

## Chapter 8 Empirical Analysis of Personality and Social Styles

### § 1. The Notion of Gregariousness

Webster's Dictionary (1962) defines "gregarious" as

**gregarious**, *a.* [L. *gregarius*, belonging to a flock, from *grex*, *gregis*, a flock, herd.]

1. living in herds or flocks.
2. fond of the company of others; sociable.
3. having to do with a herd, flock, or crowd.
4. in botany, growing in clusters.

Man is often called "a social animal" and is often described, as Adams did, as being gregarious. Psychology offers a nominal definition of sorts for gregariousness:

**gregariousness** 1. With respect to animals, the tendency found in many species to live in herds or flocks. 2. With respect to humans, the tendency to want to belong to groups or to derive satisfaction from group activity or group work. Because meaning 1 strongly suggests an innate disposition there has been a tendency to assume that meaning 2 is also reflective of an instinctive propensity; it is probably wise to resist this extrapolation. [Reber (2001)]

Many of those who characterize humankind in this way hold that gregariousness is an innate human trait, whereas others studying sociology or psychology hold it to be an acquired trait. Which is it? Could it be both? For that matter, is it really a *trait* at all? Psychologically, a *trait* is

Generally, any enduring characteristic of a person that can serve an explanatory role in accounting for the observed regularities and consistencies in behavior. This is the proper use of the term: it is incorrect and misleading to use it for the regularities themselves. The point is that a trait is a theoretical entity, a hypothesized, underlying component of an individual that is used to explain that person's behavioral consistencies and the differences between behavioral consistencies of different persons. [*ibid.*]

Reber's *Dictionary* calls gregariousness a *tendency*, by which is meant *an internal state such that particular behaviors are likely to occur or can be learned relatively easily*. The word "state" as used in this context means *"a condition of a system in which the essential qualities are relatively stable. Note that it is the qualities of features that are unchanging; the features themselves may, in actuality, be dynamic"* [Reber (2001), "state"]. Stringing this chain of definitions together, then, gregariousness is an internal condition of a system, the system being comprised of relatively stable essential qualities, such that particular behaviors (in this case, the behaviors of wanting to belong to groups or deriving satisfaction from group activities or group work) are likely to occur or can be easily learned.

Now, a *condition*, as Reber uses it in this context, denotes a *determination* of the system, in this case the individual person himself. As for "qualities of features," Reber becomes vague about what this means, and even more so when one asks what an *essential* quality is. Are we to understand "essential qualities" as being the same thing as "enduring characteristics"? Or are we to understand "essential qualities" to mean "qualia," i.e., *"the qualitative, subjective experience of something . . . Qualia are presumed to constitute the irreducible, phenomenal character of experience; they are what something is like"* [Reber (2001), "qualia"]. Reber's *Dictionary* begins to become lost in a metaphysical fogbank at this point, making further semantic analysis of the definition problematic. This is most unfortunate because it leaves the question of whether a

tendency is a trait quite unanswered.

Almost all psychologists, including the Rebers, avoid deliberately engaging in metaphysics when speaking as scientists. The attitude is a holdover from the era of positivism. Reber's defines metaphysics as,

**metaphysics** A branch of philosophy that seeks out first principles and, of necessity, must go beyond what can be found by mechanical or physical analyses. Often, because of its intellectual heritage, the term is used as a label for any philosophy that is abstruse. Indeed, William James characterized metaphysics as 'nothing more than an unusually obstinate effort to think clearly'. [*ibid.*]

To some (me, for example), this description can seem to carry within it a wisp of patronizing censure. Be that as it may, the fact is that Reber's *Dictionary* runs up here against the unavoidable fact that, eventually, all grounding explanations in science come down to metaphysical questions. Reber declines to come to grips with this and leaves the question "is a tendency a trait?" without an answer.

