A Personality Framework for the Unification of Psychology

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We describe the Personality Systems Framework for organizing the discipline of psychology (J. D. Mayer, 2005). A tale of two visions: Can a new view of personality help integrate psychology? American Psychologist, Vol. 60, 294–307). The framework consists of a broad outline of topics that psychologists already research, along with a map of psychology’s location in relation to other systems of scientific study and a map of its inner psychological functions, such as “energy development” and “knowledge guidance,” which organize interrelated areas of research. The Systems Framework uncovers an organization that already is in partial use by psychologists, elucidates it, and uses an expanded version of the approach to better organize the field’s major topics. Examples of how the Personality Systems Framework can be applied to education, research, and translational work are provided.

Keywords: personality, systems framework, systems set, unification, unifying psychology, theory of psychology

People asked what it meant to be human, and why people acted the way they did long before the beginning of modern psychology (Robinson, 1976). The fields of philosophy and medicine attempted to answer those questions until psychology emerged specifically to address them (Ellenberger, 1956; Miller, 2011). Today, the big questions of psychology—Who am I? and What is human nature?—remain of continued interest to people (Mayer, 2007b). Yet we psychologists touch on big questions only rarely; most of us examine specialized topics within the field and favor the careful measurements, experimentation, and replications developed in our own areas of study. We ask: “What effect does norepinephrine have on executive control?” or “Under what circumstances will people help another person?” As specialists, we often pursue our own areas of interest with relatively little concern for how our own findings might fit together with those of others. Asking focused questions about key issues is a strength of the field, and yet our findings might fit together with those of others. As specialists, we often pursue our own areas of interest with relatively little concern for how our own findings might fit together with those of others. Asking focused questions about key issues is a strength of the field, and yet our increasing specialization also contributes to the field’s fragmentation (Goertzen, 2008; Henle, 1976). The potential danger is that the more we learn without regard to a unifying framework, the more fragmented our field will become. As examples:

- An undergraduate begins an introductory psychology course. Although she likes the professor and is interested in the many topics from neurons to working memory to language acquisition, she is uncertain how all the topics fit together, and she never quite achieves a sense of how the whole person operates.

- A researcher applies for a grant hoping to study 15 measures that predict drug abuse, including the traits of risk-taking and disagreeableness, as well as membership in drug-using peer groups. The researcher seeks a framework to organize the 15 variables, but settles on an ad hoc list.

- A client begins psychotherapy for a mild depression. Although the therapist explains to the client about how they will work together, describes depression itself, and comments on the client’s likely chance to improve, the client wishes the therapist could explain more clearly how the therapy will affect his mental processes.

The people in the cases above are seeking overviews and integrated explanations—an explanation that specialization, despite its many strengths, cannot provide. Specialization in the absence of integrating themes presents obstacles to education, research, and psychological interventions in the discipline.

One way to address such issues, we believe, is by rediscovering one of the original visions of psychology, and clarifying and updating that viewpoint. Our own specialty is personality psychology, and we and others often work as specialists in our research. But personality psychology also has a more holistic mission. Long ago, personality psychology was charged with pulling together parts of psychology and organizing them (Wundt, 1897), and we and others have started to take that assignment seriously (Mayer, 2005). We will argue that the Personality Systems Framework—the framework we will describe—is particularly well-suited to solve the fragmentation in the discipline, in that it allows for a nonsectarian, noncompetitive mapping of biological, psychological, and social perspectives in the spirit of some advocates of unification (Goertzen, 2008). As an aside, the Personality Systems Framework has also been referred to as the “Systems Framework for Personality Psychology” in earlier works (e.g., Mayer, 2005).

