

A SYSTEM-TOPICS FRAMEWORK FOR THE STUDY OF PERSONALITY

JOHN D. MAYER

University of New Hampshire, Durham

ABSTRACT

Organizational frameworks help communicate the knowledge of a given field so as to promote that field's research, education, and applications. This article develops one possible framework for the organization of personality psychology. The framework's rationale, based on General Systems Theory, is developed and its organization is described. This organization, which includes several topics each subdivided into multiple perspectives, is specifically intended to accommodate both the elements of specific theories in personality psychology (e.g., psychodynamic, humanistic), as well as contemporary research in the field both related and unrelated to those theories. Examples are provided of how the framework might be applied. Its potential strengths and weaknesses are evaluated.

Organizational frameworks help communicate the knowledge of a given field so as to promote that field's research, teaching, and applications. In the case of personality psychology, a unifying framework can create a means by which the exposition of personality theory and research can take place, as well as being of potential use for describing an individual person. The framework for any field is no more than a lowly outline; what makes the framework outline sublime, however, is that it organizes the most important work that has taken place in the field in the most integrated and clearest possible fashion. Such a framework for personality psychology would organize the information in the field; it is different from a personality theory in that it does not necessarily attempt to explain all the phenomena about a person. Nevertheless, an integrated framework of personality encourages scientific progress by clearly defining what scientists are doing, creates a shared body of knowledge for the next generation of personality

psychologists to learn from, and communicates personality to consumers of the field through applications to both personality assessment and prediction [1].

During the infancy of personality psychology, Sigmund Freud employed psychodynamic theory as a framework for organizing the field [2]. But as new theories emerged along with research to test them, single-theory frameworks became increasingly limited in their potential contribution to organize the burgeoning field. One adaptation was the development of both comparative (and non-comparative) theory-by-theory frameworks for organizing personality [3, p. 1]. The prevalence of such frameworks indirectly led to a division in the field between theoretical frameworks for organizing the field, on the one hand, and the field's research, on the other. On the one hand, textbooks mostly arranged personality topics according to those theories that researchers rejected as being overly speculative. On the other hand, researchers narrowed their foci to a few critically important problems often outside the scope of such theory [4-6]. Researchers who rejected theoretical approaches attempted alternative organizations of the field including organizations focused on individual differences, and more recently, topical approaches organized by field of research [7]. Whereas theory-based frameworks omitted much of the research appearing in the personality's leading scientific journals, research frameworks often deemphasized their intellectual debt to earlier theories and lacked a coherent expository plan by which to describe a whole person. There was a significant loss in virtually every area of personality. As a result, research, theory, and not inconsequentially the ability to recruit outstanding students into the field became hampered.

It is the purpose of the present article to develop one possible organizational framework for the field that will here be referred to as the System-Topics framework. The System-Topics framework borrows certain key concepts from General Systems Theory [8] to create one possible organization that can encompass both personality theory and research. In so doing, it will bring important research questions into theoretical focus. Note that the framework is only intended to focus questions rather than answer them as would a theory. The general plan of this article will be 1) to review the frameworks for organizing personality presently in use in the field, 2) to describe General Systems Theory and the System-Topics framework, 3) to apply the System-Topics framework specifically to the field of personality, and then 4) to evaluate its value.

PRESENTLY EXISTING FRAMEWORKS OF PERSONALITY

Not too many years ago, Murray and Kluckhohn's research-oriented framework for personality was a list of twenty-six rather eclectic points [9]. Today, researchers concentrate largely on microtheories which apparently require little in the way of organizational frameworks. Such frameworks for the field as exist are to be found in its diverse textbooks and a very limited number of research

collections [7, 10]. What follows is an inventory of the more popular among these theoretical and research frameworks.

Perhaps the simplest type of framework for presenting personality psychology is the *single theory* approach [3, p. 2]¹ that employs a particular theory to organize the field. Books employing such a framework begin with a theory or school of thought: *psychodynamic theory*, *humanism*, or *cognitive theory* and so forth. The theory is then used as a framework for organizing the field of personality. A contemporary example of such book is Polansky's *Integrated Ego Psychology* [11]. The theory dictates how personality is described and what research is most relevant to understanding it. This approach is valuable to the exposition or teaching of a particular theory. Most personality psychologists, however, are uncomfortable employing a single theoretical perspective because research has typically falsified important aspects of any such general theories worth examining [3].

A second theory-by-theory framework sequentially explains a series of individual personality theories (e.g., those by Freud, Jung, Adler, and Maslow). These theories are often grouped by orientation into larger classes such as the psychodynamic or humanistic. Each description of a theory is followed by a discussion of the research which it inspired, and the degree to which the research supports the theory. Some examples of books employing such a theory-by-theory framework include the classic Hall and Lindzey [12] as well as numerous contemporary competitors [13]. One form of this approach has been termed benevolent eclecticism because it gives each theory a hearing, but does not necessarily evaluate the theory's relative contribution, and does little to compare any given theory with another [3, p. 1]. Of course, personality theories often contradict one another on particular issues, or fail to address the same issues; moreover, certain theories are turn-of-the-century in outlook, whereas others are more contemporary (if not necessarily more accurate). Such an uncritical approach to the field necessarily yields a disjointed, unintegrated compilation of ideas.

A more sophisticated version of the theory-by-theory approach is the *comparative analysis* approach developed by Maddi. This approach:

transcends the limitations of benevolent eclecticism and partisan zeal . . . The overall aim . . . is to discover the similarities and differences among many existing theories of personality as a starting point for determining which type of theorizing is most fruitful . . . [3, p. 3].

Maddi's comparative analysis divided personality into a person's innermost qualities (termed *core*), on the one hand, and those that deal with personality as expressed to the world (*peripheral*), on the other [3]. Maddi then grouped together those theories that consider the core of personality to be in conflict versus those which consider it to be consistent and reviewed them. He also repeated this

¹ Maddi labeled this single-theory approach, "partisan zealotry."

theory-by-theory procedure for the periphery of personality. But the core-versus-peripheral classification, although providing useful organization, seems to highlight a particular set of issues concerning personality without a strong rationale for choosing those particular issues and at the expense of other issues that may be no less critical to the study of the field.

Still another type of framework is the *individual differences* approach, in which a researcher spells out those major traits (e.g., intelligence, extraversion, etc.) upon which most people vary, and the implications of such variation. An example of this approach is Tyler's volume, *The Psychology of Human Differences* [14]. The advantages of such an approach are to collect together major findings of trait-psychology. The limitations of this approach are that it treats each trait-component of a personality in isolation and implies that the individual's personality can be described by the sum total of an individual's scores on a variety of tests [15, p. 8].

The final, most variable type of framework to be considered here (although there are still others) can be termed the *research topic* approach. It divides the subject matter of personality into areas chiefly according to those that have been afforded the most research. The *Handbook of Personality Psychology* [7] recently employed such a framework as do others [10]. Topics may be organized under categories; Pervin divides them by *theoretical perspectives*, *interfaces with other fields*, *intrapersonal/private*, and *interpersonal/public* aspects of personality. This research-topic approach has its advantages in conveying what is happening today in personality research. Perhaps its greatest weakness is that it may stress certain issues over others with no particular rationale other than that of the research's currency.

