LANGUAGE AND PERSONALITY : TOWARD A TAXONOMY OF TRAIT DESCRIPTIVE TERMS[1]

DİL VE ŞAHSİYET : BİR VASIF TANIMLAYAN TERİMLERİ SINIFLANDIRMA YOLUNDA ÇALIŞMALAR

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Bu araştırma plânının gayesi İngilizcede mevcut bütün şahsiyet tanımlayıcı terimlerin esaslı bir sınıflamasını yapmak; ve sonra bunu, başka dillerdeki benzer şekilde hazırlanmış diğer sınıflamalarla karşılaştırmaktır. Nihaî hedefimiz, insanın kendini ve başkalarını tanımlamasına ilişkin süreçler ve bu süreçlerde dil ve kültürün oynadığı rol hakkında mümkün olduğu kadar çok şey keşfetmektir. Bizimle işbirliği yapabilecek başka kültürlerden kimseleri cezbetmek ümidi ile, başlangıç prensiplerimiz ve çalışma usullerimiz burada kısaca belirtilmiştir.

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1 This paper has at least four implicit co-authors-Warren T. Norman, Dean Peabody, Jerry S. Wiggins, and Leonard G. Rorer-all of whom have contributed significantly to the research program here described. Financial support for this work has been provided by Grants MH-07195 and MH-12972 from the National Institute of Mental Health, United States Public Health Service.

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Copies of an initial version of this taxonomy are available from the author.

The objective of this research project is to develop a compellingly attractive taxonomic structure for all of the personality descriptive terms in the English language, and then to compare this structure with similarly-derived ones in a variety of other languages. Our ultimate goal is to discover as much as possible about the nature of the processes involved in the description of oneself and others, and about the role of language and culture in these processes. Our initial rationale and procedures are briefly discussed here, in the hopes of attracting some cross-cultural collaborators.

Individuals differ in a host of ways, not all of which are of equal importance to themselves or to others. The most fundamental goal of personality research is the identification and measurement of the *most important* individual differences. These central individual differences should provide the structural constructs for an eventual theory of personality, as well as the targets for the development of new assessment measures (Goldberg, 1972).

While attempts have long been made to systematize personality differences, the most promising of the empirical approaches to this ambitious task have been based on one critical assumption : *Those individual differences that are of the most significance in the daily transactions of persons with each other will eventually become encoded into their language as singleword trait descriptors.* That is, the importance of an individual difference is assumed to be related to its probability of occurrence in language. The more important is such a difference, the more will people notice it and wish to talk of it, with the result that eventually they will invent a word for it. One can see this process exemplified in the introduction of nouns into a language; for example, snow, of more importance to Eskimos than to Englishmen, has led to more words in Eskimo dialects than in English. Presumably, the same process must occur for adjectives, including those describing differences among individuals (Goldberg, 1972).

In this report, I will discuss one portion of a broad-ranging-and perhaps unduly ambitious-program of research, on which I have been collaborating for the past few years with Warren T. Norman, Dean Peabody, Jerry S. Wiggins, and Leonard G. Rorer. The major objective of this research program is to develop a taxonomy of English personality descriptive terms, one that is sufficiently systematic, comprehensive, and well-structured to be useful for scientific communication. Specifically, the ta-

xonomy is to be systematic and comprehensive in the sense that it takes as its fundamental data base the set of individual differences that are of sufficient social significance, wide-spread occurrence, and distinctiveness to have been encoded and retained as descriptive predicates in the English language during the course of its development. The taxonomy is to be well-structured in the sense that the relationships among these terms are to be determined. That is, the taxonomy is to be organized, rather than left as a mere list of terms, or as a collection of subsets of functionally synonymous descriptors (Norman, 1967).

Historical Background

The quest for a systematic accounting of individual differences is an ancient one, and most of the major figures who have attempted to construct a theory of personality have had to grapple with this general problem. It was not until the 1930's, however, when psychologists began to treat this question as at least partially an empirical, rather than exclusively as an intuitive, matter. The first rationale for applying any empirical leverage on the problem was provided by Gordon W. Allport, who argued that a scientific exploitation of language might lead to the discovery of something important about personality :

> In the first place men experience a desire to represent by name such mental processes or dispositions of their fellows as can be determined by observation or by inference. There is a demand for depicting personality as accurately and as faithfully as possible, for with a suitable term, corresponding to authentic psychological dispositions, the ability to understand and to control one's fellows is greatly enhanced. There is then reason to suppose that trait-names are not entirely arbitrary, that they are to some extent self-correcting, for there is little to gain by perserving through names an erroneous belief in merely fictitious or fabulous entities; there is everything to gain by using terms that designate true psychic structures. (Allport, 1937; p. 304).

This same rationale motivated Raymond B. Cattell to begin his efforts to discover the basic factors of personality structure. Cattell has argued:

> Over the centuries, by the pressure of urgent necessity, every aspect of one human being's behavior that is likely to affect another has come to be handled by some verbal symbol-at least in any developed modern language.