Organizing the Discipline of Psychology

The Personality Systems Framework can be described as a set of interrelated outlines and maps of mental life designed to integrate
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The molecular—molar dimension. Technically, Wundt’s arrangement of systems, from the smallest systems of study (e.g., neurons) to the largest system within the individual (overall personality), followed a molecular—molar continuum first outlined by the French philosopher August Comte in the mid-19th century as a means to organize all sciences according to the size of the systems they studied (Levy-Bruhl, 1903). Comte began with the physicist’s atoms and extended upward to the groups studied by sociologists. This molecular—molar dimension has considerable potential as a tool for integrating psychology (Sheldon, Cheng, & Hilpert, 2011). For example, it reminds us of how lower-level systems, such as brain areas, lead to the functioning of mid-level systems, such as an individual’s memory for people, and of how those memories, in turn, are a part of an individual’s personality. The molecular—molar continuum is represented as the vertical dimension in the depiction of Personality and its neighboring systems (see Figure 1). The dimension distinguishes among systems such as the brain and body (see Figure 1, bottom middle), psychology and its organizing personality processes (see Figure 1, middle), and the social systems that include the individual (see Figure 1, top). This organization is both intuitive and powerful, and it regularly surfaces in various forms.

For example, a few decades ago, Engel (1977) argued that physicians such as himself ought to take into account not only the medical conditions of their patients, but also the patients’ psychologies and social lives—they ought to examine the complete “biopsychosocial” continuum, as he termed it. The biopsychosocial continuum excerpts a portion of Comte’s molecular—molar continuum that is of particular relevance to physicians and psychologists.

The inner—outer dimension. As useful as the molecular—molar continuum is, a second dimension is also needed to specify psychology’s location amid its neighboring systems: an inner—outer dimension (e.g., Mischel & Shoda, 1995). This is represented as the horizontal dimension of Figure 1. Each of us is in a setting of some kind—at home or in a car or in the office or elsewhere. Our setting impacts our behavior: for example, we dress differently for work than for a baseball game. An analogy can be drawn to the theater, in which the stage setting, including its scenery, props, and related costumes help define how the actors play their parts (see Figure 1, bottom right).

The basic elements of the setting combine to form a situation—a patterned interaction that takes place outside the person with another person, or with a task, or with combinations of people and tasks. Situations include making dinner for one’s family, asking for a raise, or taking a dog for a walk (see Figure 1, middle right). We use our mental processes to identify a situation: we recognize that we are shoveling our driveway after a snowstorm in one instance, and that a neighbor is asking to borrow an egg in another. Because these situations are defined by their human meanings, they are depicted at a psychological level in Figure 1. The inner—outer dimension helps represent the mutual influences among people’s psychology, settings, and situations (Mayer & Korogodsky, 2011). The social groups and cultures that contain individuals also contain settings and situations, and they are found above them, spanning both individuals and their situations (as well as the lower-level systems that make them up; see Figure 1, bottom right).

Development. Finally, people and their environments develop over time (see Figure 1, depth dimension). As Erikson (1950) eloquently pointed out, as people grow and change, the social environments and the social institutions they interact with change with them. As infants, we interact with our parents or other caretakers and with childcare environments. As young children, we engage with elementary and middle school teachers. As college students, we attend colleges and universities, and as emerging adults, we may engage with professional training programs, newly formed families, and work environments (Arnett, 2000; Erikson, 1950). Our personalities adjust during these multiyear engagements—on average, we become more task focused in middle school, more open in college, and calmer and more socially dominant as adults (Roberts & Mroczek, 2008).

Personality Unifies Psychology

We believe the way professors approach the introductory course in psychology provides a concrete example of how our field is viewed and how it is organized. In the next sections, we refer to the introductory course regularly with the intent of using that course as
a concrete expression of the broader issues relevant to unifying the discipline.

The most popular introductory psychology textbooks are alike in many ways. Broadly speaking, textbook authors include a few discipline-focused chapters that describe psychology’s history, methods, purpose, and interdisciplinary reach. The greater number of chapters are psychology-focused, however, and concentrate on our mental lives; these chapters cover the brain, memory, personality, and social psychology, among others. The map in Figure 1 that positions personality reveals the organization of these psychology-focused chapters: in essence, the instructor “walks up the psychology box” (see Figure 1, middle-left), from key biological underpinnings such as neurons, to psychological systems such as perception, memory, and emotions, to individual expressions in the setting and situation, to personality. And from there, one continues upward to social groups and cultures. Because personality represents the organization of a person’s inner psychology, the personality chapter ought to represent a culmination of what has come before—a unified overview of an individual’s psychology—or so Wundt had believed.

