

Crucial Semantic and Linguistic Aspects of Personality

Gerard Saucier
University of Oregon

Invited chapter for *Cambridge Handbook of Personality*, G. Matthews and P. Corr (Eds.)

Correspondence should be addressed to:
Gerard Saucier
Department of Psychology
1227 University of Oregon
Eugene OR 97403-1227 USA
e-mail: gsaucier@uoregon.edu
tel.: 541-346-4927
fax: 541-346-4911

19 June 2007

Distinctions that refer to personality are embedded within languages, and form an important component of the semantic content of a lexicon. The science of personality builds on these distinctions that are represented in language. This chapter focuses on several crucial semantic and linguistic issues with regard to personality: (a) the scientific semantics of personality, especially in relation to aspectual types in language, (b) what kinds of content are included within the concept of personality, (c) effects of content (or variable) selection on findings, (d) possibly ubiquitous dimensions in the language of personality description, and (e) relations between individual and aggregated levels in personality, language, and culture.

Defining Personality

Definitions give clarity, making one's assumptions explicit. How one defines personality importantly affects how one selects variables when studying the phenomena of personality and how one determines what is to be tested for on a personality test. A source of difficulty is that scientists (a) define the concept in varying ways, and (b) are prone to define the concept more broadly than they operationalize it. Investigators tend to give personality a rather grand and inclusive definition (which serves to underscore its importance) while measuring it with instruments that capture only a segment of this grand, inclusive range.

Personality can be defined in either of two strongly contrasting ways, either as (a) a set of attributes that characterize an individual, or as (b) the underlying system that generates such attributes. Funder (1997) provided a definition that takes in both (a) and (b): Personality is "an individual's characteristic patterns of thought, emotion, and behavior, together with the psychological mechanisms--hidden or not--behind those patterns" (pp. 1-2).

Funder's definition focuses on "characteristic patterns" without specifying whether the patterns primarily inhere within the individual or exist at the interface between the individual and

his/her interpersonal environment. Nor does it specify whether the “mechanisms” are within the person or between persons. This ambiguity helps this definition be comprehensive with respect to other definitions. For example, 50 distinct meanings of “personality” were reviewed by Allport (1937) in a classic early textbook. These diverse meanings can be arrayed in a continuum ranging from one’s externally observable manner to one’s internal self, and the entire continuum might be fit within Funder’s definition.

Allport, in contrast, focused on one end of this continuum and derogated the other. Critical of inclusive omnibus definitions of personality (e.g., Prince, 1924), Allport attempted a more specific one: “personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment” (p. 48). Allport called this a “biophysical” conception. It focused on “what an individual is regardless of the manner in which other people perceive his qualities or evaluate them” (p. 40). Phrasings like “within the individual” and “systems that determine” reveal an emphasis on the underlying mechanisms behind behavior.

Before discussing other mechanism-focused definitions of personality, I begin with those focused on a person’s attributes. Attributes are labeled variously as traits, or characteristics, or qualities -- whether of personality, of character, or of temperament. In English usage the term “personality” is the broader concept; character attributes tend to be those associated with volition and morality, whereas temperament attributes tend to be associated with emotional, attentional, and motor activity and reactivity (Rothbart & Bates, 1998).

Personality Consists Of Which Kinds of Attributes?

One approach to defining personality focuses on attributes. In this approach, personality is a particular set of predications, that is, statements about a subject or entity. Person-description is

predication where the entity is a person, and both trait descriptors and situation descriptors are predicates. Consider the following phrases: Robin is diligent, Robin is tired, Robin is at work, and Robin is alone. All these phrases include predicates that state (predicate) something about Robin (the subject or entity).

Lehmann (1994) summarized the major aspectual types -- varieties of predicates -- conceived in linguistics. The summary reveals a continuum of predicate types ranging from the most static to the most dynamic.

At one end of this continuum is an entity’s class or *category membership* (e.g., Robin is a male), which tends to imply not only time-stability, but also something about the essence of an entity. Category membership suggests substantive rather than accidental features of the entity, and functions to name the entity. Another type of time-stable predicate is the *property* (e.g., Robert is small), which is an aspect of an entity that is relatively stable, but can change while a category membership is left intact (e.g., Robert becomes tall, but remains a male).

Neither class membership nor property specifies any contingency with respect to time -- both are distinguished from other predicate types by their atemporality -- relative stability across time. A *state* differs from a property in being more transitory (e.g., Robert feels small) or contingent (e.g., Robert looks tall in those shoes), characterizing the entity in the moment. A *process* is even more dynamic and less static than a state; it requires a continuous input of energy in order for the aspect to be present or persist (e.g., Robert is being peppered with difficult questions). And whereas a state (or a property or category membership) is just the case, a process can be said to happen at some point in time. How is a process usually distinguished from an *action*? The process (like a state, property, or category membership) is uncontrolled or high in affectedness (e.g., Robert is falling; Robert has been billed), whereas an action is controlled or

high in agentivity (e.g., Robert is jumping; Robert is paying bills). Processes and actions typically involve verbs.

Personality attributes are *properties* ascribed to persons. Some might appear to be category memberships (as in type-nouns like *cynic*, *genius*, or *jerk*) but these would be categories distinguished by having a single common property. Situation descriptors, in contrast, don't involve properties, but rather the dynamic, more transitory aspects toward the other end of the predicate continuum. Situations include the contexts set by uncontrolled processes (e.g., being challenged or threatened) and intentional actions (e.g., driving, doing homework), as well as states. States might include physical-environmental states (e.g., at work, at home), consensually defined social states (e.g., with friends, with family), as well as the person's subjective states (Saucier, Bel-Bahar, & Fernandez, 2007).

As properties, personality attributes are qualities of a human entity, more mutable than category memberships, yet less transitory and dynamic than states, processes, and actions. Personality attributes are usefully compared to the physical properties of color. Colors likewise denote attributes without indicating the essential category-defining nature of an entity. Both color and personality are organized better by dimensions than by categories, and in both cases there are multiple dimensions (for colors: hue, saturation, and brightness/luminance).

Understood as attributes, personality is a set of predications made of persons. Dynamic situational aspects that are transitory, existing in the moment only, would be excluded, unless they linger and become recurrent or chronic. Only predicates with atemporality – relative stability across time – can be considered personality.

Can we then say that personality is all of the relatively time-stable attributes of persons? Some definitions do come close to this view, for example Roback's: "an integrative combination

of all our cognitive (knowledge), affective (feeling), conative (volitional) and even physical qualities" (1931, pp. 31-32). Menninger (1930, p. 21) provided a playful but similar definition: "...the individual as a whole, his height and weight and loves and hates and blood pressure and reflexes; his smiles and hopes and bowed legs and enlarged tonsils."