Although some new words for traits constantly appear, a debris of equivalent but obsolete words constantly falls from the language. (Cattell, 1957; p. 71)

...by contrast, the area of the personality which does not bear on other people, which deals with the physical world, and in a way not relevant to the interests of society, will be sparsely and incompletely populated with trait terms. If chairs and automobiles and cheeses had tongues, we should doubtless find trait terms for light and heavy sitters, for a wide variety of gear changers, and for the varying behavior of digestive organs. The trait vocabularies of modern languages, therefore, may be expected to cover, with reasonable completeness and efficiency, patterns and elements of behavior as seen from the standpoint of man, but not as seen from the standpoint of nature. (Cattell, 1943; p. 486).

The position we shall adopt is a very direct one... making only the one assumption that all aspects of human personality which are or have been of importance, interest, or utility have already become recorded in the substance of language. For, throughout history, the most fascinating subject of general discourse, and also that in which it has been most vitally necessary to have adequate, representative symbols, has been human behavior. Necessity could not possibly be barren where so little apparatus is required to permit the birth of invention. (Cattell, 1943; p. 483).

The first major work to be stimulated by this rationale was the classic monograph by Allport and Odbert (1936), *Trait names: A psycho-lexical study*. These authors culled from the second (1925) edition of Webster's unabridged dictionary all terms pertaining to attributes of people. In their words:

The criterion for inclusion consists in the capacity of any term to distinguish the behavior of one human being from that of another. Terms representing common (non-distinctive) behavior are excluded (*e.g., walking* and *digesting*), whereas more differentiating and stylistic terms applied to these same activities (such as *mincing* and *dyspeptic*) are included. (Allport ε Odbert, 1936; p. 24).

Each of the 17,953 terms so selected was then categorized into one of four sets, described as follows:

Column I. In this column appear those names that symbolize most clearly «real» traits of personality. They designate generalized and persona-

lized... tendencies-consistent and stable modes of an individual's adjustment to his environment. Obvious examples are *aggressive, introverted, sociable,...* The number of terms in this column is 4504, or 25 per cent of the total list.

Column II. This column contains terms descriptive of present activity, temporary states of mind, and mood. The criterion for inclusion reads as follows : «Might the quality in question characterize a person's mood, emotion, present attitude, or present activity (but not his enduring and recurring modes of adjustment)?» Typical terms in this column are *abashed, gibbering, rejoicing, frantic....* This column contains 4541 words, about 25 per cent of the entire list.

Column III. This list is the longest of the four, and contains character evaluations. Typical examples are *insignificant, acceptable, worthy.* The paradigm for inclusion reads : «Might one judge a man as *(worthy)* without the man possessing a corresponding biophysical trait which may be symbolized with the *same* name?»... Some terms in this column imply no profound moral judgment but rather a social effect upon the emotions or moods of another (e.g., *dazzling, irritating*). These terms presuppose *some* traits in a man, but in themselves they are value-estimates and do not symbolize the psychological dispositions in him that cause him to have a dazzling or irritating effect upon others. This column contains 5226 terms, or 29 per cent of the total list.

Column IV. There are many terms of possible value in characterizing personality, even though they have no certain place in the first three columns.... One sub-group [contains] terms explanatory of behavior, past participles for the most part (e.g., *pampered, crazed, malformed*). Another sub-group [includes] physical qualities which are commonly considered to be associated directly or indirectly with psychological traits (e.g., *roly-poly, lean, red-headed, hoarse*). Still another group [contains] capacities or talents, such as *able, gifted, prolific....* In all, this miscellaneous column contains 3682 words, or about 21 per cent of the total list. (Allport ε Odbert, 1936; pp. 25-27).

While Allport and Odbert were content to rest with their collection of personality terms, it remained for Cattell to utilize any portion of this collection for taxonomic purposes. Unfortunately, Cattell reduced the set to a mere 171 terms. Cluster analyses of peer ratings using these terms yielded around 36 clusters or «surface traits,» and subsequent factor analyses of peer

ratings based on scales for each of these clusters led Cattell to the conclusion that between 15 and 20 distinct factors were necessary to account for their covariance; these latter became the «primary personality factors» in Cattell's taxonomic scheme.

Cattell's efforts probably suffered as a result of the premature reduction of the set of descriptors used-a reduction prompted in large part by sheer pragmatic considerations, specifically a lack of adequate resources for more extensive data collection and analysis. The present research program has sought to avoid these limitations by retaining a much larger set of terms until such time as empirical data bearing on their potential usefulness warrant the decision to remove any of them from further consideration.

The Present Research Program

Specifying the Domain of English Terms

This research program was instigated by Warren T. Norman about a decade ago. The sequence of procedures that have been employed during the initial stages of the program are outlined below.