Each of the above frameworks has its particular application. For example, the theory-by-theory approach is helpful to obtaining a historical feeling for the field and grasping some of its major issues. The research-topic approach is particularly good for understanding contemporary research in the field. None of the above frameworks, however, are successful at integrating both theory and research together. Although a few especially good scientific authors have transcended the limits of those frameworks, no contemporary framework is entirely adequate and the search for alternatives continues.

RATIONALE FOR A SYSTEMS APPROACH TO DESCRIBING PERSONALITY

Widespread Acceptance of the Systems Definition of Personality Across Theories and Frameworks

In this section, I will describe the rationale and intellectual background from which the System-Topics framework emerged, beginning with the conception of personality as a system. Scientists became increasingly interested in understanding systems at the turn of the century. Whitehead wrote, "there are no brute,

self-contained matters of fact, capable of being understood apart from interpretation as an element in a system” [16, Part I, Chap. 1, Sec. IV, p. 14]. This occurred as the discipline of personality psychology emerged. Because personality is so obviously a system it was natural that the system concept would be applied to it from the beginning [17, 18].

Freud’s psychodynamic theory was so-named to reflect the dynamic forces taking place in a complex system [2]. The influence of systems thinking is also apparent in the titles of works by many personality psychologists of the time including Lewin [19] (“A Dynamic Theory of Personality”) and Maslow [20] (“Dynamics of Personality Organization”). Although Gordon Allport was known for his trait psychology, he introduced his classic work on traits by noting that “Nature has centered her most lavish concern . . . [upon] the amazingly stable and self-contained *system* of the individual living creature [15, p. 3; italics added]”, and Pervin’s *Handbook of Personality Theory and Research* begins by noting that:

. . . the organization of component parts [of personality] . . . is what is truly distinctive about the field, and . . . recognizing this would lead to a greater emphasis in research on the system aspects of personality functioning [7, p. 12].

The above examples represent diverse orientations within the discipline (e.g., psychodynamic, humanistic, trait, contemporary research, etc.). Such diversity is intended to substitute for an exhaustive discussion of sources, which would exceed the scope of any article-length treatment. I will continue this approach to supporting material throughout the article. To return to the argument, all these and many more personality psychologists explicitly treat personality as a system.

General Systems Theory and System-Based Approaches to Personality

There exist a smaller number of personality psychologists who not only considered personality a system but also believed that they could illuminate the study of personality in specific if they understood the principles of systems in general. These systems theorists joined with the like-minded scientists in other disciplines to help establish the field of General Systems Theory [21, 22].

The development of General Systems Theory occurred as a result of a theoretical movement whose members employed certain universal principles to describe systems. General Systems Theory joined together diverse fields that spanned from the investigation of mathematical models in engineering and biology to speculative papers in theoretical sociology [21]. Much of the pioneering work was done by von Bertalanffy, a mathematical/theoretical biologist who founded the enterprise [23-25]. Within the discipline of psychology, individuals employing General Systems Theory included Angyal [26], Gray, Duhl, and Rizzo [27], Krech

[28, 29], and Laslzo [17], among others. The field of cybernetics [30] grew out of General Systems Theory and influenced other psychologists as well [31].

General Systems Theory Considered

The biologically-oriented systems approach originated by Bertalanffy can be described according to a few basic concepts. The first was that there were different classes of systems. Central among these were the closed and open systems. Closed systems were likely to be inanimate and moved toward a state of entropy (i.e., low energy and disorganization). Open systems, in contrast, tended to be living and might actually increase in energy and structure. Open systems could do this because their boundaries were permeable, and could extract energy from the external environment.²

Within a given class of systems (e.g., open) there existed isomorphisms, which were similar organizational patterns that existed across diverse systems of that class. For example, similarities exist between certain systems despite the fact that they exist on different scales (e.g., society or personality). A dictatorial government represses the conflicts among people, just as a dictatorial ego represses conflicts within a person [32, 33, p. 35]. Thus, the exercise of control through repression is said to be isomorphic to both society and personality.

Additional concepts of General System Theory are more often applicable to issues of biology, the field from which it emerged, than to personality psychology. *Equifinality* had to do with the tendency of biological organisms to end at the same state despite alterations in the beginnings. *Dynamic morphology* was specific to a subarea of biology concerning specific predictions from metabolic rate to organismic size. *Homology* concerned the identification of correspondent organs across species [34, p. 87]. These concepts are either too particularistic or too advanced for application in psychology. For example, the application of homology to personality psychology may be premature given that the basic components of personality are still under dispute. Despite his encouragement to pursue similarities across diverse systems, von Bertalanffy warned that:

. . . the various approaches [to General Systems Theory] enumerated are not, and should not be considered to be monopolistic. One of the most important aspects of the modern changes in scientific thought is that there is no unique and all-embracing 'world system' . . . [8].

² The open and closed system concepts were introduced by von Bertalanffy as a means of addressing the hypothesis of Vitalism. Vitalism maintained that living organisms possessed a special quality that permitted them to increase their organization whereas most non-living systems lost organization. Von Bertalanffy's concept of the open system was a means of explaining this difference between live and mechanical systems without recourse to special vitalistic entities such as a special life-force.

The Present Approach and General Systems Theory

There are, however, means by which General Systems Theory can help to organize the study of personality psychology. Reference to the study of systems *in general* raises the question, “What are the things we should first learn about any system in general—and, in particular—about the personality system?” The System-Topics framework developed here employs the important commonalities across systems to discover what needs to be asked. To do this, it assumes that certain standard topics are often understood and employed for describing systems, whether those systems are biological, social, or psychological. That is, the System-Topics framework first elucidates a basic approach for describing personality, isomorphic to that descriptive approach employed for other systems.

A (NEARLY) STANDARD DESCRIPTION OF SYSTEMS AS THE BASIS OF THE SYSTEM-TOPICS FRAMEWORK

In the present section I will argue that a complex system can be described by first dividing it into three broad topics (to be described below), and by, second, employing complementary perspectives to understand each of the three topics.

The Three Basic Topics of Systems Exposition

Most systems theorists agree that a system is made of its components, defined by its organization, and develops according to a combination of the things that cause it to proceed toward or away from its given status or purpose. There is considerable agreement between this contemporary view of systems and classical notions of explanation. Aristotle [35, c. 335 BCE] proposed several categories of explanations of things including that of which a thing is made (the *material*) which in the case of a system can be thought of as its components; and the defining features or properties of an object (the *formal*) which can be thought of as the system’s organization. Aristotle’s additional two modes of explanation were the causes of the object (the *efficient*), and the reason for which the object exists (the *teleological*), which together can be thought of as indicating how a system changes over time. Thus, both contemporary and classical writings can be used to support the utility of describing a system according to 1) its components, 2) how these components are organized, and 3) how the components and organization change over time.

