

they yielded a fairly normal curve of distribution, the extreme scores at either terminus of the linear scale signifying opposite modes of adjustment. Statistically considered, there is a *single* variable; psychologically, however, the composition of this variable is by no means simple.

In defense of the view that these linear continua represent a single psychological variable, it is customary to cite the supposed preference of nature for symmetrical distributions. So many minute genetic

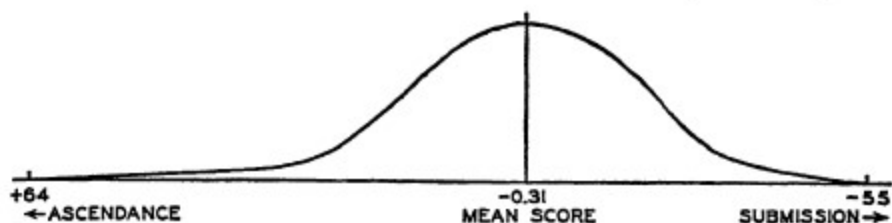


FIGURE 22

Distribution of Scores from a Test Designed to Measure Ascendancy-Submission

Constructed from the decile distribution of scores published in *Manual of Directions*, rev. ed., for "A-S Reaction Study," Form for Men.

influences determine the height of a man, for example, that the final stature attained by a large unselected male population will be found to vary about a central tendency as chance itself varies. When multiple causes are at work the normal curve of variation frequently found in biological measures is, therefore, the curve of probability. And this is why the native ingredients in personality, aspects of physique, temperament, and nervous plasticity, dependent as they are upon the composite determinants of inheritance, frequently yield symmetrical curves of distribution. The more any quality depends upon chance-biological determination the more likely it is to be normally distributed.

Traits, however, do not depend altogether on chance-biological determination. They depend also upon cultural determination, and here an entirely opposed principle is at work, for, roughly speaking, in so far as a quality depends on the mores, the *less* likely it is to be normally distributed. Folkways, civil laws, and all other exterior constraints tend to destroy the "natural" variation in behavior through their demand for *conformity*.

For example, motorists approaching an intersection without external control, will vary their behavior according to chance factors. The

curve on a continuum from "Same Speed Ahead—Full Stop" is a normal curve. But only when strong social pressure is lacking does such a Gaussian distribution appear. Let an element of social constraint enter—"Stop" signs, red lights, a policeman, and the distribution of

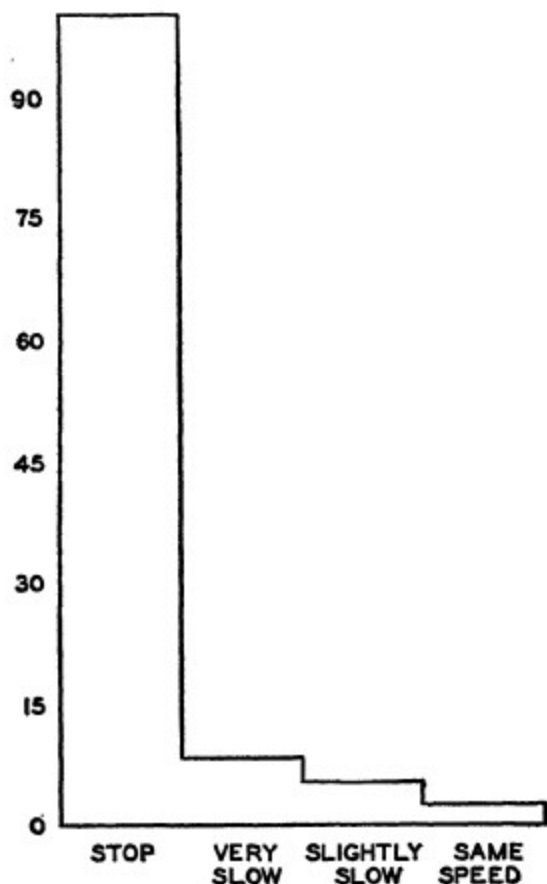


FIGURE 23

J-Curve of Conforming Behavior

Motorists' behavior at intersection, with no cross traffic approaching, but confronted with red lights and a traffic officer: 102 cases. After F. H. Allport, *J. Soc. Psychol.*, 1934, 5, p. 144, Figure 2.