Phase 1 : Construction of the Master Pool. The initial pool of terms to be considered was the set of 17,954 listed by Allport and Odbert (1936). In addition, the third (1961) edition of Webster's unabridged dictionary was scanned, and all terms which pertained in any manner to attributes of persons or their behavior, but which were not included in the Allport-Odbert list, were recorded, and notations were made of all terms listed by Allport and Odbert which had been dropped from Webster's Third. (Whatever shortcomings Webster's Third may have as a standard of «proper» and historical English, the philosophy that guided that remarkably sweeping revision and modernization of the earlier edition could hardly have been more ideally suited to these scientific purposes.)

Phase 2 : Initial Culling of the Master Pool. While it is not possible to draw a hard and fast line between classes of terms that are vague or ambiguous and those that are not, the distinction is nonetheless clear enough that it provided a basis for an initial refinement of the pool on judgmental grounds :

(*a*) A large number of terms in the Allport-Odbert list, as well as

many potential additions from Webster's Third, pertain to such obscure literary, historical, or mythological referents, derive from such archaic or little known dialects, or are for other reasons so seldom used in contemporary discourse that to include them in a contemporary vocabulary would make such a compendium virtually useless for most purposes.

(*b*) Many terms, including quite a few of those just alluded to, refer to such broad and loosely related classes of attributes, or require the use of such extended metaphors or analogies to make their relevance to personal characteristics at all clear, that they also are best excluded from further consideration at the outset.

(*c*) There exists a large class of terms which denote various anatomical or physiognomic characteristics, medical symptoms, merely physical aspects of behavior, movements, or location, or of appearance, grooming, and dress. While some of these attributes might have implications for personality development and functioning, the implications would ordinarily be indirect and so highly contingent upon situational conditions that such relations were judged to be best left as matters for subsequent experimental study.

Finally, (*d*) contemporary American English is loaded with terms whose connotations are either purely evaluative or which are merely quantifiers of degree or amount for whatever substantive term they are paired. Such terms convey almost exclusively some degree of social or personal approval or disapproval, without any indication as to what attributes of the person the valuation accrues. There is no implication here that other terms are value-neutral; only that whatever the evaluative valences of these remaining terms may be, they *also* have denotations that refer to specific attributes of the person.

These four bases for excluding terms were applied to all terms in the Allport-Odbert list, plus 171 additional terms from Webster's Third. To qualify for exclusion on one or another of these bases, a term had to be initially so categorized by one member of the research staff and subsequently agreed to by at least two of three others. Doubtful terms, or those for which disagreements could not be resolved, were retained for further consideration.

Phase 3 : Cataloguing the Retained Terms. Those terms not excluded on one or another of the bases described above were then sorted into three major categories, similar to those used earlier by Allport and Odbert. As adjuncts to the subjective judgments on which this catalogue mainly rests,

Thorndike-Lorge word counts and definitions from Webster's Third were used to resolve any disagreements among the research staff. In all cases for which doubt still existed as to whether a term should be placed in one of the exclusion categories, it was not; instead, it was retained in one of the three inclusion categories pending the accumulation of data in subsequent phases of the research program. A brief summary of this initial catalogue is presented in Table 1.

Table 1

The Initial Catalogue of 18,125 English Words

		Number	%	Example
I.	Stable («Biophysical») Traits	2797	.15	Meek
II.	Temporary States or Activities	3021	.17	Lonesome
III.	Social Roles, Relationships, or Effects	1476	.08	Dangerous
	(Total: I, II, and III)	(7294)	(.40)	
Exclusion Categories				
(a)	Almost purely evaluative	760	.04	Nice
(b)	Anatomical, physical, or medical	882	.05	Hairy
(c)	Ambiguous, vague, or metaphorical	4796	.26	Oceanic
(d)	Obscure; little-known	3606	.20	Bevering
(e)	Other; miscellaneous	787	.04	
	(Total excluded)	(10,831)	(.60)	

Less than 3000 (about 15%) of the 18,125 terms refer to stable traits (e.g., «meek»), another 3000 refer to temporary states or activities (e.g., «lonesome»), and roughly half that number (about 1500) refer to social roles, relationships, or effects (e.g., «dangerous»). For taxonomic purposes, approximately 60% of the total collection can be viewed as dross, either because the terms have only minimal descriptive significance or because they are so arcane, ambiguous, vague, metaphorical, or obscure that their personological implications are available only to the most fanatic of lexicographers.