However, attributes common to all persons (e.g., that you are a human being or that you live on planet Earth) hardly seems to describe your personality. Excluding such attributes one arrives at a reduced but still broad definition: all of the relatively time-stable attributes on which there are individual differences.

What Is a Personality Descriptor? Twelve Disputed Categories

There are at least twelve categories of person-descriptors that are subject to controversy – whether they should or should not be considered personality attributes.

1. *Situational predicates that are recurrently applicable to a particular person, that is, have high atemporality.* In psychology, situations are typically contrasted with dispositional concepts like personality, and the typical situation descriptor is no personality attribute. However, even dynamic situation descriptors, put into a static and consistent aspect, might become personality descriptors. A person could be "always at home" or "constantly with friends" or "always cleaning." Accordingly, one might identify personality tendencies by looking for extremes in the frequency distribution of situations for a person. Of course, this may be unnecessary to the extent that the most important of these chronic situational tendencies become sedimented in more trait-like descriptors, such as "homebody" or "gregarious" or "obsessive-compulsive."

2. *Indicators of geographical or ethnic origin.* Does being "Estonian" or "Mexican-American" or "from Paris" indicate personality? Such characterizations do not directly indicate a

behavioral, affective, motivational, or cognitive tendency. There may be an indirect reference to a psychological pattern, by way of stereotypes associated with geographical or ethnic origin.

Some such origin-indicators eventually become disconnected from the original referent groups, and come to refer to attributes, as in terms like *gypsy*, *provincial*, and *byzantine*. So this is a class of descriptors with occasional features of personality reference, although the features may not be very reliable, because based on often misleading stereotypes.

3. *Social and occupational role categories.* Socially-defined roles are often predicated of a person, and such roles do have some stability. For example, you may be a podiatrist, or a mechanical engineer, or a nurse, or a student. As with geographical and ethnicity indicators, prototypical or stereotypical attributes may become associated with the role-category, though perhaps more so for some categories (e.g., politician, criminal, schoolmarm, professor, fraternity member, cowboy, mother, child) and less for others (e.g., office manager, photographer, waitress, bus driver). And for any role-category, one's degree of interest in the role suggests psychological (behavioral, affective, motivational, cognitive) tendencies. Thus having an interest in a role, or being described as typical for those in the role, would be more personality-relevant than would be merely occupying the role at a particular point in time. Indeed, contemporary occupational interest inventories tend to blur the distinction between interest and typicality: If you respond to items in the way typical for those in a given occupational role, you are scored high for "interest" in (implying fit with) the role. It is noteworthy that career-interest measures show even higher stability than do personality measures (Low et al., 2005), and that there are dimensions of variation in career-interest items that are relatively independent of currently popular trait dimensions (Ackerman & Heggestad, 1997).

4. *Physical attributes.* Those physical attributes that are not perceptible to others and

therefore have no role in impression formation, reputation, and social interactions -- such as the size of one's spleen or whether one has a fracture in one's tibia -- lack psychological reference.

But many physical attributes represented in language (e.g., *clumsy*, *graceful*, *stylish*, *sexy*) are suggestive of behavioral tendencies. Yet other physical attributes (e.g., *tall*, *fat*, *attractive*) are psychologically significant because of their importance in impression formation. Of course, objective measurements of physical characteristics should be distinguished from ascribed attributes: Judgments of how tall or fat a person seems (to self or others) are likely to be imperfectly correlated with actual measured height or weight.

5. *Attributes denoting social status.* Are terms like *famous*, *prosperous*, *wealthy*, *successful*, and *popular* personality attributes? Indicators of power and privilege of social position are very important in self-presentation, in reputation, and in human transactions more generally; one of the axes of personality psychology's well-known Interpersonal Circle can be interpreted as power (Leary, 1957). Fame, success, and popularity can more easily be seen as the outcome of characteristic patterns of behavior, emotion, and thought, than as being such patterns themselves. However, these status attributes have psychologically significant effects on the behavior, affect, motivation, and thought of others. So their acceptance as personality attributes may depend on our decision regarding "social effects," described next.

6. *Attributes indicating the effect one has on others (i.e., social effects).* Do characterizations of a person as *charming*, *intimidating*, or *lovable* constitute personality? Are such attributes, which involve the effect one has on others, personality attributes? Allport, for whom personality resided "within" the individual, regarded such attributes as indicators of a person's "social stimulus value" (Allport, 1937, p. 41; based on May, 1932), not personality. Indeed, some definitions of personality stress that it consists of "internal" factors (Child, 1968;

Hampson, 1988), at least those that are not strictly observable. However, social effects provide an ecological angle on personality. They describe the pattern of impacts a person creates around him/her, rather like a social footprint. Social effects fall within Funder's broad definition: They do describe characteristic patterns associated with an individual. Some apparently physical attributes – denoted by terms such as *attractive* and *sexy* – may function largely as social effects. Because the criterion is effect on others, the prime data source for social effects might well be informant data rather than self-report.

7. *Attributes that involve global evaluations.* Personality descriptors in general contain a mixture of descriptive and evaluative components (Peabody, 1967). Some terms (e.g., *good* and *bad*) used to describe people have a particularly heavy dose of global evaluation, but do still refer to properties of human entities. A study of the most evaluative personality descriptors isolated multiple, clear content dimensions among them (Benet-Martinez & Waller, 2002), tending to refute the objection that there are pure evaluation terms without any personality-related content. Another objection is that highly evaluative items and scales may be especially susceptible to social desirability responding (in self-report) and halo bias (in informant report). More research is needed on this, on the extent to which self and informant ratings converge for highly evaluative attributes, and on the stability of such attributes.

8. *Attributes indicating eccentricity, deviance, normality, or conformity to convention.* . Some attributes primarily indicate the degree to which the person fits in with social norms, rather than any specific characteristic of behavior or thought. In some instances such non-normativity is viewed pejoratively, as in characterizations like *weird*, *strange*, or *deviant* (as opposed to *normal*). In other instances – probably more common in societies where a degree of deviation from social norms is tolerated or even celebrated -- non-normativity is seen in a partially more

positive light, as in terms like *unique* and *nonconforming* (as opposed to *conventional* and *traditional*).

