooby & Cosmides, 1990), proceed through affective and cognitive processing (Bargh & Ferguson, 2000; Diener, Oishi, & Lucas, 2003; Higgins, 1987), and extend to complex social perceptions and expressions in the environment (Cervone, 2004; Funder, 2002; Mischel et al., 2002).

Relatively straightforward expressions of traits are possible, as are more complex behavioral signatures that involve different acts in different situations – such as being cooperative with one's peers but arguing with authority figures (Cervone, 2004; Mischel, 2004). People's self-descriptions often include both straightforward traits, and conditionalized descriptions such as, "I am shy – except among my closest friends" (Ivcevic, Mayer, & Brackett, 2003). To understand such behavioral dynamics, the personality system can be further analyzed. Mischel and Shoda (1995), for example, account for behavioral interactions of various sorts with a model of social expression including encodings, expectancies, goals, and other relevant areas.

A person also chooses the environment in which to act. These environments vary dramatically from person to person. Figure 1 illustrated four areas surrounding personality: The brain and organism, the setting, the situation, and the groups to which a person belongs. To measure the environment, one can develop life space scales with items corresponding to these respective areas: "How many push-ups can you do?" (brain and organism), "How many cans of beer do you typically keep where you live?" (setting), "How many times have you spoken to your best friend on the phone this week?" (situation), and "Did you belong to Band or Orchestra when you were in High School?" (group).

Factor analyses of such life-space items suggest that a person's environment can be described by several dimensions, including the degree to which a person is (a) a cared-for and

comfortable, (b) surrounded by a drug culture and its features, (c) involved in social interactions and activities, (d) involved in sports and athletics, or (e) is an isolated (or lonely) consumer (Brackett & Mayer, 2004; Mayer et al., 1998). Personality traits, interpersonal styles, and behavioral signatures can then be correlated with these life space areas, and to the person's life story more generally (Acton & Revelle, 2002.; Bauer, McAdams, & Bauer, 2004).

Dynamics and the Development of Self-Control

A second type of dynamic involves self-control and its unique contribution to adjustment. Self control through mental defense mechanisms can guard self-esteem (Cramer, 2001; Kwon, 1999). Behavioral self-control, on the other hand, alters how actions are expressed. For example, behavioral self-regulation can help people meet such goals as studying for a test or staying on a diet. Conscious control, however, may be a limited resource that requires judicious application (Baumeister, Bratslavsky, Muraven, & Tice, 1998). It can be undermined by behavioral triggers that occur outside of awareness (Bargh & Ferguson, 2000). Yet there is also the promise that such self-control can be better understood and taught so as to improve a person's well-being (Gross, 1998; Tugade & Fredrickson, 2004).

Developmental psychologists are increasingly studying the connections between infant temperament – including self-control – and later personality traits (Graziano, Jensen-Campbell, & Sullivan-Logan, 1998; Rothbart, Ahadi, & Evans, 2000). Such studies indicate that good self-control – e.g., the lack of temper tantrums – is crucial to good occupational and marital status (Caspi et al., 2003; Peake, Hebl, & Mischel, 2002), along with other variables (Gottfredson, Jones, & Holland, 1993; Johnson, McGue, & Krueger, 2004; Kelly & Conley, 1987).

How Does Personality Change Come About?

People often exert self-control in an effort to change their lives. The systems framework distinguishes between change that targets the outside world, and change that targets personality directly. To change their outside worlds, people may move, divorce, and/or change jobs, among other possibilities (Kreider & Fields, 2002). The individual's own personality may become identified as an issue if a person observes him or herself reacting in a problematic fashion in job after job, or with partner after partner (Carstensen, 1998; Hill & Miller, 1981; Kanfer & Ackerman, in press). In that instance, personality itself may become the focus of change.

Psychotherapies such as psychodynamic therapy, humanistic therapy, and cognitivebehavioral therapy, are named according to the personality theory from which they were developed. Despite their theoretical differences, these therapies are quite similar in the overall level of improvement they bring about (Lambert, 1992; Nathan & Gorman, 1998; Nathan, Stuart, & Dolan, 2000; Smith & Glass, 1977). This is one reason many researchers are calling for a new, integrated approach to psychotherapy (e.g., Holmes & Bateman, 2002; Lampropoulos, 2000; Norcross, 1997; Shaw, 1988). One approach to such an integration is to identify the change techniques of various psychotherapies and regroup them in a pan-theoretical set.

A change technique can be defined in part *as a specific, discrete, and time-limited act... aimed at modifying an aspect of an individual's personality* (Fromm-Reichmann, 1943; Luborsky, 1990; Mayer, 2004b). In one study, fifty-two such change techniques were selected from various psychotherapies (Day, 2004; Ivey, D'Andrea, Ivey, & Simek-Morgan, 2002; Prochaska & Norcross, 2003; Scharf, 2004). A sample technique was, "analysis of transference," and it was defined as bringing into consciousness a given pattern from an early relationship that is being repeated in the current psychotherapeutic relationship.