The systematic collection of personality terms used in this research program is, of course, far more comprehensive than the much smaller subsets that have been employed in previous investigations. For example, the most popular set of trait terms used for assessment purposes has been

the 300-item Adjective Check List (ACL), compiled by Harrison G. Gough. Another somewhat similar set of 555 terms, assembled by Norman H. Anderson, has been used both by him and by others in a host of studies of person perception and impression formation. Table 2 provides a comparison between these two widely-used stimulus sets on the one hand and the present more complete collection on the other. The first two columns of Table 2 show that while roughly three quarters of the terms in both the ACL and Anderson's (1968) Standard List of Personality Traits (SLPT) refer to stable traits (Category I), the other quarter in both lists are scattered rather unsystematically across the other categories. Moreover, as the last two columns of Table 2 indicate, only a small fraction of the total set of stable trait terms is included in either the ACL or the SLPT lists. Data accumulated by the present project should permit future investigators to select stimulus sets in a far more systematic manner than has ever before been possible.

Table 2

A Comparison between the Terms in Gough's Adjective Check List (ACL), Anderson's Standard List of Personality Traits (SLPT), and our Initial Catalogue of 18,125 Terms

	Percentage of ACL and SLPT Terms Which Fall in Each Category		Percentage of the Terms in Each Category Which are Included in the ACL and SLPT	
Inclusion Categories	Gough ACL (N=300)	Anderson SLPT (N=555)	Gough ACL (N=300)	Anderson SLPT (N=555)
I. Stable Traits	.79	.72	.08	.14
II. Temporary States	.07	.08	.01	.02
III. Roles or Effects	.01	.05	.00	.02
Exclusion Categories				
(a) Evaluative	.02	.06	.01	.04
(b) Physical	.02	.01	.01	.00
(c) Ambiguous	.05	.05	.00	.01
(d) Obscure	.00	.00	.00	.00
(e) Other	.01	.01	.00	.01
Unclassified	.04	.02	—	—
Total	1.00	1.00	.02	.03

Phase 4 : The first Wave of Empirical Analyses. To date, we have concentrated our research attention on those terms which refer to stable traits (Category I). This category includes all terms that designate typical, generalized, and personalized characteristics of a person or a person's behavior; terms that denote stable and consistent styles of behavior and reactions to other persons or to a variety of situations; and terms that convey characteristic modes of adjustment. While 3586 terms were initially so catalogued, 786 of these terms were subsequently removed from further consideration for various reasons, such as the existence of a preferable form of the word in the set, excessive slanginess, awkwardness, or unsuitability for presentation in a group testing situation.

The remaining 2800 terms were then divided into 14 lists of 200 each, and each list was administered to a different sample of 50 male and 50 female undergraduate university students under each of several conditions. First, the subjects were asked to give a synonym or short definition for each term or, alternatively, to cross out the term if they did not know its meaning. Second, the subjects were asked to rate the degree to which each term was applicable to, or descriptive of, themselves and each of three self-selected peers-one liked well, one to whom they were indifferent, and one disliked. Third, the subjects were asked to rate the social desirability of each term.

In this and all subsequent studies conducted so far we have employed samples of university students, not because these persons are representative of the general population but, to the contrary, because they possess an unusually high level of verbal skill and sophistication. Terms which are unknown or otherwise unsuitable for use with such a population are unlikely to be understood by less sophisticated individuals, and thus are probably unusable for our purposes.

Itemmetric analyses from the five rating tasks were carried out separately within the male and female samples. For each of the 2800 terms, the means and standard deviations for the social desirability, self rating, and peer rating tasks have been reported (Norman, 1967), along with the proportion of persons who indicated that they did not know the meaning of the term.

Phase 5 : The Second Wave of Empirical Analyses. While these initial data-gathering procedures provided a rich bed of normative information about each of the 2800 separate terms, analyses of their interrelati-

onships would necessarily be limited to sets of 200 terms that were administered to any one subsample. Consequently, an effort was made to reduce the set of terms to a number small enough to be administered to a single sample, while at the same time preserving the systematic character of the initial total collection. The findings from the first wave of empirical analyses suggested that roughly half of the terms were sufficiently obscure to make their meanings unclear to many university undergraduates. This finding was not unexpected, since in the initial cataloguing process any doubt about the apparent difficulty of a term was explicitly resolved in favor of its inclusion in the set to be used for preliminary investigation.

Depending on the stringency of one's criteria for exclusion, between 1200 and 1800 terms might qualify at this stage as candidates for further empirical analyses. Using a liberal criterion, a set of 1710 adjectives has been selected, and samples of university undergraduates in the United States, Australia, and Great Britain have been administered an inventory of these 1710 terms, with self-description instructions.