9. *Attributes indicative of psychopathology.* Because of substantial correlations between variables in the two domains (Krueger & Tackett, 2003), one can indeed say that “the field of personality abuts abnormal psychology” (Buss, 1995, p. 3). In the field of abnormal psychology, one finds disorder-attributes are relatively stable patterns of behavior, affect, motivation, and/or cognition that show individual differences – and thus fit the definition of personality. And these disorders are not only the so-called personality disorders: Tendencies toward the Axis I disorders also show a good deal of cross-time stability (Shea & Yen, 2003) and relations to personality (Krueger & Tackett, 2003; Trull & Sher, 1994). Psychopathology attributes tend to indicate deviance and be more evaluative than many prototypical personality attributes. The language of psychopathological attributes is primarily an expert language (cf. Block, 1995), but this expert language does filter down into lay language, so that terms originally of a professional/technical nature (e.g., *depressed*, *anxious*, *neurotic*, *obsessive*, and *compulsive*) freely enter the everyday vocabulary. One might object that psychopathology requires expert diagnosis, whereas personality attributes are conventionally measured using self- and informant-ratings. However, self- and informant-reports are widely used in the measurement of psychopathology (e.g., in screening measures; Meyer et al., 2001), and expert observations can also be useful in the assessment of personality (Block, 1995; Tanaka & Taylor, 1991).

10. *Generalized attitudes, values, and belief dispositions.* Beliefs, values, and social attitudes may seem to be of a very different character than personality traits. They involve valuations of, and expectations with regard to, specific objects (e.g., ideas, governments, groups of people, supernatural entities). Allport (1937) regarded attitudes as behavioral dispositions of a

specific and external sort, being “bound to an object or value” (p. 294), aroused in the presence of a specifiable class of stimuli. If, however, an attitude is “chronic and ‘temperamental,’ expressed in almost any sphere of the person’s behavior” (p. 294) then for Allport it differed little from a trait, and he gave radicalism and conservatism as examples. Such *generalized* attitudes – those for which it is difficult to specify the object – can be considered personality traits. Although single items referencing attitudes, values, and beliefs about specific topics cannot indicate traits, factors based on a large number and range of such items can. An example of factors based on such wide-ranging content are the four dimensions found among isms terms from the natural language (Saucier, 2000; Krauss, 2006): Tradition-oriented Religiousness, Subjective Spirituality, Unmitigated Self-interest, and another factor referencing the civic belief system. These dimensions are roughly as stable across time as personality attributes (Saucier, in press), and appear to be relatively independent of them.

11. “*Temporary state*” attributes. Stability across time is a part of most definitions of personality. Based on this, investigators might exclude any variables that seem to refer to attributes of temporary duration. However, as with situations (category 1 above), an attribute that usually refers to something temporary (e.g., *angry*, *surprised*) might also be a stable ‘property of a human entity.’ For example, a chronic tendency toward a particular emotion (as in *easily or often angry*, *easily or often surprised*) fits well with the classic conception of temperament.

12. *Attributes that indicate abilities.* We might say that ability tests reference the maximum-performance capabilities of the individual, whereas personality tests reference the individual’s typical performance. Based on this, attributes indicating abilities might not be considered personality, but rather part of some other domain (e.g., Eysenck, 1993). However, we must distinguish between perceived virtues of intellect (e.g., *wise*, *insightful*, *astute*,

knowledgeable, *creative*, *brilliant*, *talented*, *smart*, *clever*) and scores on tests of general mental ability. These terms do not commonly denote that a person does well on tests, but rather that the person typically and in naturalistic situations demonstrates reactions, understanding, and decision-making processes that seem adaptive and intelligent. The modest (r roughly .30) level of association between lexically derived Intellect factors and IQ tests (Goldberg & Rosolack, 1994; McCrae & Costa, 1985) indicates as much. The terms may refer to social, practical, or emotional intelligence as much as to academic intelligence.

Comparing Narrow and Inclusive Variable-Selection Strategies

Operational definitions of personality are embodied in variable-selection strategies. The most narrow operational definition of personality would exclude all of the 12 categories of attributes above and accept only what remains. In contrast, the most inclusive operational definition would include all or most of the 12 categories, only specifying that there must be chronicity or temporal stability and there must be some psychological aspect to the attribute (whether in the perceiver or the perceived).

The narrow and inclusive variable-selection approaches have differing strengths. The narrow approach concentrates only on the lowest common denominator -- those descriptors everyone would agree are attributes of personality. The inclusive approach, on the other hand, still includes the lowest common denominator – which one can always access simply by selecting a subset of variables for analysis – but enables the investigator to find useful additional sources of variance.

Likewise, the narrow and inclusive approaches each have their own hazards. Use of the narrow approach risks throwing out a baby with the bathwater -- losing important information that is referenced in the excluded attributes. Moreover, since predictors that are inclusive in

nature should be predictive of a wider range of criteria, one might expect lower average validity for measurement models based on the narrow operational approach. As for the inclusive approach, it might yield factors that would (a) turn out eventually to not meet many criteria for personality attributes or (b) be a difficult-to-interpret mixture of heterogeneous categories.

How Does Variable Selection (and Thus the Definition of Personality) Affect Structure?

Differences in structure between personality inventories are rooted to some degree in the differing variable-selection strategies used to construct them. But the effect of differing strategies – of differing operational definitions of personality -- is most clear when we examine the results of lexical studies.

What are lexical studies? As has long been recognized (e.g., Allport & Odbert, 1936; Cattell, 1943; Goldberg, 1981; Norman, 1963), basic personality dimensions might be discovered by studying conceptions implicit in use of the natural language. If a distinction is highly represented in the lexicon, it can be presumed to have practical importance. This leads us to a key premise of the lexical approach: The degree of representation of an attribute in language has some correspondence with the general importance of the attribute in real-world transactions. This premise links semantic representation directly with a social-importance criterion.

Two other considerations make lexical studies of crucial importance. First, lexicalized concepts can be found in *standard sources* created by disinterested parties (e.g., linguists and lexicographers), and basing variable selection on such a source reduces the likelihood of investigator bias in deciding what is or is not an important variable. Second, because lexicalized concepts constitute a finite domain, one can sample them representatively to establish *content-validity* benchmarks for personality variables.

The lexical-study paradigm gives special importance to *cross-cultural generalizability*.

Structural models derived within one limited population are prone to reflect the unique patterns found within that population. Models that transfer well across populations, across languages and sociocultural settings, satisfy better the scientific ideals of replicability and generalizability.

The lexical approach involves an indigenous research strategy. Analyses are carried out separately within each language, using a representative set of native-language descriptors, rather than merely importing selections of variables from other languages (e.g., English). An indigenous structure is discovered, and then compared to previously derived structures.

The majority of lexical studies of personality descriptors have attempted to test the most widely influential structural model of the last two decades--the Big Five factor structure (Goldberg, 1990; John, 1990). The Big Five factors are customarily labeled Extraversion, Agreeableness, Conscientiousness, Emotional Stability (versus Neuroticism), and Intellect (or, in one inventory representation, Openness to Experience). Although there were signs of the Big Five structure in some studies from an earlier era (as detailed by Digman, 1990; John, 1990), its identification in studies of English descriptors (e.g., Goldberg, 1990) was decisive.