But the current chapters on personality fail. The chapter on personality ought to complete what has come before—drawing together inner psychology before the course moves on to, say, social influences and applied areas, such as psychological disorders and psychology and law. Yet in most introductory textbooks, the chapter on personality is as fragmented as the rest of the book; perhaps the chapter is even more fragmented. During the mid 20th century, personality psychology was most commonly depicted as a competition among empirically untested (and perhaps untestable) grand integrating theories by such individuals as Sigmund Freud, Gordon Allport, and Carl Rogers (Hall & Lindzey, 1978). Moreover, the theories contradicted one another and failed to reflect the actual empirical work of the discipline (Mendelsohn, 1993).

Most textbook chapters convey these competing old theories, proceeding through a series of more or less unrelated topics, such as Freud’s psychodynamic theory, traits, and perhaps a touch of social cognition. It is particularly incongruous that many textbook chapters on personality still present an arguably outdated model—the id, ego, and superego—as if it were a current organization of personality functioning—even after many psychoanalysts who advocated for the division have themselves moved on to more contemporary views (Brenner, 2002).

How the personality chapter should be constructed. Personality psychology is far more integrated today than the typical introductory chapter on the topic might suggest. There is a clear consensus as to the central definition of personality, so let us start with the consensual statement that “...personality is a system of parts that is organized, develops, and is expressed in a person’s

Figure 1. Psychology and its neighboring systems. Psychological systems are shown relative to neighboring systems, according to a vertical molecular—molar dimension and a horizontal inner—outer dimension. Below the psychological systems are the individual’s brain and physical functioning; above the psychological systems—but still at the psychological level—is personality. Further above are the social groups and culture that contain people and situations. Outside the person are the individual’s setting (analogous to the stage setting of a play), and situation—regular, identifiable interactions with others, such as at home eating a meal, or at a sports game, or at work. The “development” dimension represents the changes the individual and environment undergo over time. Adapted from “A Tale of Two Visions: Can a New View of Personality Help Integrate Psychology?,” by J. D. Mayer, 2005, American Psychologist, 60, p. 297, and “A Really Big Picture of Personality,” J. D. Mayer and M. Korogodsky, 2011, Social and Personality Psychology Compass, 5, p. 107. Copyright 2005 by American Psychological Association and 2011 by The Authors, Social and Personality Psychology Compass, and Blackwell Publishing Ltd.
actions” (Mayer, 2007a, p. 1). Examples of personality’s parts include motives, mental models (schemas), and traits. The definition of personality as a system of parts can serve to integrate a person’s overall psychology in future revisions of introductory psychology texts (as Wundt foresaw). The Personality Systems Framework suggests three main topics of interest after identifying the location of our mental life: describing the essential parts of the system, the organization of the parts within different individuals, and developmental processes that formed those individuals. The intermediate topic, the organization of the mental system, is critical to drawing together a person’s psychological system. The organization almost always centers on the functions that our psychological systems carry out. In the early 20th century, a popular division was into motives, emotions, and cognition (Hilgard, 1980). Following that idea, although perhaps not always knowingly, the earlier textbook chapters had organized their coverage of mental life into emotions, cognition, and social expressions, in part.

But better divisions of mind are available today. Philosophers and psychologists use a small set of crucial rules to divide our mental processes into areas. These rules include keeping the divisions small in number, creating distinct areas of functions, and capturing most or all of the functional areas of mind known to psychologists of their day (Mayer, 2001). Applying these rules to our contemporary field, one possible division of mind is into four functional regions, shown in Figure 2. These four regions are: (a) energy development, including motivations and emotions, (b) action implementation, including procedural knowledge, motor activity, and social activity, (c) knowledge guidance, including cognition and intelligences, and (d) executive management, including conscious self-awareness and self-management. Collectively, these are referred to as the “Systems Set” (Mayer, 2001; Mayer, 2003).