Developing a Taxonomy of Trait-Descriptive Terms

Over the years, an important theoretical controversy has centered on the extent to which the correlational structures discovered in peer rating studies (e.g., Cattell, 1957; Norman, 1963) reflect primarily (*a*) the raters' conceptual factors (their shared «implicit personality theory») as compared to (*b*) the actual organization of personality traits among the ratees (see Norman ε Goldberg, 1966). Indeed, some investigators have proposed that these analyses may have *no* bearing on true personality trait covariation, but merely reflect the way in which the raters generally view the interrelationships among such traits (D'Andrade, 1965; Levy ε Dugan, 1960; Mulaik, 1964). It is most likely that this issue can never be resolved in the absence of detailed information about the sheer *similarity of meaning* among the trait descriptive terms used in these investigations. That is, a stimulus taxonomy based only on similarity of meaning is a necessary precondition for drawing any substantive conclusions about the «true relationships among personality traits.» The present research program seeks to develop precisely such a trait taxonomy, and it is our intention to utilize this taxonomy for leverage in resolving those contentious issues which have heretofore remained in dispute.

Since we believe that structural representations based on similarity of meaning must initially be independent of those based upon self or peer des-

criptions, our first and overriding goal has been to develop such semantic structures. Moreover, previous taxonomic efforts may well have suffered severely as a result of investigators' commitments to the use of *one* method for structural analyses. By and large, one or another factor analytic procedure has been elevated to occupy the role of scientific supreme court both in finding the facts and in adjudicating the issues relating to personality structure. It has been assumed, most explicitly by Cattell, that the application of some *a priori* statistical criterion like «simple structure» will inevitably direct the adventurous traveler down a royal road to truth. The present research endeavor has been based on a diametrically opposite rationale, namely that *it is only through the triangulation afforded by many diverse methods that one learns to unconfound sources of variance that are normally confounded in nature.*

As a consequence of this general scientific orientation, we have been undertaking a multi-faceted exploration of the structure of the trait descriptive terms in the English language. Initially, we are developing a set of alternative structures, from which investigators can select the one most suitable for their own purposes. Eventually, empirical analyses should discover the linkages among these alternative structures, and determine the relative assets and liabilities of each of them for diverse scientific purposes. The rationale and procedures for developing one of these structures will now be described.

Characteristics of people as they are usually measured include a mixture of descriptive content and other confounding features. Traditional methods of analysis, most especially exploratory factor analysis, will only fortuitously -and thus extremely rarely- serve to separate them. However, to the extent that one can specify some of these features in advance, one can attempt to separate them deliberately. The resulting structures should correspondingly be much cleaner and tighter, and therefore more robust when moved from one sample of subjects to another. Moreover, if one can additionally identify those sources of variance that are method-confounded, one should again be able to separate them deliberately, and thus to find analogous structures via a number of different methods.

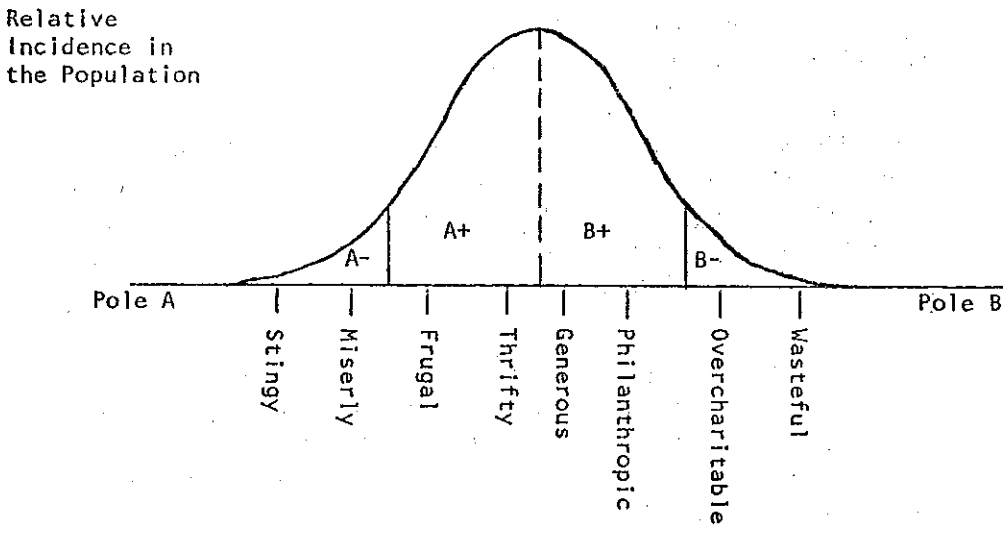
For example, any single trait descriptive adjective (e.g., «thrifty») combines both a descriptive aspect (unlikely to spend money) and an evaluative aspect (good). The same confounding continues if one introduces the contrasting opposite term («extravagant»). In this case, the descriptive aspect

(spending money) is confounded with an evaluative one (bad). To separate the descriptive and evaluative aspects, Peabody (1967) has suggested that one needs to find another pair (e.g., «generous» vs «stingy») that *reverses* the relation between descriptive and evaluative contrasts. In that case, a possible schema for classifying all four traits is illustrated in the top section of Figure1.