If we value cross-cultural generalizability, however, applicability to one language is not enough. Lexical studies have yielded structures resembling the Big Five most consistently in languages from the Germanic and Slavic language families of northern Europe, but more inconsistently elsewhere. The subsequent review therefore focuses not only on the five-factor level, but on other numbers of factors as well.

As will be seen, variable selection matters, especially if one extracts three or more factors. Lexical studies have had imperfect agreement regarding exactly how inclusive or narrow the variable selection should be. This is true even for studies with a narrower selection, which have differed with respect to their inclusion of descriptors from categories 11 and 12 in particular.

The 'Big One' Factor

Several lexical studies have reported evidence about factor solutions containing only one factor (Boies et al., 2001; Di Blas & Forzi, 1999; Goldberg & Somer, 2000; Saucier, 1997, 2003b; Saucier et al., 2005, 2006; Zhou et al., 2007), with consistent findings. The single factor contrasts a heterogeneous mix of desirable attributes at one pole with a mix of undesirable attributes at the other pole. This unrotated factor can be labeled Evaluation (following Osgood, 1962), or as Socially Desirable versus Undesirable Qualities. If psychopathology variables are constrained to only one dimension, it represents general maladjustment, likely strongly related to the evaluation factor in personality attributes. Overall, there is as yet no evidence that variable selection – how inclusively versus narrowly personality is conceived – affects structure at the one-factor level.

The Big Two

Lexical-study two-factor solutions also suggest a consistent pattern: One factor includes attributes associated with positively valued dynamic qualities and individual ascendancy, whereas the other factor includes attributes associated with socialization, morality, social propriety, solidarity, and community cohesion (Caprara, Barbaranelli, & Zimbardo, 1997; Di Blas & Forzi, 1999; Goldberg & Somer, 2000; Hřebíčková et al., 1999; Saucier, 1997, 2003b; Saucier et al., 2005, 2006; Zhou et al., 2007). These two factors may be aligned with some of the sets of dual personological constructs reviewed by Digman (1997) and by Paulhus and John (1998), including Hogan's (1983) distinction between "getting ahead" (Dynamism) and "getting along" (Social Propriety). They seem to resemble also higher-order factors of the Big Five (DeYoung, 2006; Digman, 1997).

Like the one-factor structure, this two-factor structure appears to be as ubiquitous across

languages and cultures and appears to be relatively impervious to variable-selection effects. That is, these two factors seem to appear whether there is a relatively restricted or inclusive selection of variables (Saucier, 1997), and whether one studies adjectives or type-nouns (Saucier, 2003b) or even more diverse combinations of variable types (Saucier et al., 2006). And there may be strong homology with the structure of the domain of psychopathology at the two-factor level. The best replicated two-dimensional model for psychopathology distinguishes externalizing and internalizing disorders (e.g., Krueger & Markon, 2006). A reasonable hypothesis is that externalizing disorders represent low Social Propriety (Morality) whereas internalizing disorders have a stronger relation to low Dynamism.

Three-Dimensional Space

In three-factor solutions, studies of most languages of European origin (plus those in Turkish, Korean, and Chinese) have produced factors corresponding to Extraversion, Agreeableness, and Conscientiousness. Although this structure was not observed in Filipino, French, Greek, or Maasai studies, it appears readily in a subset of languages that is larger than the subset that yields the Big Five. Its generalizability across variable selections is unclear. Among English adjectives, this structure was as robust across variable selections as were one- and two-factor structures (Saucier, 1997). But studies of English type-nouns (Saucier, 2003b) and of other inclusive selections of variables (Saucier et al., 2005; Saucier et al., 2006) failed to find it.

Five Lexical Factors

Lexical studies in Slavic and Germanic languages (including English) have been quite supportive of the Big Five, and so has a study in Turkish. But other studies (e.g., Di Blas & Forzi, 1998; Saucier et al., 2005; Szirmak & De Raad, 1994) have found no clear counterpart to the Intellect factor in five-factor solutions.

Several lexical studies have had a relatively inclusive selection of variables, each including many terms that could be classified as referring to emotions and moods or as highly evaluative. Some of these studies (Goldberg & Somer, 2000; Saucier, 1997) included terms referring to physical appearance. None of these analyses has found the Big Five in a five-factor solution. The appearance of the Big Five is clearly contingent upon the variable-selection procedure, and thus on the operational definition of personality.

Lexical Six-Factor Models

Ashton et al. (2004) have presented evidence that many of the lexical studies conducted to date yield a consistent pattern in six-factor solutions: six factors that can be labeled as Extraversion, Emotionality, Agreeableness, Honesty/Humility, Conscientiousness, and Openness. Although the structural pattern was first detected in studies of Korean (Hahn, Lee, & Ashton, 1999) and French (Boies et al., 2001), it has appeared to a recognizable degree also in Dutch, German, Hungarian, Italian, and Polish. The six-factor structure appears in a wide variety of languages, well beyond Germanic and Slavic groups, and its replicability appears to exceed that for the Big Five. Another advantage: Six independent factors can provide more information than the Big Five. In the first reported “horse races” between the models, (Saucier et al., 2005; Saucier et al., 2006), the six-factor model seemed about equally as replicable as the Big Five, although not nearly as well replicated as were one- and two-factor models.

This six-factor model may be found, however, only in the adjective domain. Saucier (2003b) found that type-nouns in English yielded six factors very similar to those found in earlier studies of Dutch and German. But these six factors as a set do not correspond closely to the Cross-Language Six.

Seven Factors Found With a Wider Inclusion of Lexical Variables

Consistent with early practice in the field (Allport & Odbert, 1936; Norman, 1963), analyses leading to the five- or six-factor structures have involved, in each study, removal of all terms from the great majority of the 12 controversial categories reviewed earlier. When investigators have used wider variable selections (i.e., those including many or all of these excluded types of variables), studies in English and Turkish did find Big-Five-like factors within a seven-factor solution (Goldberg & Somer, 2000; Saucier, 1997; Tellegen & Waller, 1987). Of the two additional factors in these studies, one was found in all three: “Negative Valence” (NV) is a factor emphasizing attributes with extremely low desirability and endorsement rates and with descriptive content involving morality/depravity, dangerousness, worthlessness, peculiarity, and stupidity (cf., Benet-Martinez & Waller, 2002). A core content theme seems to be Noxious Violativeness – attributes reflecting a tendency to harmfully violate the rights of others, corresponding in many ways to contemporary definitions of antisocial personality disorder (Saucier, 2007).