To convince yourself that this approach is near-standard, look at the description of any system—mechanical, biological, or societal—in an encyclopedia. The system description involves just such an exposition. Thus, the solar system consists of “the *sun* and all objects that travel around it” [36, p. 580], or in another source, “consists of the Sun and all matter under the gravitational control of the sun in its 225,000,000-year period of revolution around its galaxy” [37, p. 504]. In such a description, sun and planets are the components, they are organized

according to an orbital pattern, and they change according to a multi-million year course through the galaxy. Such a breakdown applies equally well to biological systems. The (vertebrate) circulatory system, “is a network that carries blood throughout the body . . . [it] consists primarily of a pumping organ—the heart—and a network of blood vessels” [38, p. 559]; or, more extensively, “[it] contains two fluids, blood and lymph, and functions by means of two interacting modes of circulation, the cardiovascular system and the lymphatic system” [39, p. 400]. This same exposition holds true of social systems. “The term system of education,” states the *New Encyclopædia Britannica* [40, p. 118], “refers to a society’s total pattern of formal institutions, agencies, and organizations that transmit knowledge . . . no educational system is fixed or static but is always in a process of change . . .”. Following each of these entries is a well-organized exposition that includes sections devoted in turn to 1) the components of the system, 2) their organization, and 3) their development or change over time.

The *World Book* entry employs a system-like definition of personality [41, p. 302]: that it concerns the study of “The enduring patterns of behavior that make individuals different from one another . . . [and] how these patterns develop, how they are organized, and how they change.”³ But, in the encyclopedia (as well as in many textbooks) the personality entry is followed up with a theory-by-theory approach rather than the standard systems exposition. Later, I will outline how a System-Topics development might proceed.

The Contribution of Multiple Perspectives

Within each of the above topics, there exist a set of different possible perspectives. Von Bertalanffy recognized that it was not possible even for the brightest person to keep in mind all the different aspects of a system-topic at one time. For that reason it was necessary to develop complementary perspectives on such topics. For example, the components of a solar system are most commonly divided into sun and planets, but one could also examine its component magnetic fields. No more than can we see 180 degrees around us, can we understand all of a system at once; these different perspectives permit us to look around—each denotes a portion of truth about the system. Aware of Bertalanffy or not, most or all psychologists employ multiple perspectives when considering personality. For example, the rich quality of Freud’s psychodynamic theory depended in part on his self-conscious use of multiple perspectives [42, pp. 11-22; 43].

Absent the Topics framework above, however, it is easy to proliferate perspectives in an unorganized fashion. Thus, Rapaport’s [44] otherwise excellent systematization of psychoanalytic theory enumerated ten perspectives employed by Freud, but without the advantage of a topical organization. These ten included the

³ The *World Book* entry was authored by Lawrence A. Pervin, also the editor of the research volume referred to frequently in this article.

1) empirical, 2) Gestalt, 3) organismic, 4) genetic, 5) topographic, 6) dynamic, 7) economic, 8) structural, 9) adaptive, and 10) psychosocial. Rapaport himself felt uncomfortable suggesting so many perspectives, and noted:

. . . it is likely that seven of these ten points of view which we have discussed here will, in future systematic treatments, be condensed into the five (dynamic, economic, structural, genetic, and adaptive) metapsychological points of view . . . The remaining three points of view (empirical, Gestalt, and organismic) seem to be of a different character, and lumping them together with the metapsychological points of view is another indication that the systematization here attempted is premature [44, p. 65].

It is possible to preserve Rapaport's ten perspectives with slight modifications, however, by grouping them according to the above topical system. For example, both the topographic and structural approaches involve perspectives on personality components (unconscious, conscious; id, ego, superego). If the Topics approach is so clear, however, it is worth considering why it has not been more employed.

HISTORICAL IMPEDIMENTS TO APPLYING THE SYSTEM-TOPICS FRAMEWORK TO PERSONALITY PSYCHOLOGY

System-Based Approaches to Personality and the Problem of Personality Components

I think the central reason that the System-Topics exposition I have described was not applied to personality psychology was because it was difficult to feel secure concerning what the components of personality were. Andras Angyal wrote a little-known but admirable book-length treatment devoted to applying General Systems Theory to personality [26]. It is an often-repeated tenet of General Systems Theory that any given system also interacts with the systems around it. In a manner consistent with General Systems Theory, Angyal viewed personality as connected directly to the entire biosphere (a term he may have first introduced). In his description, Angyal perhaps oversimplified this connection by largely omitting the intervening systems of family, society, and culture. Regardless, he believed that personality was forever involved in uniting and differentiating itself from this biosphere. Although in one sense Angyal's approach was very consistent with General Systems Theory, his description of the interaction between personality and larger systems was so abstract that he lost track of the distinguishing features of personality itself. For example, he wrote that one set of personality components:

. . . are not distinguished as expression and expressed (surface-depths) or means and ends (progression), but exist side by side, forming the *dimension of breadth*, or, as we may call it, the *transverse dimension* [26, p. 269].

This transverse dimension, Angyal goes on to say, utilizes its personality components so as to bring about an action, but he neglected any further specifications of its components. Perhaps Angyal thought that, having focused on the function of the personality system as a whole and its embeddedness in the biosphere, it was unnecessary or uninteresting to proceed further into a discussion of what the parts of personality were. The normally charitable Hall and Lindzey, in their theory-by-theory coverage of the field, characterized Angyal's thinking as, "lost in the whole universe [12, p. 274]."

The problem of identifying personality components existed for other systems theorist as well. Krech [28, 29] attempted to address the nature of personality components with greater specificity than did Angyal. Perhaps because he theorized during the heyday of behavioral influence and rhetoric, Krech appeared embarrassed by the obviously hypothetical aspects of personality components. His solution was:

. . . to take the plunge and announce that henceforth our hypothetical constructs (through the use of which we hope to understand all behavior and experience) are to be conceived of as molar neurological events—that and nothing more [28, p. 288].

Having taken this dramatic reductionistic approach, Krech, too, apparently felt the further delineation of personality components was largely unnecessary. This led to the disappearance from personality research of any viable systems-oriented personality theory at that time. After the 1950s, the field of personality became a patchwork of microtheoretical fiefdoms, and the overall influence and prestige of personality psychology waned [4-6]. Perhaps for this reason, new general organizations of the personality area were developed on an ad-hoc, atheoretical basis. The rebound of interest in the field, of which much has been written [7], has not yet explicitly produced a systems view of personality.

Other Approaches to Personality Components

Paradoxically, theorists less affiliated with the General Systems Theory were quite interested in delineating the components of personality. Freud divided personality into the id, ego, and superego. Allport [15] divided the mind into traits, Murray and Kluckhohn [9] divided it into needs, Maslow [20] into syndromes (trait-like processes) and Pervin's [7] more contemporary research collection contains research relevant to all of these components. So many components of personality have been proposed, in fact, that it would be impossible to list them all. I believe the components of personality form a coherent topic and that the various

Table 1. An Outline of a Provisional System-Topics Framework

Topic	Perspectives on Topic	Examples
Components	Faculties/enabling mechanisms Traits Control mechanisms	Sensation, memory Conscientiousness Ego, self
Organization	Outside control Distributed control Hierarchical control	Obedience, hypnotic states Cognition and affect Conscious control
Development	Stability Cyclical change Normative stages Prescriptive change	Trait theories Mood swings Stage theories Self-actualization

components suggested by theorists and researchers represent complementary divisions of the topic than can be organized together.⁴ I will briefly sketch how such an exposition might work. After describing such components, I will further sketch several perspectives on their organization and development. The topics I will be covering, and the perspectives on them, are outlined in Table 1. I will further describe these topics and perspectives as I discuss them below.