speeds is no longer "normal." It is skewed markedly toward the side of *obedience*. A large number of instances of social conformity have been studied, always with the same result.¹⁹ What appears in place of a normal (chance-biological) curve is a J-shaped distribution. The behavior of motorists confronted physically by stop lights and a policeman is represented in Figure 23.

¹⁹ F. H. Allport, "The J-Curve Hypothesis of Conforming Behavior," *J. Soc. Psychol.*, 1934, 5, 141-183.

In many situations, a *double J-curve* is found. Some strong social pressure makes for conformity; every individual is expected to fit the same mold; and most of them do. But at the same time "uncontrolled" factors again enter to a sufficient extent to cause minor deviations from the norm. A good instance is found in the punching of the time clock in a factory, Figure 24. Here every incentive leads to punctuality, or if any deviation is permitted, it must be in the direction of earliness. The resulting distribution is sharply asymmetrical, with the mode falling upon the "punching time" set by the employer.

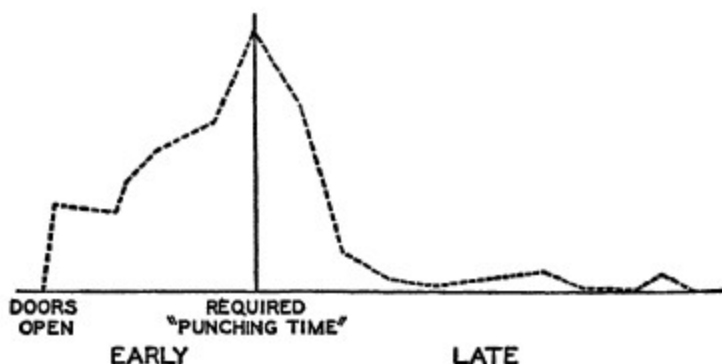


FIGURE 24

Double J-Curve of Conforming Behavior

Smoothed curve representing time of arrival at a factory: 1,277 cases. After F. H. Allport, *op. cit.*, p. 145, Figure 5A.

Underlying biological variation, then, makes for a distribution approaching the normal probability curve; cultural conformity, also operating in the case of common traits, tends, on the other hand, to make the distribution asymmetrical, with the mode at the terminal step defined by the norm itself. How can these opposed forms of distribution be reconciled?

Before attempting a solution of the puzzle, we must ask ourselves one other question: Is it more reasonable to suppose in the case of a given scalable variable that we are confronted with *one* common trait or with *two*? Taking Ascendance-Submission as typical, is one aspect of behavior here in question (as the hyphenated name for the continuum implies) or are two different aspects arbitrarily brought together for convenience of measurement? The second alternative is the more probable. For submission is not merely the absence of ascendance; a high score on the former does not mean simply an absence of the latter. Submission is a *positive* manner of adjusting, as

positive as ascendance itself. Many people have a well integrated disposition to yield, to take the passive role in face-to-face situations; it is their style of life. The conception of a common trait of submission does its best to approximate this tendency as it is found in individual lives. And the same may be said of most other commonly scaled traits. Introversion is as positive (in the psychological sense) as extroversion; radicalism is as definite a common trait as conservatism. In such linear continua clearly *two* traits are involved.²⁰ Putting the two together is justified, not because they are one and the same trait, but because, from the point of view of adaptive significance, they are *complementary*.

In the light of these considerations, the following suggestions are offered to account for the quasi-normal distribution of continua of the type represented in Figure 22. *Two* common traits are present, but since they represent aspects of adjustment that may be regarded as complementary, they are joined into one linear continuum. The true distribution of either trait considered *alone* is not normal. It approaches the J-curve of cultural behavior: most people do not depart markedly from the norm that is culturally established; social pressure in these cases tends to produce moderation. Yet owing to special sets of influences (of which biological temperament is surely one) some individuals do deviate from the modal tendency.