Is there convergence at the seven-factor level? Studies with inclusive variable-selection criteria in some languages do converge on a seven-factor structural pattern, in spite of many differences in study methodology. Lexical studies in Filipino (Church et al., 1997) and Hebrew (Almagor et al., 1995) -- languages from unrelated language-families and cultures — tend to exhibit this structural pattern, even if divergent labeling of the factors obscures it (Saucier, 2003a). Moreover, a lexical study of the language with the largest number of native speakers (Chinese) generated seven emic factors with some resemblance to this structure (Zhou et al., 2007). The seven factors include Negative Valence (or Noxious Violativeness), Conscientiousness, Intellect, Gregariousness, Self-Assurance, Even Temper, and Concern for Others (versus Egotism). A comparison of seven-factor solutions from numerous studies with

indicates that the first six of these are particularly recurrent across studies. These six resemble the Cross-Language Six, except for one apparent effect of variable selection: With an inclusive selection, the (Dis)Honesty factor tends to morph into the slightly more evaluatively extreme Noxious Violativeness factor (Saucier, 2007).

Epilogue: The Effects of Variable Selection and of Operational Definitions

The foregoing review underscores the important downstream effects of variable selection (cf., Saucier, 1997), of how personality is operationally defined. These effects of variable selection should come as no surprise, as they are pervasive across the sciences. If astronomers focused entirely on the zone of the ecliptic -- that narrow band of the firmament in which the sun, moon, and planets appear to rotate and where the zodiac is found -- astronomy's conclusions about the nature of the universe would no doubt be altered. It would be prudent for psychologists to couple a focus on the most prototypical attributes of personality with a simultaneous 'bigger picture' examination of all psychological attributes on which there are stable individual differences. The same dual focus is advisable in lexical studies (as in Goldberg & Somer, 2000; Saucier, 1997; Saucier et al., 2006).

Personality as a System

A very different approach to defining personality focuses on the underlying system that drives or generates the set of personality attributes. Good examples are definitions by Cloninger (2000, p. 3) -- "the underlying causes within the person of individual behavior and experience" -- by Pervin (1996, p. 414) -- "the complex organization of cognitions, affects, and behaviors that gives direction and pattern (coherence) to the person's life" -- and by Mayer (2007, p. 14; cf., Wundt, 1897, p. 26) -- "the organized, developing system within the individual that represents the collective action of that individual's major psychological subsystems." On this view, personality

is not a set of predications (i.e., attributes) that are clearly represented in language, but instead a set of mechanisms that may operate differently from one individual to another.

The history of psychology has seen rich theoretical developments using "personality as system" conceptions. I will briefly review some prominent examples. Then I will review in more detail another, less well-known, conception that is relevant to a semantic and linguistic standpoint, and offers novel insights regarding integration of the personality and culture levels of analysis.

Conceptions of the personality system developed within psychology

Psychodynamic theories (of Freud, Jung, Adler, and others) posit a distinction between unconscious (or automatic) and conscious (or controlled) processing, and identifying certain energetically powerful motivational forces operating from the unconscious (automatic) side. They posit multiple internal forces or tendencies that may conflict (and thus need harmonizing) with one another, which may give rise to mechanisms (e.g., ego, defenses, an individuation process) that in effect respond to the conflicts and the anxiety they generate. Of course, psychodynamic theories are ideationally rich but have proven difficult to empirically confirm (or falsify).

Rooted in contemporary neuroscience are promising theories that posit distinct brain systems or circuits, and then link individual differences in the functioning of these systems/circuits, via psychobiological endophenotypes, to overt personality characteristics. A prime example is the set of theories (e.g., Carver & White, 1994; Torrubia et al., 2001), emanating originally from Gray (1983) that set out distinct brain systems for approach (or reward-sensitivity, or behavioral activation) and avoidance (or withdrawal, or threat- or punishment-sensitivity, or behavioral inhibition), sometimes adding a third "constraint" or self-

regulation system (Carver, 2005; cf. Rothbart & Bates, 1998).

Mischel and colleagues have proposed a cognitive-affective personality system that includes prominently (a) the encoding or appraisal of particular types of situations, (b) expectancies and values that may become activated if relevant in a situation, (c) competencies and (d) self-regulatory strategies. These components interact in relation to the particular type of situation the individual encounters, generating the overt behavioral pattern (Mischel, 1999). A distinct feature of this approach is that overt attributes – personality dispositions – are seen contextually and conditionally, appearing based on the type of situation present. A partially related description of the personality system is provided by Cervone and Pervin (2008), who see the operation of the system in terms of four principal types of variables: beliefs and expectancies, evaluative standards, goals, and skills/competencies.

However, none of the approaches just reviewed compellingly integrates the personality system with the “culture” level of analysis. For an approach that does so, I turn to a sister field.

The personality system as conceived in psychological anthropology

To explore how personality and culture might be integrated, we must begin by defining culture. A mainstream definition in cultural psychology is this: Culture is “the set of attitudes, values, beliefs, and behaviors shared by a group of people, communicated from one generation to the next via language or some other means of communication” (Matsumoto, 1997, pp. 4-5). Thus culture is shared patterns. But shared by whom? How much has to be shared for two persons to be considered as from the same culture? The definition is fuzzy and hard to operationalize: “there are necessarily no hard and fast rules of how to determine what a culture is or who belongs to that culture” (Matsumoto, 1997, p. 5).

A problem with this definition is that it prompts one to look for the (one) pattern shared

by a whole distinct group, relying on the common but unexamined assumption that cultures are homogeneous. A set of persons is postulated to all be members in a culture in an equivalent way. One goes to Italy and finds there “Italian culture” – the same thing theoretically in every region of Italy and in every Italian. Then one crosses into France, and now finds “French culture.” Cultures might be assumed to correspond to nations, but on other occasions to ethnic groupings (e.g., Hispanic-American) or even racial constructs (e.g., Caucasians). But in reality, culture does not regularly correspond to nations, ethnicities, or so-called “races.” Some individuals are “bicultural” – able to operate in two different cultures. One can learn a new culture without necessarily giving up an old one. Nor is culture homogeneous: Within any nation one typically finds numerous subcultures, which might be organized along what are seen as ethnic or racial lines, or alternatively by language, lifestyle, or ideology. And there is plenty of variation from one individual to another within one apparent culture.

Psychological anthropology has developed a way of taking account of culture’s heterogeneity, through a “distributive model of culture.” The first explicit versions of a distributive model were put forward by Devereux (1945), Spiro (1951), and Wallace (1961). Schwartz’s (1978) and Goodenough (1981) provided the fullest versions.