A SAMPLE SKETCH APPLYING THE SYSTEM-TOPICS APPROACH TO PERSONALITY

First System Topic: The Components of the System

A personality component can be defined to include any identifiable and distinguishable structure, process, or “output” of the mind. Personality components can

⁴ Components proposed by competing theories have often been viewed as irreconcilable. There are, in fact, pressures to keep theories distinct. Careful distinctions serve the pedagogical purpose of keeping each theory memorable, and indicating it is worth learning in-and-of itself. Some theories are also distinct from one another because of squabbles having more to do with personal politics than scientific differences of great import. Although I am sensitive to the great differences in their styles, much of Freud’s psychoanalytic theory and Jung’s psychoanalytical theory are cut from the same mold but were divided apart by the two theorists fighting with one another and each therefore refusing to accept accounts of psychological processes made by the other. Despite apparent distinctions, even quite different-appearing psychological theories are more compatible than at first glance. How else can we explain the fact that large portions of Freud’s psychodynamic theory have been successfully translated into behavioral, cognitive, and social psychological languages [61, 89, 90].

be very small (e.g., short-term memory) or very large (e.g., cognition) but most typically they are midsize structures such as “memory” or “aggression.” The sizes and levels of personality components can be conceived of as centering around a basic level, analogous to the basic-level of categorical description described by Rosch and her colleagues as conveying the greatest possible amount of information about an object [45].

The ensuing section will provide an initial sketch of how these components might be discussed rather than any final product. Nonetheless, this sketch can clarify the potential of the System-Topics framework for organizing theories and research. The above definition will suffice for now in this initial examination of what the components of the personality might be like.

Perspective 1: Enabling Mechanisms and Faculties

The division of the mind into subparts forms an ancient tradition in Western thought dating back at least to the ancient Greeks [46]. By the time of the middle ages, scholars divided the mind into three global parts: the rational, sensitive, and vegetable souls, each with several subsystems [47]. The rational soul was divided into understanding and reason. The sensitive soul, into five outward wits: touch, taste, smell, vision, and hearing, and five inward wits: memory, estimation, imagination, fantasy, and common sense (hence, the poem, “But my five wits nor my five senses can / Dissuade one foolish heart from serving thee”; 48, Sonnet CXLI, p. 1422). The vegetable soul was responsible for non-conscious, mostly bodily processes such as growth, secretion, and the like [47, pp. 156-162].

During the late 1650s, adherents to Faculty Psychology divided the mind into a new trichotomy of cognition, affect, and conation [49, p. 107]. These faculties were then often subdivided into those original functions denoted by the ten wits (e.g., memory, perception, and sensation), and augmented by lists of additional mental functions. Today, these faculties are sometimes labeled enabling mechanisms because they are mechanisms by which the mind performs a given function [50].

Perspective 2: Traits

When Allport developed his concept of the *trait*, it represented an alternative division of the mind to the enabling-mechanism/faculty approach. Allport quite consciously remarked on the alternative nature of his division:

Traits are not, like the faculties of old, abstractions derived from a theory of mind-in-general. There is no essential resemblance between impersonal faculties, as Memory, Will, and Sagacity on the one hand, and the focalized sub-structures of a particular mind (interests, sentiments, general attitudes) on the other [15, p. 339].

Allport recognized that a different perspective is employed when one divides the mind into traits than when one divides the mind into enabling mechanisms/faculties. Actually, there are a variety of perspectives on traits themselves that any full treatment of personality components would need to deal with. The central trait perspective dealt with here is that some traits represent sets of “interests, sentiments, [and] general attitudes.” Thus, the Big-Five trait, *conscientiousness* represents a complex of ideas and strategies for being responsible in social situations [51-53]. Similarly, the trait of Machiavellianism suggests that an individual has a personality component consisting of beliefs concerning the morality of means-ends behaviors in the world [54]. Certain of Murray’s *needs* may be traits in this sense. For example the *need for achievement* might represent groups of attitudes toward particular goal states. But other traits represent other perspectives on the mind. Averill has described traits as denoting behavioral outputs or “operating characteristics” [50]. For example, when we say a person is emotional we are describing the operation of the emotion system (an enabling mechanism). It is also possible that emotionality would be an emergent property of the organization of various system components. Such additional considerations would be important to cover in any more complete treatment of the components of personality.

Perspective 3: Control Mechanisms

There are other components besides those reflected by faculties and traits [2, 55]. One of Freud’s innovations was a concentration on components that didn’t merely enable personality such as a faculty, or describe a group of its attitudes such as a trait, but that *governed* it. Thus, Freud wrote of the ego:

It is the mental agency which supervises all its own constituent processes, and which goes to sleep at night, even though then it exercises the censorship on dreams [56, p. 7].

Research concerned with the components of personality reflect these multiple theoretical perspectives as well. Intelligence research examines work on enabling mechanisms (perception, memory, judgment, etc.; [57]). A great deal of trait research is conducted through the factor analysis of personality scales [53, 58]. Supervisory control structures are examined through considerable experimentation in the laboratory on the interaction between conscious control and the unconscious [59-61].

Summary of Perspectives and their Interrelations

The enabling mechanism, trait, and control mechanism perspectives on personality components are interrelated. It is as if the mind were a map and we wanted to describe the “components” of the land. In this simplified analogy, faculties such as sensation, perception, and memory may reflect the farms, forests, or minerals of the land. Traits such as conscientiousness and the need for

achievement are like businesses that exploit them for particular purposes. One is tempted to consider a control-structure like Freud's ego as analogous to business or government administrators deciding what is to be done with the land and its product.

The purpose of the framework is not to choose among perspectives but rather to collect them together, because each is likely to be useful for a specific purpose. The framework enables us to compare and contrast our definitions of personality components. Even this brief exposition suggests that what we commonly view as undifferentiated traits may in fact fall into important subclasses. For example, some traits such as machiavellianism [54] probably denote systems of attitudes, whereas other traits such as emotionality describe the variability and intensity of an enabling mechanism (i.e., the emotion system; [62, 63]). Still other traits such as ego strength may describe control at the level of the whole personality [64]. The framework therefore clarifies why, at some times, researchers may wish to divide personality processes or components into different classes and treat them separately [65].

The present section provides an incomplete picture of personality components; this topic is sufficiently complex to deserve its own treatment [66]. But the present section can serve to indicate how the system-topics approach to personality can begin to address and contribute to the investigation of personality components. Having undertaken such an exposition, we may consider the second topic, which is how the components are organized together.