Judges sorted the change techniques according to the areas of personality they believed the technique might especially influence. The areas employed were the systems set's *energy* lattice, knowledge works, social actor, and conscious executive. The agreement level as to placement between odd and even groups of judges was 75%, and exceeded chance levels of 20%, both in terms of statistical significance (t(51) = 25.6, p < .001) and meaningfulness. Techniques such as, "changing emotion with emotion," and "problem expression" were classified as influencing the energy lattice. Techniques such as "developing a new life story," and "developing new philosophies" were associated with the knowledge works. Techniques such as "role playing," and "language statements" (e.g., learning to use "I" statements) were associated with the social actor, and "meditation," and "interpretation of defense" with the conscious executive. Finally, the whole personality was believed to be influenced by such techniques as, "establishing a therapeutic relationship," and "instilling trust, hope and confidence." In other words, change techniques can be organized according to the specific areas of personality they target; then, outcomes in the specific areas of personality can be assessed. This may promote a more powerful way of assessing and studying therapeutic change (Mayer, 2004b).

Education and Looking Forward

Today's introductory psychology textbooks typically begin with chapters on smaller topics of study such as the neuron, sensation, and perception, and then move on to more complex systems such as motives, memory, and intelligence, and conclude with a chapter on personality (before going on to social psychology or applications). A student might expect that the chapter on personality would integrate what had come before. Instead, however, the student is typically exposed to about four or five theoretical perspectives on personality (e.g., Myers, 2004; Zimbardo, Weber, & Johnson, 2003).

The introductory textbooks' chapters reflect in miniature today's personality psychology textbooks. Those books, although scholarly and well-written, use the same perspective-by-perspective approach that developed from Hall and Lindzey's delightful work. Even though personality textbooks now cover contemporary research, many of them seem anachronistic in their extensive attention to early 20th-century thinkers (Mayer & Carlsmith, 1997; Mendelsohn, 1993).

In the 1970's, personality psychology underwent a dramatic reduction in prominence and acceptance. Some say the field contracted in response to questions about the limits of personality's predictive powers (e.g., McGuire, 1968; Mischel, 1968). Others attributed its decline to the growing power of social psychologists, who were not always sympathetic to personality's mission (Kenrick & Dantchik, 1983). Demographic patterns in university hiring may have played a role as well, as hiring freezes in the 1970's prevented the replacement of personality psychologists who were retiring.

Some of the responsibility, however, may rest with the way we have taught personality, and with personality textbooks themselves. Despite their many positive qualities, these books failed to communicate personality's mission in ways that could be readily appreciated and used by those in adjoining fields. Today, newer textbooks do a much better job (e.g., Burger, 2000;

Funder, 2001; Larsen & Buss, 2002; Mischel, Shoda, & Smith, 2003; Pervin et al., 2005). Moreover, textbooks that employ a systems approach (or something like it) are also beginning to appear (Cloninger, 1996; Mayer, 2005; Pervin, 2003).

A re-envisioned lecture in introductory psychology could begin with the assertion that personality is the discipline entrusted to tell us how motives, emotions, and other psychological systems studied earlier in the course are integrated. To these systems, the self-concept might then be added. A "gateway" topic into how psychology is organized, students could be told, is personality structure. Trait structures such as the Big Five might be covered, along with personality structures such as Freud's division between the conscious and the unconscious, and newer divisions. Personality dynamics of action would draw on research about how traits are expressed. Dynamics of self control would cover defense mechanisms, coping, and behavioral self-regulation. Personality development could then be covered – or integrated with the later chapter on development.

Such an approach would make the psychology course more gracefully cumulative – and better live up to the expectations generated by the chapter's placement.

DISCUSSION AND CONCLUSION

The discipline of personality psychology is associated with the task of providing key integrations on behalf of the discipline of psychology. Its job is to indicate how the parts of personality function together. The integrations personality psychology can provide may both allow progress within the field and better connect it to neighboring disciplines such as psychological measurement, clinical psychology, and other areas concerned with the broader psychology of an individual.

The problem is that, during the mid-20th century, personality psychology itself was fragmented by theories. Fortunately now, through the work of translators among different theories, and through the accumulation of research knowledge, a more integrated vision is possible.

The Two Frameworks and Their Visions

Today's dominant framework is a perspective-by-perspective approach that describes a group of theoretical perspectives on personality. It has served the field well, attracting wonderful students and inspiring today's professors, but its limitations also are considerable. The framework is not inherently able to locate personality – its object of study – in any central way amidst its neighboring systems. Because it leaves the system multiply defined and unlocated, it cannot structure the sources of data in the field. The framework also fails to explain how divisions such as the id, ego, and superego, or motivation, emotion, and cognition, might coexist. Instead, it leaves them in mutual contradiction.

The perspective-by-perspective framework is similarly divided in regard to assessment, change, and education. In regard to assessment, it fails to specify how to assess traits. A psychologist can measure an empirically-based sets of traits such as the Big Five, which omit many important traits, or measure a specific trait which may be identified by a given theory. In regard to personality change, the perspectives framework compares psychotherapies based on their theoretical approaches rather than on their specific change techniques. Finally, in regard to

education, the framework's focus on theoretical perspectives commits so much energy to historical issues that current theory and research may be neglected relative to that in other fields.