For Schwartz, to define culture one must define its representation in individuals. This he calls the “idioverse.” It is the individual’s portion of his/her culture, an open system, subject to change. It can be more clearly defined as the total set of cognitive, evaluative, and affective constructs – the schemas, or construals of (and rules and standards about) events, objects, and persons (both self and others) – held by the individual. Included are an individual’s scripts, norms, goals, values, beliefs, expectancies, and knowledge structures. One could use “mindset” as a more colloquial synonym for idioverse – although idio-verse does nicely convey the notion

of “an individual’s idiosyncratic view of the universe.” The idioverse (mindset) is an organizing system that generates regularities in thought, emotion, and behavior. It is a personality system.

Culture, according to Schwartz, is a population of personalities, that is, of idioverses or mindsets. Personality is culture at the individual level, and culture is personality at an aggregated level. For Schwartz, culture includes the all of the content of all of the idioverses of all individuals who participate in the culture. This may seem overly inclusive, but such a wide conception is necessary in order to account for cultural innovation. A single individual may develop a new “construct” (e.g., self-esteem, non-violent resistance, a Super Bowl party) that eventually becomes more widely shared. If one does not include all of the contents of all of the idioverses – what Goodenough (1981) calls the “cultural pool” -- as somehow part of culture, these innovations seem to appear out of nowhere.

Goodenough’s (1981) approach emphasizes the similarities of how culture is represented in individuals with how language is represented in individuals. Speakers of one language – one might call them a language-community – are not one homogeneous group. There are individual differences in knowledge as well as usage of both grammar and vocabulary. One person may know slang or technical or other vocabulary that another person does not; the individual’s unique version of the language might be called an “idiolect.” The analogue of a subculture would be a dialect. One can learn to speak more than one language, and even so, to participate in more than one culture. Like a culture, a language embodies a set of standards (for how to communicate).

The standards attributed to a group can come to be seen as operating apart from the individuals in the group – a common illusion. But logically, it is as nonsensical to speak of “belonging to a culture” (or being a member of it) as it is to speak of “belonging to a language.” As Goodenough puts it, you “cannot be a member of a set of standards or of a body of knowledge

of customs” (1981, p. 103). You utilize a culture, just as you utilize a language.

Goodenough itemizes the contents of culture in systematic relation to one another, beginning with the most basic units, moving from (a) forms (categories, concepts, ideas), up to (b) propositions, up to (c) beliefs. Personal values (d) are those personal beliefs associated with inner feeling states, wants, felt needs, interests, and with maximizing gratification and minimizing frustration. The next most abstract units seem less overtly psychological and more overtly cultural. There are (e) rules and public values -- systems that set out rules, codes, duties, obligations, rights, privileges, and standards of fairness, (f) recipes (known procedural requirements for accomplishing a purpose, as in how-to and etiquette guides), (g) routines and customs, and finally (h) institutions that organize and systematize units (e) through (g).

These are proposed to be the contents of culture, and also the key components of personality, but only if we think of personality in the sense of mindset or personality system – the guidance system for behavior rather than attributes (observable patterns of behavior). The personality system may appear to give way to the cultural system when we go from personal values (d) to public values (e), but features of cultural systems are internalized in individuals, and features of personality systems continually impact the cultural systems.

Integrating Personality-Attribute and Personality-System Approaches

In some ways the two approaches to defining personality embody different perspectives on the person. Seeing personality as *attributes*, we take an external perspective that averages across behavioral instances in conceiving generalized qualities and tendencies. This is fundamentally how others see us, and is the basis for reputations. Although we may commonly use this attribute-oriented perspective also in viewing ourselves, the informant perspective is ultimately more reliable with respect to defining a real basis for attributes: When many

informants tend to agree about a target person, this yields a degree of objectivity that is not possible from a single self-report (Hofstee, 1994). Whether a person objectively has an attribute is a matter distinct from whether the person believes s/he does, or even whether any other single person has that belief.

When we conceive of personality as a behavior-generating *system*, we focus instead on the standards, expectancies, beliefs, values, goals, and other schemas held “within” the individual. Such contents can certainly be inferred from behavioral observations, task performance, and implicit attitudes (observing how the presentation of the concept affects judgments), but self-report is often the most direct way to elicit such contents.

As different as these two approaches are, there are important intersections between them.

1. The character of one’s personality system (or mindset) affects the character of one’s behavior, and thus the attributes one is perceived to have.

2. Some attributes – those that refer to an individual’s cognitive and motivational tendencies, including many generalized attitudes – reference primarily mindset and simultaneously suggest how an individual’s personality system is organized. Examples are Radical, Conservative, Perfectionistic, Machiavellian, and Sensation-Seeking.

3. Beliefs about self play an important role under either conception. For example, the belief that I am honest or extraverted is part of my mindset, as is a representation about how much honesty and extraversion are valued. Self-report directly reflects such beliefs and values. Even if a self-report is not validated by informant reports, it can still be taken as evidence of personal beliefs and values.

4. The NV (Negative Valence or Noxious Violativeness) factor seems to index tendencies to gross and wide-ranging violations of the rights of others, and of normative standards for

behavior. But this probably also reflects a central tendency in mindset – monitoring for individuals who cannot be “counted on” for the behavior expected in the cultural context. Highly evaluative attribute-concepts (e.g., Good, Holy, Impressive, Evil) reference perceived competence with respect to consensual standards for proper behavior. We tend to have contempt for those who disappoint us by showing deficits in such competence, who run askew of the standards of public culture. Allport and Odbert (1936) argued that the science of personality would do well to ignore highly evaluative concepts, but they may be a vital part of the operation of mindset.

5. Attributes so important as to anchor major personality dimensions may reveal key features of the personality system, and of its preoccupations. For example, the Big Two dynamism and morality/social propriety dimensions may arise out of the relative independence of tendencies for others to be rewarding (those you would approach) or threatening (those you would avoid). And the single evaluative factor may be a simple combination of these two – attributes of people you would approach contrasted with attributes of people you would avoid.

Conclusions

As this chapter demonstrates, attending to semantic and linguistic aspects of personality is no idle exercise, but leads to crucial insights. Personality has no single consensual definition. If one defines it as attributes (i.e., properties of persons) that show individual differences, one must deal with controversy regarding which categories of attributes should be included in the domain of personality. Many categories that appear to fall easily within definitions of personality tend to be operationally excluded from personality research. The dimensions one finds from studying lexicons demonstrate the effects of how one operationally defines personality and thus selects variables. Nonetheless, some dimensions (the Big One and those in the Big Two) seem to arise

across variations in operational definition. If one defines personality as a system, as mechanisms that affect behavior, one confronts many alternative conceptions of what this system contains. However, it is possible to see the personality system as integrally related to the meaning of “culture,” and language itself, existing in individual- and group-level variants, has some analogies to personality and culture. Central semantic themes in personality may reveal not just the character of human variation in the real world, but also the evolved preoccupations of human mindsets. More work is needed to create a truly integrative view of personality that incorporates both attribute and system perspectives.