In the case of Ascendance-Submission our hypothesis is that two separate distributions are represented in Figure 22. Most people are neither decidedly ascendant nor decidedly submissive; their average or near-average score on the test signifies as much.²¹ When the two

²⁰ It is not true, however, that common traits, as conceived by testers, are always a combination of two opposite modes of adjustment. There are different ways of conceiving common traits. In some scales mere presence or absence of a tendency is measured, as, for example, in the case of esthetic, political, or religious interests, or in cases where the amounts of some prejudice or ambition are determined. In these instances a high score signifies the presence of the trait in question; a low score merely its absence. The present argument applies to scales, for either traits or attitudes, that are represented by hyphenated names, or could be so represented, e.g., radicalism-conservatism, expansiveness-reticence, introversion-extroversion, fascism-communism, militarism-pacifism, and the like.

²¹ An analysis of the reasons for the large proportion of average scores on the A-S Reaction Study reveals many contributing factors. In the first place the primary influence seems to be a tendency for the subject to select moderate responses to virtually every question; that is to say, he shows himself to be consistently "average" (neither ascendant nor submissive) in most situations. Here in all probability is a double effect: on the one hand, the social norms favor people neither markedly ascendant nor markedly submissive; on the other, the chance factors of temperament and other biological causes tend by and large in the same direction. A second, less frequent, cause of average scores is the cancellation of strongly ascendant

traits are put into a single artificial continuum, the result is a quasi-normal curve. If the distribution is still asymmetrical, as it often is, the inventor of the scale alters one item and another until a more satisfactory curve is obtained. The last step—so completely arbitrary—is often forgotten by the inventor when he interprets his results. He overlooks the fact that he personally has had much to say about the distribution which he blithely attributes to nature.

By way of summary: The whole problem of the distribution of common traits is exceedingly complex. Though for the present it is well to leave it open, a few suggestions have been made concerning factors influencing the distribution. For one thing the "normal" curve for common traits does in part reflect nature's preference for average (non-distinctive) levels; but in addition it reflects social pressure toward conformity with some accepted "average" level of conduct. The normal distribution often results from an arbitrary juxtaposition of opposite modes of adjustment into one linear scale. Finally, the distribution is to a certain extent affected by the inventor of the test who sees to it that successive revisions of his scale yield a more and more symmetrical scatter of scores. There is no serious objection to this last procedure, nor to the normal curve thus obtained, since in any case the scaling of common traits is but a rough way of approaching personality. In the interests of sound theory, however, it is well to realize the extent of the complications introduced into one "simple" variable for purposes of convenient measurement. Only by so doing can we avoid the fallacy of presuming, as more than one writer has done, that "everything in personality is normally distributed."

CARDINAL, CENTRAL, AND SECONDARY TRAITS

In every personality there are traits of major significance and traits of minor significance. Occasionally some trait is so pervasive and so outstanding in a life that it deserves to be called the *cardinal trait*. It is so dominant that there are few activities that cannot be traced

responses by an equal number of markedly submissive responses. In such cases, the scale is misapplied and misleading, for the subject obviously is not "average" in any intelligible sense of the word. He has two well integrated but entirely contradictory traits. Finally, an average score might result (though it seldom does so) from an entirely random series of responses, whereby this ascendant reply is cancelled by that submissive reply, with a number of non-diagnostic (moderate) responses thrown in, all as the theory of specificity would require. Thus there are many causes of average scores, and it is for this reason that an *average* score obtained by a single individual has little psychological significance.

directly or indirectly to its influence. The list of terms on pp. 302 f., derived from the proper names of historical and fictional characters, shows clearly what is meant by cardinal traits. No such trait can for long remain hidden; an individual is known by it, and may even become famous for it. Such a master quality has sometimes been called *the eminent trait*, *the ruling passion*, *the master-sentiment*, or *the radix* of a life.