Figure 1

Scheme for Unconfounding Evaluation and Description

		Descriptive Contrast	
		A	B
Evaluative Contrast	Positive (+)	Thrifty	Generous
	Negative (-)	Stingy	Extravagant



Descriptive Attribute

(e.g., Tendency to share one's possessions)

Traditional methods of analysis generally will not separate these confounding features, and most factor analytic methods will produce factors which confound description and evaluation. For example, Cattell (1957) described 15 major bipolar factors, for most of which the characteristics defining one pole are all favorable, and those defining the opposite pole are all unfavorable. One factor has favorable and unfavorable terms at one pole but only favorable terms at the other pole. Indeed, only two factors have both favorable and unfavorable terms at each pole. Thus, of these 15 factors, two are unconfounded, one partially confounded, and 12 wholly confounded with evaluation.

The seminal research of Peabody (1967, 1968, 1970) provides a rationale for unconfounding description and evaluation, and we have been using an extension of this model to begin our structural analyses of trait terms. Our theoretical scheme is based on the assumption that there exist clusters of interrelated terms which are used to describe differences in the *intensity* or the *frequency* of the same basic behavioral pattern. For example, consider individual differences in generosity with regard to money and property. While one can use adverbs to scale these differences (e.g., «very generous,» «quite generous,» «a bit generous»), alternatively one can use single terms which embody such differences in degree (e.g., «generous,» «philanthropic,» «lavish,» «extravagant,» «wasteful»).

Moreover, for many types of behavior patterns, there is an important relationship between the extremity of the behavior described and the rated social desirability of the trait descriptor. Specifically, more extreme terms are typically judged as less desirable (e.g., it is good to be «generous,» but it is bad to be «too generous» or «overgenerous» or «extravagant»), as is illustrated by the hypothetical frequency distribution in the lower portion of Figure 1.

If Peabody's schema can be applied more generally, it should be possible to find sets of interrelated terms such that all terms in each set refer to the same behavioral dimension but differ in their location or extremity, and consequently in their social desirability. If one can cluster the terms by similarity of meaning and can assess the social desirability of the terms in each cluster, one has a rudimentary framework for constructing a trait taxonomy. Table 3 shows the application of this rationale to the concept of generosity; terms indicating a propensity for giving or sharing are listed on

Table 3

Generosity

	Mean Desirability	
	7.8	Generous
	7.8	Charitable
	7.1	Unniggardly
Economical	7.0	
Thrifty	6.7	
	6.6	Philanthropic
Unwasteful	6.5	
	6.0	Unmercenary
Frugal	5.7	
Unextravagant	5.4	
	4.8	Lavish
	4.7	Overcharitable
	4.2	Unthrifty
Possessive	3.9	
	3.8	Unfrugal
	3.8	Extravagant
Closefisted	3.6	Uneconomical
Unphilanthropic	3.3	
	3.2	Thriftless
Mercenary	3.1	
Covetous	2.9	Wasteful
Miserly	2.7	
Uncharitable	2.4	
Niggardly	2.4	
Ungenerous	2.3	
Stingy	2.2	
Greedy	1.7	

the right, those suggesting a propensity for retaining are listed on the left. As one moves down the page, from the top to the bottom, the terms become increasingly less desirable. These mean social desirability values, on a scale from 1 (least desirable) to 9 (most desirable), are based on the ratings from 50 male and 50 female college students. A line is used to separate the desirable terms (mean values from 5 to 9) from the undesirable ones (mean values from 1 to 5). Negations are offset a bit toward the center of the page, while amplifications are offset slightly away from the center. Since negations of root terms are typically reversed both descriptively and evaluatively, root-negation pairs will usually be found in the diagonally opposite corners; for example, «generous» can be found in the upper right corner, and «ungenerous» in the lower left corner of the table. Each amplification will be found on the same side of the page as its root term; typically, positively-valued root terms (e.g., «charitable») get amplified, and the resulting terms (e.g., «overcharitable») are evaluated negatively.

Note that the set of terms included in Table 3 is not complete balanced or symmetrical. There are no terms to express frugality with quite the same degree of desirability as can be found for the terms «generous» and «charitable.» And, there are no terms to excess of generosity with quite the same degree of undesirability as the terms «stingy» and «greedy.» That is, the concept of generosity, as it is embedded in the English language, is somewhat correlated with evaluation, although it can be unconfounded by an appropriate selection of terms from the nuclear trait set. Most trait sets show at least some such correlation, with more terms in two diagonal cells (e.g., upper right and lower left) than in the other two cells (e.g., upper left and lower right). Indeed, there are some concepts that are so completely confounded with evaluation that they include *only* terms in two diagonal cells. For example, there are no common terms to express the notion of having too much talent, although one could create such a term (e.g., «overintelligent»).

Table 4 presents another nuclear trait cluster, this one for risktaking. Here there is only a slight correlation with evaluation, though there are more positive terms to express riskiness than to express cautiousness. To be «careful» is highly desirable, but not quite as desirable as it is to be «courageous»; and, to be «overrash» is highly undesirable, but not quite as undesirable as it is to be «cowardly.»