Second System Topic: Organizational Principles

The particular components just described are largely unique to the personality system, and for that reason dividing up personality is an unfamiliar and therefore difficult matter. In contrast, we have daily opportunities to witness the ways in which systems are organized: we see various committees, administrations, governments, and the like, and frequently refer to systems as being organized under 1) outside control, 2) distributive control, and 3) hierarchical control. These perspectives are isomorphic to many systems in the sense that a hierarchical organization, for example, may be common to computers, governments, and personalities.

Perspective 1: Organization by Outside Influence

Some personality psychologists have viewed personality as organized according to outside control—by other people, institutions, or situations of one type or another. One such form of outside control is “mind control,” in which a person, willfully or otherwise, joins a group or an institution that will control much of his or her activities; for example, people may hand long-term control of themselves over to others should they choose to join a cult. Another example involves the hypnotized person who temporarily suspends planning functions and puts them in

the hands of an experienced hypnotist [67]. Personality can also be viewed as under control of various situations. Thus, we are quiet in the library, cheer for our team at the ballgame, and so on. Outside control of personality is typically only partial; that is, it usually interacts with the rest of personality [68]. Nonetheless, some extreme examples make clear that personality can be substantially controlled from the outside [69, 70].

Perspective 2: Distributed Organization

Another group of personality psychologists have viewed personality as organized across many subcomponents. After 1923, Freud viewed personality as distributed among the id, ego, and superego, by which he meant that each of the three subsystems contained some important aspects of personality function. Moreover, each system acted in concert or in conflict with its companion systems. Thus, the superego might ally itself with the id to battle the ego. This independent operation of such systems leads to a personality that is influenced by them all. Some theorists believe it is this distribution of control that leads in part to unconscious behavior. According to this view, consciousness is only one part of personality, and it is incompletely connected to the other organizational and control processes that occur throughout the mind. Moreover, its limited processing capacity further constricts its awareness of the overall actions of the personality system [59, 61, 71].

Personality can also be viewed as distributed across different levels of components (e.g., neurological versus psychosocial). An example of distribution across levels might be the case of an introvert who desires to be outgoing at the psychological level but is prevented from socializing by a neurological subsystem that is too easily overstimulated by the presence of other people [62]. Personality can also be distributed across classes of personality components (e.g., affect versus cognition) such as when an advertising writer's negative emotions constantly bring about negative rather than more useful positive cognitions concerning the product she is trying to sell [72].

Perspective 3: Hierarchical Organization

From the final organizational perspective to be considered here, personality systems are viewed as organized hierarchically, with a mostly unchanging executive exerting control over them. Murray and Kluckhorn labeled the controlling process the *regnant* process [9, p. 7]. Much of the time this executive is identified as consciousness. Conscious self-control is one of the few means we have of improving our selves and our lives. Only by making "conscious what is unconscious" [2, p. 435] can an individual creatively examine, analyze, and solve personal problems. The self-governing aspect of the person is likely critical to the continuance of both the individual and society. To some, this conscious or unconscious hierarchical control involves "a strong enough sense of self, based on personally selected goals, that no external disappointment can entirely undermine

who he or she is" [73, p. 203]. A growing amount of contemporary research is concerned with such issues of self control.

Summary

As with the section on personality components, this sketch of personality organization is incomplete. But once again it indicates how a System-Topics framework could be employed to integrate and describe many of the notions of personality organization that arise in theoretical and research treatments.

Third System Topic: Personality Through Time

Finally, personality can be thought of as occurring over time. Here I will briefly mention four perspectives: that personality 1) is stable, 2) is cyclical, 3) develops over time, and 4) can develop according to a prescription. I will treat these perspectives more briefly than earlier ones because the general character of the framework should now be more apparent. A variety of theorists and researchers have viewed personality as relatively stable. Freud believed certain aspects of character were established by an early age and remained stable thereafter. Trait researchers, too, view personality as partially stable [74]. For example, intelligence-levels are relatively constant throughout the lifespan [57, p. 337]. While some portions of personality remain much the same, a second perspective is that personality follows rhythms. For example, each day we awaken and then sleep. And, as another example, each week the moods of American students proceed through a seven-day cycle, with peak happiness on the weekends, and unpleasantness during the week [75]. By far the most common perspective on personality over time is that it develops according to certain "normative" patterns. For example, in the social/affective sphere psychologists believe that individuals pass through psychosocial stages such as Erikson's eight stages [76]. Singer [77] believes that an increasingly researched normative theme is that individuals attempt to balance autonomy, on the one hand, with affiliation on the other [78, 79]. The final perspective concerning personality over time dealt with here is that various psychological interventions can cause people to grow according to a prescribed, optimal plan. Thus, Freud believed that even a neurotic could learn "to work and to love" with the proper assistance. Humanistic psychologists recommend contacting one's true self [79, 80]. Another prescription is to altruistically prepare the groundwork for one's future self so that he or she will have a good time of it [81]. Still others have recommended seeking particular states of consciousness [73]. The present framework's purpose would be to draw together these various views for examination and comparison. Each temporal perspective is likely descriptive of some components and/or organizations but not of others.

DISCUSSION

The field of personality requires a coherent expositional framework so as to integrate and communicate its findings. A number of organizational frameworks exist for the study of personality psychology including the single-theory, theory-by-theory, individual differences, and research-topics approaches. Each of these frameworks has a particular set of advantages and disadvantages associated with it. No one framework in use today, however, adequately integrates together theory and research to address personality as a system.

My purpose has been to show that the development of a more integratory framework is possible, and that we could learn how to develop this by examining how systems like personality are typically described. My reading of the systems literature strongly suggests that a standard approach is employed to describe a system including coverage of its components, the organization of such components, and the way they change over time; multiple perspectives are required to study each topic.

I made a speculative suggestion that system theory in personality never adequately addressed the first (and most difficult) question of what the components of the personality system are, and that this was due to the idiosyncracies of individual theorists, and the influence of a holistic zeitgeist. I then sketched out one possibility for what such a topical treatment of personality components might look like today. The components of personality can be divided into enabling mechanisms/ faculties, output characteristics such as traits, and other groupings, depending upon one's perspective. I next examined the second topic of how these personality components might be organized. Examples were given of how personality can be organized from the outside, or can be distributed across components, or can be organized hierarchically from the top, down. The final topic concerns aspects of personality that are relatively stable across time, or that fluctuate according to cycles, develop according to normative developmental stages, or according to prescriptive objectives. Although the initial sketch of how such topics might ultimately be treated is incomplete, I have attempted to indicate the potential of the proposed framework to integrate theory and research by showing how influential theoretical concepts such as Freud's ego, on the one hand, and higher researched concepts such as traits, on the other, can be covered together because they are both personality components.

Research Considerations

The System-Topics approach focuses attention on a series of research problems that have not received the attention that they should. The fact that a satisfactory delineation of personality components is difficult to fashion at present highlights two limitations in personality research. First, few literature reviews and even fewer individual research reports have been self-consciously concerned with the identification and organization of components of personality, although there are

exceptions [82, 83]. It is possible to consider much trait research as concerned with identifying certain types of basic personality components, but traits are only one type of component, and the mental structure of such components has received relatively little attention [see 82]. The present framework argues for a broader attempt at developing criteria for such components. Agreed-upon criteria for identifying personality components are underdeveloped, with insufficient attention paid to work that does exist in the area [84]. Identifying such components permits more sophisticated understanding of the other topics. For example, rather than ask whether personality is stable or changing (as in the Topic concerned with change over time), it makes more sense to ask which parts of personality change [51].