This division follows the rules of separating the mind into functional areas, and it provides a more comprehensive coverage of mental functions than other divisions to which it has been compared. For example, in one study, nine graduate student judges sorted approximately 70 psychological traits into the four areas and into competing divisions (e.g., motivation/emotion/cognition). The panel had the highest levels of agreement in their classifications using the fourfold Systems Set division, and could classify 98.7% of the relevant traits in one area or another, com-

![Figure 2](image-url)
pared to an 87.3% classification rate for the next-best division (Mayer, 2003).

Each of the four functional areas represents psychological processes that reach from neuroscience up to personality. “Knowledge guidance,” for example, includes knowledge structures, problem-solving, cognition, and intelligence. The associated description (see Figure 2, middle left) indicates that it involves brain areas such as the hippocampus and the cerebral cortex (as well as many other systems). At a psychological level, studies of working memory and of knowledge structures—topics of cognition—are particularly relevant, as well as of language acquisition, and these collectively guide the individual at the level of overall personality. The topic of energy development (see Figure 2, bottom) includes the limbic system in the brain and, at psychological levels, motivations and emotions. These, in turn, help to animate the psychological system at the level of personality. Similar descriptions are provided for action implementation and for executive management (see Figure 2).

The personality chapter itself, in this approach, sets out the major functional areas of psychology using the model in Figure 2, or some variation of it. The definition of personality can be introduced. A statement can be made as to how the functional areas work together such as:

Now we can draw together all that we have learned to this point. A person’s mental system is energized by motivational and emotional processes, and is guided by the individual’s learning and reasoning. The system plans actions and behaves in the world so to fulfill its needs where possible, and it exercises self-control.

The simple statement above clarifies the organization of the introductory course’s coverage of the inner person, and, in so doing, it integrates an enormous amount of material for the student. To that central integration one can then delve, trait-wise, into the individual differences that distinguish us: for example, into individual differences in motivational, emotional, cognitive, and social traits. In addition, coverage could extend to personality dynamics: for example, how moderate levels of self-control are good for the individual, whereas overly strict self-control, or the lack of self-control, can lead to problems in living (Donnellan & Robins, 2010). In each instance, one can draw from the more specific areas of the field covered in the textbook that illuminate the problem. The trait of openness to experience, for example, is affected both genetically and environmentally (for example, it rises during a person’s college years), and a person’s openness can contribute positively to his or her intellectual functioning. A person expresses openness in such details as how he or she chooses to decorate an office or bedroom (Gosling, Ko, Mannarelli, & Morris, 2002).

Such integrations can also be explored with a case example. Consider the American writer Truman Capote (Breakfast at Tiffany’s and In Cold Blood), who repeatedly recalled being locked inside a strange hotel room while his parents went out drinking. His parents’ difficulties with alcohol—and his own difficulties with alcohol dependence later in life—could trigger a discussion of genetic transmission of addiction-proneness, its environmental triggers, and personality development more generally. Capote was soon transferred to the care of his aunts, but he still felt alone and isolated, which might prompt a discussion of avoidant attachment styles. He turned to writing as an outlet for his energies, which could trigger a conversation about language acquisition as a means to connect himself to others. From a cognitive—intellectual standpoint, Capote’s deliberate practice at writing as a child could initiate a dialogue about how people develop expertise. Motivationally, Capote had great ambitions for his writing, many fulfilled, which could prompt a discussion of the need for achievement. Emotionally, he experienced sadness, fear, and anger but also the joy of creation and the pleasures of friendship. Getting closer to the level of personality patterns, Capote suffered from rejection sensitivity (an acute fear of being rejected by others), and also exhibited great creativity as a writer (Schultz, 2005). Although Capote generally guided himself well, toward the end of his life his self-control seemed to falter, and his attachment issues resurfaced, as he threatened to expose the secrets of his high-society friends in a book, effectively severing his connections with them. Although we can never fully understand a person in all his or her real-world complexity, case examples illustrate concepts well and can be used in this context to depict how the many levels and functions of a person’s psychology come together to form a life.