Table 4

Risk-Taking

	Mean Desirability	
	8.0	Courageous
	7.6	Brave
Careful	7.4	
	7.3	Venturous
	7.2	Venturesome
	7.1	Adventurous
	7.0	Stout-hearted
	7.0	Fearless
	7.0	Valiant
Heedful	6.9	Heroic
	6.7	Daring
Cautious	6.6	Lion-hearted
	6.5	Dauntless
	6.5	Unfearing
	6.2	Plucky
	6.2	Valorous
	6.0	Bold
	5.9	Gutsy
	5.9	Forward
Wary	5.6	
	5.4	Devil-may-care
	4.5	Impetuous
	4.5	Overvaliant
	4.4	Headlong
Unheroic	4.2	Uncautious
Unbold	4.2	Overbrave
Tentative		
	4.1	Aweless
Overcareful	4.0	Brash

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Overwary	4.0	Unwary
	4.0	Overdaring
	3.9	Audacious
	3.8	Incautious
	3.8	Overbold
Overcautious	3.7	Nervy
Unvaliant	3.6	
Timid	3.5	
Timorous	3.5	
	3.4	Overforward
Unventurous	3.0	Imprudent
	3.0	Foolhardy
Unadventurous	2.9	Rash
Overfearful	2.9	Brazen
Weak-hearted	2.8	Reckless
Weak-kneed	2.8	
	2.6	Overrash
Gutless	2.3	
Cowardly	2.0	

Table 5 illustrates the application of this schema to one of the most central concepts in personality research, namely self-confidence or self-esteem. Self-esteem is an example of a construct with differential variance in the desirability of terms defining each of its two poles. Specifically, it is very desirable to be «confident,» «self-respecting,» or «assured,» while it is very undesirable to be «bigheaded,» «boastful,» «swell-headed,» or «stuck-up.» In contrast, the range of desirability values for the other pole of this construct («modest» to «prideless») is considerably smaller.

Moreover, this schema may help to unravel some of the seeming inconsistencies in past research on the self-concept (e.g., Wylie, 1968). For, as Table 5 should make clear, there are at least two distinct varieties of self-esteem : (*a*) Individual differences in the tendency to endorse terms on the right (e.g., «self-confident,» «egotistical») as compared to those on the left

Table 5

Self Esteem

	Mean Desirability	
	8.1	Confident
	7.9	Self-respecting
	7.8	Self-reliant
	7.7	Self-confident
	7.4	Assured
	7.2	Self-sufficient
Modest	7.1	Self-assured
Self-critical	7.0	
Unvain	6.9	
Unboastful	6.8	
Conceitless	6.8	Unselfconscious
Humble		Proud
Nonegotistical		
	6.5	Unshy
	6.2	Unbashful
Unpresuming	6.0	Self-satisfied
Unassuming	5.7	
Boastless	5.7	
	5.6	Unmeek
	4.7	Self-righteous
	4.5	Complacent
Self-conscious	4.4	
Self-doubting	4.3	
Shy	4.2	
Bashful	4.2	
Overmodest	4.1	Self-possessed
	4.0	Self-important
Meek	3.9	
Self-disparaging	3.8	
	3.7	Overconfident

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Self-effacing	3.5	Egocentric
Unassured	3.4	
Unsure	3.3	Immodest
Insecure	3.2	Egotistical
Self-deprecating	3.2	
Unconfident	3.1	Self-centered
	3.1	Presumptuous
	2.8	Overproud
	2.8	Affected
Prideless	2.7	Vain
	2.6	Conceited
	2.6	Smug
	2.5	Bigheaded
	2.4	Boastful
	2.3	Swellheaded
	2.0	Stuck-up

(e.g., «humble,» «self-deprecating»); and (*b*) individual differences in the tendency to endorse terms above the line (e.g., «humble,» «self-confident»), as compared to those terms below it (e.g., «self-deprecating,» «egotistical»). Each of the numerous scales that have been developed to asses self-esteem includes a different blend of these two conceptually-independent processes. Is it any wonder, as a consequence, that findings based on one of these measures may not replicate in a subsequent study in which some different measure is used? One of the goals of the present research program is to provide the technology for resolving many of the apparent inconsistencies in previous studies of personality structure.

The 1710 trait descriptive terms that have been retained at this stage of the project have been classified into some 50 categories, of which Tables 3, 4, and 5 are three examples. This initial classification scheme is still under continuous revision, using semantic similarity judgments made both by members of the project staff and by advanced graduate students in English Literature. Five successive revisions of this initial structure have been completed, and a sixth revision is in progress[3]. Future efforts will be devoted

both to improving these initial classifications and to establishing an overarching molar structure based on the relationships among the categories. This latter endeavor should be greatly aided by our parallel explorations of other types of taxonomic structures, as well as by the parallel explorations of investigators using *other* languages.