References

- Ackerman, P. L., & Heggestad, E. D. (1997). Intelligence, personality, and interests: Evidence for overlapping traits. *Psychological Bulletin, 121*, 218-245.
- Allport, G. W. (1937). *Personality: A psychological interpretation*. New York: Holt.
- Allport, G. W., & Odbert, H. S. (1936). Trait names: A psycho-lexical study. *Psychological Monographs, 47* (1, Whole No. 211).
- Almagor, M., Tellegen, A., & Waller, N. (1995). The Big Seven model: A cross-cultural replication and further exploration of the basic dimensions of natural language of trait descriptions. *Journal of Personality and Social Psychology, 69*, 300-307.
- Ashton, M. C., Lee, K., Perugini, M., Szarota, P., De Vries, R. E., Di Blas, L., Boies, K., & De Raad, B. (2004). A six-factor structure of personality-descriptive adjectives: Solutions from psycholexical studies in seven languages. *Journal of Personality and Social Psychology, 86*, 356-366.
- Ashton, M. C., Lee, K., Vernon, P. A., & Jang, K. L. (2000). Fluid intelligence, crystallized intelligence, and the openness/intellect factor. *Journal of Research in Personality, 34*, 198-207.
- Benet-Martinez, V., & Waller, N. G. (2002). From adorable to worthless: Implicit and self-report structure of highly evaluative personality descriptors. *European Journal of Personality, 16*, 1-41.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin, 117*, 187-215.
- Boies, K., Lee, K., Ashton, M. C., Pascal, S., & Nicol, A. A. M. (2001). The structure of the French personality lexicon. *European Journal of Personality, 15*, 277-295.
- Buss, A. H. (1995). *Personality: Temperament, social behavior, and the self*. Boston: Allyn &

- Bacon.
- Caprara, G. V., Barbanelli, C., & Zimbardo, P. G. (1997). Politicians' uniquely simple personalities. *Nature*, *385*, 493.
- Carver, C. S. (2005). Impulse and constraint: Perspectives from personality psychology, convergence with theory in other areas, and potential for integration. *Personality and Social Psychology Review*, *9*, 312-333.
- Carver, C. S., & White, T. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, *67*, 319-333.
- Cattell, R. B. (1943). The description of personality: Basic traits resolved into clusters. *Journal of Abnormal and Social Psychology*, *38*, 476-506.
- Cervone, D., & Pervin, L. A. (2008). *Personality: Theory and research* (10th ed.). New York: Wiley.
- Child, I. L. (1968). Personality in culture. In E. F. Borgatta & W. W. Lambert (Eds.), *Handbook of personality theory and research*. Chicago: Rand McNally.
- Church, A. T., Reyes, J. A. S., Katigbak, M. S., & Grimm, S. D. (1997). Filipino personality structure and the Big Five model: A lexical approach. *Journal of Personality*, *65*, 477-528.
- Cloninger, S. C. (2000). *Theories of personality: Understanding persons* (3rd ed.). Upper Saddle River, NJ: Prentice-Hall.
- Devereux, G. (1945). The logical foundations of culture and personality studies. Transactions of the New York Academy of Sciences, series 2, 7: 110-130.
- DeYoung, C. G. (2006). Higher-order factors of the Big Five in a multi-informant sample.

- Journal of Personality and Social Psychology*, *91*, 1138-1151.
- Di Blas, L., & Forzi, M. (1998). An alternative taxonomic study of personality descriptors in the Italian language. *European Journal of Personality*, *12*, 75-101.
- Digman, J. M. (1997). Higher order factors of the Big Five. *Journal of Personality and Social Psychology*, *73*, 1246-1256.
- Eysenck, H. J. (1993). The relationship between IQ and personality. In G. L. Van Heck, P. Bonaiuto, I. J. Deary, & W. Nowack (Eds.), *Personality psychology in Europe, Vol. 4* (pp. 159-181). Tilburg, Netherlands: Tilburg University Press.
- Funder, D. C. (1997). *The personality puzzle*. New York: Norton.
- Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. W. Wheeler (Ed.), *Review of personality and social psychology* (Vol. 2, pp. 141-165). Beverly Hills, CA: Sage.
- Goldberg, L. R. (1990). An alternative "description of personality": The Big-Five factor structure. *Journal of Personality and Social Psychology*, *59*, 1216-1229.
- Goldberg, L. R., & Rosolack, T. K. (1994). The Big Five factor structure as an integrative framework: An empirical comparison with Eysenck's P-E-N model. In C. F. Halverson, G. A. Kohnstamm, A. Geldolph, Martin, R. P. (Ed.). *The developing structure of temperament and personality from infancy to adulthood*. (pp. 7-35). Hillsdale, NJ: Erlbaum.
- Goldberg, L. R., & Somer, O. (2000). The hierarchical structure of common Turkish person-descriptive adjectives. *European Journal of Personality*, *14*, 497-531.
- Goodenough, W. H. (1981). *Culture, language, and society*. Menlo Park, CA: Benjamin/Cummings.

- Gray, J. A. (1983). Where should we search for biologically based dimensions of personality? *Zeitschrift für Differentielle und Diagnostische Psychologie*, 42, 163-174.
- Hahn, D. W., Lee, K., & Ashton, M. C. (1999). A factor analysis of the most frequently used Korean personality trait adjectives. *European Journal of Personality*, 13, 261-282.
- Hampson, S. E. (1988). *The construction of personality: An introduction*. (2nd ed.). London: Routledge.
- Hofstee, W. K. B. (1994). Who should own the definition of personality? *European Journal of Personality*, 8, 149-162.
- Hogan, R. (1983). A socioanalytic theory of personality. In M. M. Page (Ed.), *Nebraska Symposium on Motivation* (pp. 336-355). Lincoln: University of Nebraska Press.
- Hřebíčková, M., Ostendorf, F., Osecká, L., & Čermák, I. (1999). Taxonomy and structure of Czech personality-relevant verbs. In I. Mervielde, I. J. Deary, F. De Fruyt, & F. Ostendorf (Eds.), *Personality psychology in Europe* (Vol. 7, pp. 51-65). Tilburg, The Netherlands: Tilburg University Press.
- John, O. P. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 66-100). New York: Guilford.
- Krauss, S. (2006). Does ideology transcend culture? A preliminary examination in Romania. *Journal of Personality*, 74, 1219-1256.
- Krueger, R. F. & Markon, K. E. (2006). Reinterpreting comorbidity: A model-based approach to understanding and classifying psychopathology. *Annual Review of Clinical Psychology*, 2, 111-133.
- Krueger, R. F., & Tackett, J. L. (2003). Personality and psychopathology: Working toward the bigger picture. *Journal of Personality Disorders*, 17, 109-128.