Introducing the personality chapter with diagrams, such as those illustrated in Figures 1 and 2, provides a coherent summary of what has come before in the introductory textbook. The diagrams unpack and clarify the assumptions that have developed along with our discipline and make them explicit. In doing so, they allow for a better organization of the pivotal chapter on personality—the chapter which should serve as a bridge between the inner person and the subsequent chapters that typically cover the psychology of groups as examined by social psychologists, and applied topics such as abnormal psychology. More importantly, the chapter should explicitly serve as an apex for the book, with the unified personality of an individual serving as a point of connection among the psychological basics covered to that point.

Implications and Discussion

Encountering the whole field of psychology today is akin in some ways to entering a meeting without knowing the topic under discussion. We could save ourselves unwelcome confusion if someone whispered in our ear a quick summary of what was going on; it would help us to organize what we were hearing, as Bransford and Johnson’s (1972) now classic study indicated. In that study, participants read a paragraph about an activity that began:

The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities, that is the next step, otherwise you are pretty well set. It is important not to overdo things . . . (Bransford & Johnson, 1972, p. 722)

Participants who read that passage could recall the information far better when they were first informed it was about washing clothes.

The organizing idea here is that psychology is a system, and each individual’s personality must manage itself amid neighboring biological, situational, and social influences—and exert itself on its surroundings in return. Psychology today has a potentially excellent organization if only it were better recognized. The problem is to make the organization explicit, and
that is a great deal of what the Personality Systems Framework does.

Yet the Systems Framework must be actively employed to make it work. This includes using the outlines and maps provided here to clarify the location and function of mental life, and to illustrate how psychological functions from diverse levels and areas work together to shape behavior. Such discussions can be illustrated with a real-life case as well. The organization and maps illustrate how the specialized work in the field builds to a unified whole. Employing the Personality Framework provides the broadest integration of the field possible (Yanchar, 2000) and remedies the lack of shared general psychological knowledge that has grown from generation to generation of psychologists (Calhoun, 2004).

At the outset of this article, we noted three areas of psychology that are impacted by fragmented thinking: education, research, and psychotherapy. We have used the example of the introductory course to explain how the Personality Systems Framework can work in education in the first context.

 Turning to research, the psychologist, mentioned in the introduction, who sought to submit a grant to study various contributions to substance use, could organize the variables of interest according to the inner psychological functions based on the areas indicated in Figure 2, and connect them as well to underlying brain qualities and overarching cultural issues (see Figure 1). Ivcevic, Mayer, and Brackett (2002–2003) used this approach to examine the natural descriptions that people made of their personalities. They classified the depictions into the areas of the Systems Set (see Figure 2) so to organize them. For example, the self-description “I am a good judge of human character” is an example of a knowledge- and intelligence-related statement (knowledge guidance). Statements such as “I need to feel in control” and “I feel things deeply for myself and others” reflect motives and emotions (energy development; Ivcevic et al., 2002–2003, pp. 224–225). This organization allows for a broader depiction of personality than is typical. For example, although some categories such as motives and emotions are related to the Big Five personality traits, other such as self-regulation (e.g., losing one’s temper if treated disrespectfully) are plainly beyond the Big Five’s coverage (Ivcevic et al., 2002–2003). Well-chosen functional divisions of mind can bring more breadth to the area of personality measurement than is presently the case—and more fully incorporate research conducted through the field of psychology.

Turning to the psychotherapy client who wants to know something about how his therapy might work, one of us has argued that the Systems Framework can be illustrated with a real-life case as well. The psychotherapist can use depictions of mental functions to better explain how talking and relationship issues (such as the therapeutic relationship) can change cognition, and, ultimately, change feelings about relationships, by describing the causal sequences step by step through the chart (Mayer, 2004).

Throughout the integration process, the Personality Systems Framework avoids the compulsory acceptance of a single research paradigm or theory and invites the common themes that may exist in psychology to emerge empirically in multiple areas and levels of analysis. Rather than characterizing the discipline by subfields that compete with and try to discredit one another, the framework represents the field in a more flexible, organismic, and integrated way (Goertzen, 2008). We can obtain great gains by emphasizing how the specialized scientific areas of psychology grow as a whole, and how such knowledge can be integrated to enhance our insights into ourselves and others.

References


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