It has been objected that the conception of a cardinal trait is essentially tautological, for, one asks, is not the cardinal trait identical with the personality itself? This objection cannot be admitted; however well integrated a life may be around the cardinal trait there remain specific habits, incidental and non-organized tendencies, and minor traits of some degree that cannot be subsumed functionally under the cardinal trait. Though pervasive and pivotal, a cardinal trait still remains within the personality; it never coincides with it.

It is an unusual personality that possesses one and only one eminent trait. Ordinarily it seems that the foci of personality (though not wholly separate from one another) lie in a handful of distinguishable *central traits*. (Cf. Perry's list of the four "benign" traits of William James, p. 314, fn. 2.) Central traits are those usually mentioned in careful letters of recommendation, in rating scales where the rater stars the outstanding characteristics of the individual, or in brief verbal descriptions of a person.

One may speak, on a still less important level, of *secondary traits*, less conspicuous, less generalized, less consistent, and less often called into play than central traits. They are aroused by a narrower range of equivalent stimuli and they issue into a narrower range of equivalent responses. Being so circumscribed they may escape the notice of all but close acquaintances.

It goes without saying that these three gradations are altogether arbitrary and are phrased merely for the convenience of discourse. There are no criteria, statistical or otherwise, by which to mark off one grade from another. In reality there are all possible degrees of organization in a trait from the most circumscribed and unstable to the most pervasive and most firmly integrated. It is useful, however, to have these distinctions at hand when one wishes to speak roughly of the relative prominence of various traits in a given personality.

TRAITS AND THE TOTAL PERSONALITY

Since semi-separate traits are the most reasonable units for use in the psychological exploration of personality, it has been necessary to discuss them in some detail. It would, however, be unfortunate to give the impression that a personality is *adequately* studied when a list of these inter-dependent traits is assembled. The problem of sub-structures is not the same as the problem of total structure. Traits are merely the principal *Teilfunktionen* of personality; beyond them extends the problem of their inter-fusion. Various theories have been advanced to account for the homogeneity of the whole personality which Stern has so aptly characterized as an *unitas multiplex*. Thus far we have been considering theories that explain its multiplicity; the next question in order is its unity. Be it noted, however, that the theory of inter-dependent traits takes a long step in the direction of synthesis.

RÉSUMÉ OF THE DOCTRINE OF TRAITS

In everyday life, no one, not even a psychologist, doubts that underlying the conduct of a mature person there are characteristic dispositions or traits. His enthusiasms, interests, and styles of expression are far too self-consistent and plainly patterned to be accounted for in terms of specific habits or identical elements. Nor can the stability and consistency of behavior be explained away by invoking nominalistic theories; stability and consistency are not due to the bio-social arrangement of unrelated activities into categories with verbal tags. Traits are not creations in the mind of the observer, nor are they verbal fictions; they are here accepted as biophysical facts, actual psychophysical dispositions related—though no one yet knows how—to persistent neural systems of stress and determination.

Traits are not, like the faculties of old, abstractions derived from a theory of mind-in-general. There is no essential resemblance between impersonal faculties, as Memory, Will, and Sagacity on the one hand, and the focalized sub-structures of a particular mind (interests, sentiments, general attitudes) on the other. Faculties are universal, traits personal; faculties are independent, traits inter-dependent; faculties are *a priori*, traits must be ascertained empirically in the individual case.

The doctrine of traits differs also from the theory of factors or

any other system of common dimensions into which every individual is fitted categorically. Conceptualized nomothetic units (factors, instincts, needs, and the like) stress what is universal in men, not what is organized into integral, personal systems. The doctrine of traits emphasizes concrete individuality.