- Leary, T. (1957). *Interpersonal diagnosis of personality*. New York: Ronald.
- Lehmann, C. (1994). Predicates: Aspectual types. In R. E. Asher (Ed.), *The encyclopedia of language and linguistics* (Vol. 1, pp. 3297-3302). Oxford, UK.
- Low, K. S. D., Yoon, M., Roberts, B. W., & Rounds, J. (2005). Stability of vocational interests from early adolescence to middle adulthood: A quantitative review of longitudinal studies. *Psychological Bulletin*, 131, 713-737.
- Matsumoto, D. (1997). *Culture and modern life*. Pacific Grove, CA: Brooks/Cole.
- May, M. A. (1932). The foundations of personality. In P. S. Achilles (Ed.), *Psychology at work*. New York: McGraw-Hill.
- Mayer, J. D. (2007). *Personality: A systems approach*. Boston: Pearson.
- Menninger, K. A. (1930). *The human mind*. Literary Guild of America.
- Mischel, W. (1999). Personality coherence and dispositions in a Cognitive-Affective Personality System (CAPS) approach. In D. Cervone & Y. Shoda (Eds.), *The coherence of personality: Social-cognitive bases of consistency, variability, and organization* (pp. 37-60). New York: Guilford.
- McCrae, R. R., & Costa, P. T. (1985). Updating Norman's "adequate taxonomy": Intelligence and personality dimensions in natural language and in questionnaires. *Journal of Personality and Social Psychology*, 49, 710-721.
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., Eisman, E. J., Kubiszyn, T. W., & Read, G. M. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, 56, 128-165.
- Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social*

- Psychology*, 66, 574-583.
- Osgood, C. E. (1962). Studies on the generality of affective meaning systems. *American Psychologist*, 17, 10-28.
- Paulhus, D. L., & John, O. P. (1998). Egoistic and moralistic biases in self-perception: The interplay of self-descriptive styles with basic traits and motives. *Journal of Personality*, 66, 1025-1060.
- Peabody, D. (1967). Trait inferences: Evaluative and descriptive aspects. *Journal of Personality and Social Psychology*, 7 (4, Whole Pt. 2), 1-18.
- Pervin, L. A. (1996). *The science of personality*. New York: Wiley.
- Prince, M. (1924). *The unconscious* (2nd ed.). New York: MacMillan.
- Roback, A. A. (1931). *Personality: The crux of social intercourse*. Cambridge, Mass.: Sci-Art.
- Rothbart, M. K., & Bates, J. E. (1998). Temperament. In W. Damon (Series Ed.) & N. Eisenberg (Vol. Ed.), *Handbook of child psychology: Vol. 3, Social, emotional and personality development* (5th ed., pp. 105-176). New York: Wiley.
- Saucier, G. (1997). Effects of variable selection on the factor structure of person descriptors. *Journal of Personality and Social Psychology*, 73, 1296-1312.
- Saucier, G. (2000). Isms and the structure of social attitudes. *Journal of Personality and Social Psychology*, 78, 366-385.
- Saucier, G. (2003a). An alternative multi-language structure of personality attributes. *European Journal of Personality*, 17, 179-205..
- Saucier, G. (2003b). Factor structure of English-language personality type-nouns. *Journal of Personality and Social Psychology*, 85, 695-708.
- Saucier, G. (2007). *Personality dimensions recurrent across languages: Support for a Big Six model*. Unpublished manuscript, University of Oregon.

- Saucier, G. (in press). Measures of the personality factors found recurrently in human lexicons. In G. J. Boyle, G. Matthews, & D. Saklofske (Eds.), *Handbook of personality theory and testing: Vol. 2 – Personality measurement and assessment*. London: Sage.
- Saucier, G., Bel-Bahar, T., & Fernandez, C. (2007). What modifies the expression personality tendencies? Defining basic domains of situation variables. *Journal of Personality*, 75, 479-504.
- Saucier, G., Georgiades, S., Tsaousis, I., & Goldberg, L. R. (2005). The factor structure of Greek personality adjectives. *Journal of Personality and Social Psychology*, 88, 856-875.
- Saucier, G., Ole-Kotikash, L., & Payne, D. L. (2006). *The structure of personality and character attributes in the language of the Maasai*. Unpublished report, University of Oregon.
- Schwartz, T. (1978). Where is the culture? Personality as the distributive locus of culture. In G. D. Spindler (Ed.), *The making of psychological anthropology* (pp. 419-441). Berkeley: University of California Press.
- Shea, M. T., & Yen, S. (2003). Stability as a distinction between Axis I and Axis II disorders. *Journal of Personality Disorders*, 17, 373-386.
- Spiro, M. E. (1951). Culture and personality: The natural history of a false dichotomy. *Psychiatry*, 14, 19-46.
- Szirmák, Z., & De Raad, B. (1994). Taxonomy and structure of Hungarian personality traits. *European Journal of Personality*, 8, 95-118.
- Tanaka, J. W., & Taylor, M. (1991). Object categories and expertise: Is the basic level in the eye of the beholder? *Cognitive Psychology*, 23, 457-482.
- Tellegen, A., & Waller, N. G. (1987). *Re-examining basic dimensions of natural language trait*

descriptors. Paper presented at the 95th annual convention of the American Psychological Association.

Torrubia, R., Avila, C., Molto, J., & Caseras, X. (2001). The Sensitivity to Punishment and Sensitivity to Reward Questionnaire (SPSRQ) as a measure of Gray's anxiety and impulsivity dimensions. *Personality and Individual Differences*, 31, 837-862.

Trull, T. J., & Sher, K. J. (1994). Relationship between the five-factor model of personality and Axis I disorders in a nonclinical sample. *Journal of Abnormal Psychology*, 103, 350-360.

Wallace, A. F. C. (1961). *Culture and personality*. New York: Random House

Wundt, W. M. (1969). *Outlines of psychology* (C. H. Judd, Trans.). New York: G. E. Stechert. (originally published in German in 1896).

Zhou, X., Saucier, G., Gao, D., & Liu, J. (2007). *The factor structure of Chinese personality terms*. Unpublished manuscript, Sun Yat-Sen University.