Rearranging the Particulars of Personality

In addition to its implications for prioritizing research tasks, the present framework can facilitate the research task. Each personality theorist and/or researcher in the field has identified and studied one or more of the puzzle pieces of personality: ego, machiavellianism, distributed control, stage development. But each scientist's set of concepts holds fewer pieces than are necessary to solve the problem of personality as a whole. Thus, factor theorists such as Eysenck [62] concentrate on components, those who study the unconscious may concentrate more on organization [59], and still others focus on development [64, 76]. Moreover, many pieces held by researchers are doubles or near doubles.

Thus, Freud's [2, p. 429] ego-ideal, Roger's ideal self [85], Higgins' self-discrepancy theory [86], and certain of Markus' possible selves [87] all contain concepts that are closely connected and sometimes repeatedly developed. The System-Topics approach collects together these pieces in one box, and sorts them. It lays out all (or most of) the pieces together so that doubles may be discarded and a relatively complete picture assembled. This helps the researcher sort quickly through the alternatives relevant to a particular area; it enables him or her to test how well a particular idea (e.g., a trait) fits in with others (e.g., faculties). Moreover, although the puzzle is still incomplete it enables us to step back and see which pieces are missing and how the picture of personality is developing as a whole.

Are Three Topics Sufficient?

The three topics: personality components, their organization, and their development, are probably not all that are needed to describe personality. There are other topics recommended by their popularity among field leaders. Pervin's volume on personality makes a distinction between intrapsychic and interpersonal personality that is parallel, in certain respects, to Maddi's core (intrapersonal) versus peripheral (interpersonal) distinction [7]. The topics I have proposed here are by-and-large intrapersonal, and it may be useful to employ a fourth topic that we

might call *position* because it deals with the personality system's place amidst other social systems including the family and educational systems, as well as other biological systems such as the cortical and limbic systems. Another potential topic might be a class of miscellaneous descriptive perspectives which are employed to evaluate aspects of personality function (e.g., whether a personality component is normal or abnormal, and so on). The three topics with which I have begun, however, at least describe the intrapsychic personality which forms the most central part of personality psychology [88]. Interpersonal topics provide more of an interface with social psychology, although a critical one.

The Vagaries of Multiple Perspectives

The expository perspectives I developed for each topic are more speculative than the topics themselves. The specific perspectives neither exhaust the possibilities nor are of equal merit. For example, certain perspectives will be better because they have inspired more or better research than others; thus, traits are more researched than needs (this may indicate their greater utility or merely that they are easier to study). Because perspectives are often complementary rather than contradictory in the sciences, there is no strong need to limit perspectives; indeed, any such limitations may impede creativity in the field.

Specific Benefits of the System-Topics Approach

One specific benefit of this approach is the integration together of theory and research. Many researchers are reluctant to place their research in a theoretical context because whole theories often have discredited parts. Contemporary researchers who may in private acknowledge inspiration from the older theories are reluctant to draw connections publicly because, for example, the psychodynamic framework contains many incorrect or unscientific notions (e.g., hydraulic drives) in addition to the good ones (e.g., transference). But when psychodynamic theory is translated into a new language of, say, behaviorism [89], cognition [90], or social psychology [61], there often appear a great number of studies in the new areas that are closely congruent with the old psychodynamic notions. The System-Topics framework abbreviates this translation process by extracting the most useful portions of the theory, updating the concepts, and in the process integrating them with more contemporary constructs. A researcher unwilling to invoke the concept of "ego" because it seems particular to psychodynamic theory may be more willing to do so once the concept is situated along with similar ideas (e.g., the self; [87, 91]) more generally in the field. In this way, the continued use of such a framework may rehabilitate many good scientific concepts that are connected to now-discredited theories and thereby provide more fertile, creative ground for researchers.

Moreover, if each perspective yields some truth respecting personality, then some increment in prediction may be obtained by employing an additive model of

the person across perspectives—rather than any single perspective alone. This is regularly accomplished today in research that employs multiple perspectives such as person-situation interactionism, which combines two perspectives on organization (outside control and distributed control), and the use of state-trait measurement in the study of mood (which combines stability versus change perspectives; [93]). No doubt, influences do not always combine in a simple additive fashion. Nonetheless, the success of additive models is meaningful and provides a valuable inroad to this complex problem.

The gain will also apply to our attracting outstanding students from whose ranks must come the next generation of personality psychologists. Years ago, while teaching my original theory-by-theory course on personality I had been approached by engineering students and told, “it’s just a collection of theories and nothing is put together like in a real science.” Organizing personality courses according to the framework described here may lead students to complete such courses with greater satisfaction and respect toward the field [94, 95]. I think the System-Topics framework makes the science of personality more visible.

General Benefits of the System-Topics Approach

There are a number of potential benefits awaiting a shift to the System-Topics perspective. Most organizing frameworks today emphasize either theory or research. Theory is favored in the *single-theory* and *theory-by-theory* approaches; research in *individual difference* and *research topic* approaches. It is important, however, to integrate theory and research. On the one hand, our discipline cannot afford to discard its personality theories, for these provide us with rich insight into human nature—they provide the excitement and human meaning in our field. On the other hand, our discipline cannot dispossess its personality researchers, ignoring all those among them who are not explicitly identified with a traditional theory. The future of our understanding of personality depends on those researchers. In short, the future of personality psychology depends on the combination of theory with research in a non-dogmatic, integrated fashion. I believe the System-Topics framework I have outlined shows promise for attaining this goal.

ACKNOWLEDGMENTS

The author gratefully acknowledges the assistance of James Averill, Robert McCrae, and Jerome Singer, who read earlier drafts of this manuscript, and also the assistance of his excellent colleagues in (and visitors to) the Personality and Social Psychology area at the University of New Hampshire, particularly Rebecca Warner, Ellen Cohn, David Sugarman, Danuta Bochenska, Deborah Hirsch, Glenn Geher, and Dennis Mitchell.