Traits are not directly observable; they are inferred (as any kind of determining tendency is inferred). Without such an inference the stability and consistency of personal behavior could not possibly be explained. Any specific action is a product of innumerable determinants, not only of traits but of momentary pressures and specialized influences. But it is the repeated occurrence of actions having the *same significance* (equivalence of response), following upon a definable range of stimuli having the same personal significance (equivalence of stimuli), that makes necessary the postulation of traits as states of Being. Traits are not at all times active, but they are persistent even when latent, and are distinguished by low thresholds of arousal.

It is one thing to admit traits as the most acceptable unit for investigation in the psychology of personality, but another to determine authoritatively the precise character of these traits in a given life. In order to avoid projection of his own nature and many other sources of error, the psychological investigator must use all the empirical tools of his science to make his inferences valid. Traits cannot be conjured into existence; they must be discovered.

In naming the traits that are discovered, there are many pitfalls, the chief one being the confusion of personality with character through the use of eulogistic and dyslogistic terms. Whenever this occurs the existential pattern of personality becomes hopelessly entangled with social judgments of merit and demerit. It is possible, though difficult, to achieve a psychological vocabulary of non-censorial trait-names. Most of these terms antedate psychology by centuries; they were invented because they were needed. Simply because it is difficult to employ them circumspectly, the investigator is not on that account justified in dispensing with them altogether and attempting to put mathematical or artificial symbols in their place. Regrettable though it may seem, the attributes of human personality can be depicted only with the aid of common speech, for it alone possesses the requisite flexibility, subtlety, and established intelligibility.

For the purposes of comparison and measurement certain segments of behavior (by virtue of the similarity of human equipment

and the common exigencies of the cultural and physical environments) may be considered as distributed in a general population. These *common* traits as conceptualized by the investigator may, in a rough and approximate way, be scaled on a linear continuum. The "normality" of distribution obtained for such traits is a complex product of chance-biological variation, cultural conformity, and artifact. However carefully conceived and scaled, a common trait is at best an abstraction, for in its concrete form, in each particular life, it operates always in a unique fashion. *Individual* traits cannot be scaled at all in a general population, and for that reason they have been hitherto neglected by all excepting clinical investigators.

Some traits are clearly motivational, especially those sub-classes ordinarily known as interests, ambitions, complexes, and sentiments. Other traits are less dynamic in their operation, having an ability to steer (to stylize) behavior rather than to initiate it. But often the traits that are at first directive acquire driving power, and those that are at one time driving become merely directive.

Traits are not wholly independent of one another; nor are any other neuropsychic systems. They frequently exist in clusters, the arousal of one portion tending to spread to all regions in readiness for communication. Throughout this elaborate interplay, different foci of organization can be detected, a fact that justifies the conception of a *manifold* of traits even where they clearly overlap.

As this segregation among traits is only relative, so too is their self-consistency. In fact, the usefulness of any trait to its possessor depends to a great extent upon its flexibility. Even while it stabilizes conduct and economizes effort, the trait must not be rigid in its operation; for effective adjustment and mastery require variation. The range of situations that arouses traits must be expected to change according to circumstances. Also in any personality one must expect to find some contradiction and conflict among traits, as novelists and clinicians never tire of telling.

Variable though they are, still in every mature personality certain *central* traits can normally be identified. So too can *secondary* traits, though these are less distinctive, less prominent, and more circumscribed in their operation. Whenever a disposition is so little generalized that it is aroused by only a narrow range of stimulus situations, it is more properly called an *attitude* than a trait. Somewhat rarely a personality is dominated by one outstanding *cardinal* trait, to which other dispositions serve as merely subsidiary, congruent foci.

As is the case with all other forms of mental organization, the structure of true (individual) traits is a question of degree. But however much they may vary in respect to their consistency, scope, and independence, they have—according to the theory developed in these chapters—certain essential characteristics. They are always biophysical in nature, concrete and personal in their organization, contemporaneous in their effect, capable of functional autonomy, but not structurally independent of one another; they are generalized (to the extent that the effective stimuli are equivalent, and to the extent that the resultant responses are equivalent). They are *modi vivendi*, ultimately deriving their significance from the role they play in advancing adaptation within, and mastery of, the personal environment.