A Plea for Additional Collaborators

All of these taxonomic efforts have been confined to terms from the English language, for the crassly practical reason that all members of our scientific team are native speakers of English, as were Allport and Odbert. On the other hand, given that one must start with any single language, English could be defended as an initial source on the grounds that English has a larger vocabulary than any other modern language. In addition, for better or for worse, English is the dominant language of science, including the scientific study of personality, and therefore an English taxonomy should be useful for psychologists throughout the world. Nonetheless, since our ultimate goal is to provide an observational language for general personality description, we must determine the extent to which confining the project to American English is defensible.

Consequently, we now wish to broaden our investigation of the interplay of language and personality structure by beginning to sample other language communities within the United States (for example, southern versus northern, and rural versus urban, dialects), other distinct subcultures within the English-speaking world (for example, those on the British Isles and those in Australia or New Zealand), other Indo-European languages (such as Russian, German, Greek, and Spanish or French), and some non-Indo-European languages (such as Chinese, Turkish, and Hebrew).

While there are many lexicographic sourcebooks available for the large modern languages, these typically do not include a counterpart volume to the Allport and Odbert monograph. Thus, to replicate our work, we will first need to find native speakers of other languages to cull from their dictionaries the initial catalogue of personality-related terms. Beyond that point, their work can parallel our own, and all aspects of the classification procedure could be replicated separately within each language. However, the critical problem of comparing the resulting taxonomic structures with those from English will require unusually sophisticated linguistic techniques.

As tantalizing as is the quest for cross-language generality, it might turn out to be equally important -and certainly far easier- to begin with those languages where no replication of the detailed structure in English can be expected. Specifically, we would like to study one or more of the relatively small language groups of the sort traditionally studied by anthropologists (for example, various American Indian and African languages). These languages generally tend to have small vocabularies; one South American Indian language in particular is reported to be extremely impoverished in trait terms. In such languages, it would be interesting to discover those structural dimensions that were common to the ones found in English. Hypothetically, the most universal distinctions are of the most fundamental importance for personality development and functioning. Assuming that many of the personological distinctions found in English are *not* contained in these other languages, it would then be important to discover whether, among native speakers of the relatively impoverished language, such individual differences are encoded in different ways (for example, by phrases rather than by single words), are perceived but only rarely communicated to others, or do not appear to be perceived at all.

REFERENCES

Allport, G.W. *Personality : A psychological interpretation.* New York : Holt, 1937.

Allport, G.W., ε Odbert, H.S. Trait-names : A psycho-lexical study. *Psychological Monographs,* 1936, 47, (1, Whole No. 211).

Anderson, N.H. Likableness ratings of 555 personality-trait words. *Journal of Personality and Social Psychology,* 1968, 9, 272-279.

Cattell, R.B., The description of personality : Basic traits resolved into clusters. *Journal of Abnormal and Social Psychology,* 1943, 38, 476-506.

Cattell, R.B. Confirmation and clarification of primary personality factors. *Psychometrika,* 1947, 12, 197-220.

Cattell, R.B. *Personality and motivation structure and measurement,* New York : World Books Co., 1957.

D'Andrade, R.G. Trait psychology and componential analysis. *American Anthropologist,* 1965, 67, 215-228.

Goldberg, L.R., Some recent trends in personality assessment. *Journal of Personality Assessment,* 1972, 36, 547-560.

Levy, L.H., ε Dugan, R.D. A constant error approach to the study of dimensions of social perception. *Journal of Abnormal and Social Psychology,* 1960, 61, 21-24.

Mulaik, S.A., Are personality factors raters' conceptual factors? *Journal of Consulting Psychology,* 1964, 28, 506-511.

Norman, W.T., Toward an adequate taxonomy of personality attributes : Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology,* 1963, 66, 574-583.

Norman, W.T., *2800 personality trait descriptors : Normative operating characteristics for a university population.* Department of Psychology, University of Michigan; April, 1967.

Norman, W.T., ε Goldberg, L.R. Raters, ratees, and randomness in personality structure. *Journal of Personality and Social Psychology,* 1966, 4, 681-691.

Peabody, D. Trait inferences : Evaluative and descriptive aspects. *Journal of Personality and Social Psychology Monograph,* 1967, 7, Whole No. 644.

Peabody, D. Group judgments in the Philippines : Evaluative and descriptive aspects. *Journal of Personality and Social Psychology,* 1968, 10, 290-300.

Peabody, D. Evaluative and descriptive aspects in personality perception : A reappraisal. *Journal of Personality and Social Psychology,* 1970, 16, 639-646.

Wylie, R.C., The present status of self theory. In : E.F. Borgatta ε W.W. Lambert (Eds.), *Handbook of personality theory and research.* Chicago : Rand McNally, 1968, pp. 728-787.