REFERENCES

1. W. Bevan, Contemporary Psychology: A Tour Inside the Onion, *American Psychologist*, 46:5, pp. 475-483, 1991.
2. S. Freud, *Introductory Lectures on Psychoanalysis*, J. Strachey (ed.), W. W. Norton, New York, 1917/1966.
3. S. R. Maddi, *Personality Theories: A Comparative Analysis* (3rd Edition), The Dorsey Press, Homewood, Illinois, 1967.
4. R. Carlson, Where is the Person in Personality Research?, *Psychological Bulletin*, 75:3, pp. 203-219, 1971.
5. W. G. Johnson, H. E. Wildman, C. Downey, and S. Bell, Personality: Trends in Theory and Research, *Social Behavior and Personality*, 8:2, pp. 209-211, 1980.
6. R. R. Sears, Personality Theory: The Next Forty Years, *Monographs of the Society for Research in Child Development*, 24 (Series No. 74:5, pp. 37-50), 1959.
7. L. A. Pervin, A Brief History of Modern Personality Theory, in *Handbook of Personality Theory and Research*, L. A. Pervin (ed.), Guilford, New York, 1990.
8. L. von Bertalanffy, General Systems Theory: A Critical Review, *General Systems*, 7, pp. 1-20, 1962.
9. H. A. Murray, and C. Kluckhorn, Outline of a conception of personality, in *Personality in Nature, Society, and Culture*, 2nd Edition, C. Kluckhorn and H. A. Murray (eds.), Alfred A. Knopf, New York, 1956.
10. V. J. Derlega, B. A. Winstead, and W. H. Jones, *Personality: Contemporary Theory and Research*, Nelson/Hall, Chicago, 1991.
11. N. A. Polansky, *Integrated Ego Psychology*, Aldine de Gruyter, 1991.
12. C. S. Hall and G. Lindzey, *Theories of Personality*, John Wiley & Sons, New York.
13. J. Burger, *Personality*, 3rd ed., Wadsworth, Belmont, California, 1993.
14. L. E. Tyler, *The Psychology of Human Differences*, Appleton-Century-Crofts, New York, 1965.
15. G. W. Allport, *Personality: A Psychological Interpretation*, Holt, Rinehart, & Winston, New York, 1937.
16. Whitehead, *Process and Reality*, Free Press, New York, 1929/1978.
17. E. Laszlo, Ludwin von Bertalanffy and Claud Levi Strauss: Systems and Structures in Biology and Social Anthropology, in *Unity Through Diversity*, W. Gray and N. D. Rizzo (eds.), Gordon and Breach Science Publishers, New York, 1973.
18. W. Wundt, *Outlines of Psychology*, C. H. Judd, Trans., Wilhelm Englemann, Leipzig, (Original work published 1896), 1897.
19. K. K. Lewin, *A Dynamic Theory of Personality*, McGraw Hill, New York, 1935.
20. A. Maslow, Dynamics of Personality Organization I, *Psychological Review*, 50:5, pp. 514-539, 1943.
21. W. Gray and N. D. Rizzo, *Unity Through Diversity*, Gordon and Breach Science Publishers, New York, 1973.
22. R. R. Grinker (ed.), *Toward a Unified Theory of Human Behavior*, Basic Books, New York, 1956.
23. L. von Bertalanffy, Theoretical Models in Biology, in *Perspectives on General Systems Theory*, E. Taschdjian (ed.), George Braziller, New York, pp. 103-114, 1975a.
24. L. von Bertalanffy, A Biological World View, in *Perspectives on General Systems Theory*, E. Taschdjian (eds.), George Braziller, New York, pp. 115-126, 1975b.

25. L. von Bertalanffy, New Patterns of Biological and Medical Thought, in *Perspectives on General Systems Theory*, E. Taschdjian (ed.), George Braziller, New York, pp. 40-52, 1975c.
26. A. Angyal, *Foundations for a Science of Personality*, The Commonwealth Fund, New York, 1941.
27. W. Gray, F. J. Duhl, and N. D. Rizzo (eds.), *General Systems Theory and Psychiatry*, Little Brown, Boston, 1969.
28. D. Krech, Dynamic Systems, Psychological Fields, and Hypothetical Constructs, *Psychological Review*, 57:5, pp. 283-290, 1950a.
29. D. Krech, Dynamic Systems as Open Neurological Systems, *Psychological Review*, 56:6, pp. 345-361, 1950b.
30. N. Wiener, *The Human Works of Human Beings: Cybernetics and Society*, Da Capo Press, New York, 1954/1988.
31. C. S. Carver and M. F. Scheier, Origins and Functions of Positive and Negative Affect: A Control Process View, *Psychological Review*, 97:1, pp. 19-35, 1990.
32. A. G. Greenwald, The Totalitarian Ego: Fabrication and Revision of Personal History, *American Psychologist*, 35:7, pp. 603-618, 1980.
33. J. L. Singer, *The Human Personality*, Harcourt Brace Jovanovich, San Diego, California, 1934a.
34. L. von Bertalanffy, Homology: The History and Meaning of a Concept, in *Perspectives on General Systems Theory*, E. Taschdjian (ed.), George Braziller, New York, pp. 85-96, 1975d.
35. Aristotle, Physics [Book II, Chapter 3]. In *A New Aristotle Reader*, J. L. Ackrill (ed.), Princeton University Press, Princeton, New Jersey, (pp. 98-100), c. 335 BCE/1985.
36. L. L. Wilkening, S. v., "Solar System," *World Book Encyclopedia*, vol. 18, 1992a.
37. G. W. Wetherill, S. v. "Solar System," *New Encyclopedia Britannica (15th Edition)*, vol. 27, 1986a.
38. F. L. Abel, S. V., "Circulatory System," *World Book Encyclopedia*, vol. 4, 1992b.
39. M. F. Oliver, 15th Edition, S. v. "Circulation and Circulatory System," *New Encyclopedia Britannica (15th Edition)*, vol. 16, 1986b.
40. P. W. Goetz, 15th Edition, S. v. "Education, Systems of," *New Encyclopedia Britannica (15th Edition)*, vol. 18, 1986c.
41. L. A. Pervin, S. V., "Personality," *World Book Encyclopedia*, vol. 16, 1992c.
42. O. Fenichel, *The Psychoanalytic Theory of Neurosis*, W. W. Norton & Company, New York, 1945.
43. J. Strachey, Editor's introduction, in *S. Freud's 1960 The Ego and the Id*, W. W. Norton, New York, pp. ix-xvii, 1960.
44. D. Rapaport, The Structure of Psychoanalytic Theory: A Systematizing Attempt, *Psychological Issues*, 2:2, pp. 1-158, [Monograph 6], 1960.
45. E. Rosch, C. B. Mervis, W. Gray, D. Johnson, and P. Boyes-Braem, Basic Objects in Natural Categories, *Cognitive Psychology*, 8:3, pp. 382-439, 1976.
46. A. O. Ross, *Personality: The Scientific Study of Complex Behavior*, Holt, Rinehart, & Winston, New York, 1987.
47. C. S. Lewis, *The Discarded Image*, Cambridge University Press, Cambridge, England, 1970.