A systems vision of the field also has been developing over the 20th century. The systems framework begins with a re-ordering the field according to a series of four clearly-specified topics. These topics address personality's identification, its parts, its organization, and its development. Next, the personality system is located along a molecular-molar continuum in relation to the brain and larger social systems, as well as along an internal-external continuum in relation to the social setting and social situation. This positioning of personality is then employed to divide the data of personality into external-source data and personal-report data. Structural divisions of personality are regarded as crucial. It is sensible to allow for competing structural divisions within the field, but each such division must meet fit criteria relative to the personality system itself.

In regard to personality assessment, change, and education in the field, the new vision is also informative. The new vision suggests that a comprehensive set of personality traits should represent each structural area of personality. A complete assessment should therefore include measures of motivation and emotion, of knowledge and intelligence, of social interaction, and of executive control. This provides a conceptual basis for contemporary clinical test batteries, albeit with modifications (Acklin, 1995). The new vision presented here suggests that psychotherapeutic (as well as, say, educational) change techniques might be studied according to the areas of personality they are believed to change; change itself should be assessed on an area-by-area basis. The new view presented here is that textbooks should be introduced that address the personality system itself, rather than filter it through theories.

Is This a Framework or a Theory?

Is the systems framework indeed a fieldwide framework for personality psychology, or, in fact, another specific theory? A framework is an outline for a field. A theory is a set of interrelated assumptions about human nature that can be subject to empirical test (e.g., Hall & Lindzey, 1957). The systems framework is indeed an outline for the field with four systems topics (identification, parts, organization, development) at its highest level. The topics of a framework by themselves, however, are insufficient to make a framework work. Sears' (1950) framework provided an instance of how an insufficiently-defined outline can be increasingly misunderstood. Rather, a framework requires conceptual development, and therefore the systems framework has been conceptually developed. In so doing, the development was conscientiously pan-theoretical. That is, as a given area, such as personality structure, was developed, it began with cross-theoretical literature reviews, and then concluded with the most consensual definitions and criteria that were possible at the time. These conceptual developments are inherently necessary to permit the framework to be understood and used. They are still far more framework-like than theory-like.

There also exist, however, extensions to the framework. Extensions are jumping-off points from a framework that help to further develop its vision and application. Consider again personality structure. The conceptual development of that topic required laying out cross-theoretical criteria for good structure. Once that was accomplished, however, the opportunity arose to introduce the systems set, which appeared to better divide personality than many

divisions presently in use. That division is not part of the framework proper. Although that division was developed in part on the foundations of earlier personality divisions, it is one specific division itself. As an extension of the framework, the systems set appears to occupy a grey area between framework and something more specifically theoretical.

The Future of Personality Psychology

The field of personality psychology is too important to disappear. In the unlikely event that the discipline should fail – it would be reinvented under another name. That already appears to have occurred in part with conferences, associations, and journals devoted to the study of the self. I agree, with Allport, that for all its limitations, the term "Personality" makes sense, and that the field is likely to survive (Allport, 1937). There is little question that, as has been pointed out rather frequently, research in the discipline is thriving (Cervone & Mischel, 2002).

I believe that the field will better thrive with a firm shift in emphasis from the theories to the systems framework for personality described here. Such a shift will clarify the purpose and mission of the field, make it more interesting, be more contemporary, better integrate research, and yield a variety of new research endeavors hinted at above.

Personality theory, too, deserves its due. It has carried the field forward for the greater part of the 20th century. It has attracted many wonderful students, and led them to become productive personality psychologists. In the hands of a gifted teacher the theories seem to explain much about human behavior. I hope there will always be room for grand theories in the field. It is my belief that, like plants or trees in a garden, the grand theories are more likely to survive, and in a healthier fashion, if they are pruned. For example, the vagueness of many such theories arises from the fact that they are not tightly knit wholes (Rapaport, 1960). Rather than teach theoretical entities in their sprawling and sometimes internally inconsistent natural state, they may be better preserved by using the most promising portions of them, such as (in the case of psychodynamic theory) defense mechanisms, the dynamic unconscious, and transference. By dropping those portions that no longer harmonize with contemporary research we allow the stronger parts of the theory to better compete with contemporary ideas. In this way, the grand theories can remain with us: Perhaps not in their entirety, but according to their strengths. In this regard, Funder's (2001) *Personality Puzzle*, is notable for the contemporary spirit with which it illuminates the traditional theories.

The field of personality psychology is an institution embedded in the discipline of psychology that can naturally promote integrations and a vision of the whole person. In the integration shown here, structural models of personality are presented that, arguably, cut across various theories toward a generic view of the system (Craik, 1998). This generic view can inform research both in personality psychology and in allied fields such as clinical psychology, and help, with other integrations, to lead the discipline toward a more positive and powerful future.

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