48. W. Shakespeare, *The Complete Works of William Shakespeare*, W. A. Wright, ed., Doubleday & Company, Garden City, New York, 1936.
49. E. R. Hilgard, The Trilogy of Mind: Cognition, Affection, and Conation, *Journal of the History of the Behavioral Sciences*, 16:2, pp. 107-117, 1980.
50. J. R. Averill, The Structural Bases of Emotional Behavior: A Metatheoretical Analysis, *Review of Personality and Social Psychology* 13, pp. 1-24, 1992.
51. P. T. Costa and R. R. McCrae, "Set like plaster?", Evidence for the Stability of Adult Personality, in *Can Personality Change?*, T. Heatherton and J. Weinberger (eds.), American Psychological Association, Washington, DC, in press.
52. L. R. Goldberg, The Structure of Phenotypic Personality Traits, *American Psychologist*, 48:1, pp. 26-34, 1993.
53. O. P. John, The "Big Five" Factor Taxonomy: Dimensions of Personality in the Natural Language and in Questionnaires, in *Handbook of Personality*, L. A. Pervin (ed.), Guilford, New York, pp. 66-100, 1990.
54. R. Christie and F. Geis, *Studies in Machiavellianism*, Academic Press, New York, 1970.
55. J. A. Fodor, Precis of "The Modularity of Mind," *The Behavioral and Brain Sciences*, 8, pp. 1-42, 1985.
56. S. Freud, *The Ego and the Id*, J. Strachey (ed.), W. W. Norton, New York, 1923/1966.
57. A. Anastasi, *Psychological Testing (6th Ed.)*, MacMillan, New York, 1988.
58. H. J. Eysenck, Biological Dimensions of Personality, in *Handbook of Personality*, L. A. Pervin (ed.), Guilford, New York, pp. 244-270, 1990.
59. J. F. Kihlstrom, The Psychological Unconscious, in *Handbook of Personality*, L. A. Pervin (ed.), Guilford, New York, pp. 445-464, 1990.
60. D. Wegner, *The Handbook of Mental Control*, in press.
61. D. Weston, Psychoanalytic Approaches to Personality, in *Handbook of Personality Theory and Research*, L. Pervin (ed.), Guilford, New York, pp. 21-65, 1990.
62. H. J. Eysenck, *On Extraversion*, Wiley, New York, 1973.
63. R. J. Larsen and E. Diener, Affect Intensity as an Individual Difference Characteristic: A Review, *Journal of Research in Personality*, 21:1, pp. 1-39, 1987.
64. J. Block and J. Block, The Role of Ego-Development and Ego-Resiliency in the Organization of Behavior, in *Development of Cognition, Affect, and Social Relations*, W. A. Collins (ed.), (Minnesota Symposium on Child Psychology, Hillsdale, vol. 13, New Jersey, Erlbaum), 1980.
65. J. D. Mayer, P. Salovey, S. Gomberg-Kaufman, and K. Blainey, A Broader Conception of Mood Experience, *Journal of Personality and Social Psychology*, 60:1, pp. 100-111, 1991.
66. J. D. Mayer, A Framework for the Organization of Personality Components, manuscript submitted for publication, 1993.
67. E. R. Hilgard, *Divided Consciousness: Multiple Controls in Human Thought and Action*, Wiley, New York, 1977.
68. N. S. Endler and D. Magnusson, Toward an Interactional Psychology Personality, *Psychological Bulletin*, 83:5, pp. 956-974, 1976.
69. S. Milgram, *Obedience to Authority*, Harper & Row, New York, 1974.
70. P. G. Zimbardo, The Human Choice: Individuation, Reason, and Other versus Deindividuation, Impulse and Chaos, in *Nebraska Symposium on Motivation*, W. J. Arnold

- and E. Levine (eds.), University of Nebraska Press, Lincoln, Nebraska, pp. 237-308, 1969.
71. D. C. Dennett, *Brainstorms: Philosophical Essays on Mind and Psychology*, Bradford Books, Cambridge, Massachusetts, 1978.
 72. J. D. Mayer, Y. Gaschke, D. L. Braverman, and T. Evans, Mood-congruent Judgment is a General Effect, *Journal of Personality and Social Psychology*, 63:1, pp. 119-132, 1992.
 73. M. Csikszentmihalyi, *Flow: The Psychology of Optimal Experience*, Harper Collins, New York, 1990.
 74. S. Epstein and E. J. O'Brien, The Person-situation Debate in Historical and Current Perspective, *Psychological Bulletin*, 98:3, pp. 513-537, 1985.
 75. R. J. Larsen and M. Kasimatis, Individual Differences in the Entrainment of Mood to the Weekly Calendar, *Journal of Personality and Social Psychology*, 58:1, pp. 164-171, 1990.
 76. E. H. Erikson, *Childhood and Society, 2nd Edition*, W. W. Norton & Company, New York, 1963.
 77. J. L. Singer, Personal communication, Dec., 1992.
 78. C. Gilligan, *In a Different Voice*, Harvard University Press, Cambridge, Massachusetts, 1982.
 79. A. Maslow, *Toward a Psychology of Being, 2nd Edition*, Van Nostrand, New York, 1986.
 80. C. R. Rogers, *On Becoming a Person: A Therapist's View of Psychotherapy*, Houghton Mifflin, Boston, 1961.
 81. N. Haslam and J. Baron, Intelligence, Personality, and Prudence, in *Intelligence and Personality*, Ruzigs and R. Sternberg (eds.), in press.
 82. S. J. Read, D. K. Jones, and L. C. Miller, Traits as Goal-based Categories: The Importance of Goals in the Coherence of Dispositional Categories, *Journal of Personality and Social Psychology*, 58:6, pp. 1048-1061, 1990.
 83. A. H. Buss and S. E. Finn, Classification of Personality Traits, *Journal of Personality and Social Psychology*, 52:3, pp. 432-444, 1987.
 84. D. W. Fiske, Can a Personality Variable be Validated Empirically? *Psychological Bulletin*, 80:2, pp. 89-92, 1973.
 85. C. R. Rogers and R. M. Dymond, *Psychotherapy and Personality Change*, University of Chicago Press, Chicago, 1954.
 86. E. T. Higgins, Self-discrepancy Theory: What Patterns of Self-beliefs cause People to Suffer? in *Advances in Experimental Social Psychology*, L. Berkowitz (ed.), 22, pp. 93-136, 1989.
 87. H. Markus and P. Nurius, Possible Selves, *American Psychologist*, 41:9, pp. 954-969, 1986.
 88. J. L. Singer, The Private Personality, *Personality and Social Psychology Bulletin*, 10:1, pp. 7-30, 1984b.
 89. J. Dollard and N. Miller, *Personality and Psychotherapy*, McGraw Hill, New York, 1950.
 90. M. H. Erdelyi, *Psychoanalysis: Freud's Cognitive Psychology*, W. H. Freeman, New York, 1985.

91. S. Epstein, The Self-concept Revisited, or a Theory of a Theory, *American Psychologist*, 28:s,pp. 404-416, 1973.
92. H. Markus, Self-schemata and Processing Information about the Self, *Journal of Personality and Social Psychology*, 35:2, pp. 63-78, 1977.
93. J. D. Mayer and P. Salovey, Personality Moderates the Interaction of Mood and Cognition, in *Affect, Cognition and Social Behavior*, K. Fielder and J. Forgas (eds.), Hogrefe, Toronto, pp. 87-99, 1988.
94. J. Einhorn, Teaching Personality: Discovering the Difference between Self and Personality, *Teaching of Psychology*, 12:2, pp. 101-102, 1985.
95. A. K. Hess, The "Parts Party" as a Method of Teaching Personality Theory and Dynamics, *Teaching of Psychology*, 3:1, pp. 32-33, 1976.

Direct reprint requests to:

John D. Mayer
Department of Psychology
Conant Hall
University of New Hampshire
Durham, NH 03824