But the answer makes a great deal of difference to the divers ideas of social compacting. In Critical metaphysics, the idea of the *state* of a system, viewed in the empirical reflective perspective, is the idea of the coexistence of the changeable with the fixed. The changeable, in this context, is comprised of divers *modi* of *Existenz* that are determinables of different particular actions (behaviors in the present case). The fixed consists of the organized functional invariants of the system. As an *adjective*, gregariousness is a mode-of-*Existenz*, thus denotes a particular manner-of-*Existenz* and *not* an "essential quality" as a *quale*<sup>1</sup> (such as an "instinctive propensity") of a person in the Reberian sense. Gregariousness, therefore, cannot be regarded as a *cause* of behavior but can taken as being descriptive of a *form of causality*<sup>2</sup> specific to a determinable *class* of behaviors. Gregariousness is not an agency nor a *causatum* (rule for the determination of change). It is at best a *label* for a *pattern of spontaneous expression*, i.e., a characteristic way of behaving, thinking, feeling, reacting, etc.

The notion that gregariousness is in some way "enduring" is what gets it called a *personality trait* by some. This term, however, has two quite distinct connotations in psychology:

**personality trait** Loosely, a trait of personality. That is: **1.** Some hypothesized underlying disposition or characteristic of a person that, in principle, can be used as an explanation of the regularities and consistencies of his or her behavior. **2.** A simple description of one's characteristic modes of behaving, perceiving, thinking, etc. Meaning 2 is used descriptively without explanatory intent; meaning 1 is grounded in a particular approach to personality theory. [*ibid.*]

The first usage of the term denotes either *personality-trait-as-tendency* (when used to mean disposition) or else *personality-trait-as-trait* (when used to mean characteristic)<sup>3</sup>. These are both entirely different sorts of ideas from the second usage quoted above. The second usage pertains to appearances, thus to what can be actually observed, and is a concept of Relation. The first usage is a concept of Quality and pertains to some putative (and often speciously reified) *real essence* of a person. When one uses the term the first way, as some schools of personality theory do, he is

<sup>1</sup> singular form of qualia

<sup>2</sup> Critically, **causality** is the notion of the determination of a change by which the change is established according to general rules. **Cause** is the notion of the agency of a substance (in this case, the person) in containing the ground of the actuality of the change. A **causatum** is a *rule* for the determination of a change under the condition of a cause as its ground.

<sup>3</sup> see Reber's entries for 'disposition' and 'characteristic' in Reber (2001).

standing on metaphysical quicksand:

The idea of essence belongs properly to logic. Essence is either a logical essence or a real essence. A *logical essence* is the first ground of all logical *predicates* of a thing; a *real essence* is the first ground of all *determinations* of an essence. . . . We posit a logical essence through the analysis of the concept. The first ground of all predicates thus lies in a concept, but that is not yet a real essence. . . . But a *real essence* is the first ground of all that which belongs to the object-matter itself. . . . Logical essence is found through principles of analysis, but real essence through principles of synthesis. . . . The real essence is not the essence of the concept, but rather of the object-matter. . . . Now the inner ground of all this is the nature of the thing. We can infer the inner principle only from properties known to us; *therefore the real essence of things is inscrutable to us*, although we recognize many essential aspects. [Kant (1790-91), 28: 552-553]

This tells us something of such great importance that to miss it is to utterly lose our grip on objective validity: *the concept of gregariousness, as are the concepts of all other personality traits, is a mathematical concept*. It belongs to Slepian's facet B, the mathematical world, and can never be mistaken for anything in facet A, the phenomenal world. Those who seek to understand personality traits as part of facet A must ultimately and necessarily fall back upon some sort of pseudo-mechanistic premise. In present-day sociology the most common of such attempts goes under the name *sociobiology*; in psychology it goes under the heading of *psychoevolutionary theory*. Neither approach is objectively valid, although within both approaches there are some ideas that *are* properly mathematical and from which objectively valid conclusions can be deduced. The tricky part, as usual, is separating the wheat from the chaff.

How is the term used in the subfields of personality theory and of psychiatric and clinical psychology? Reber does give us an answer, or at least an indication of one, to this:

**disposition 1.** Generally, an ordered arrangement of elements which stand in a particular relationship to each other such that certain functions may be carried out readily. This is the core meaning and arrives in straight translation from the Latin word for *arrangement*. By extension: **2.** In the study of personality, any hypothesized organization of mental and physical aspects that is expressed as a stable, consistent tendency to exhibit particular patterns of behavior in a broad range of circumstances. In this sense, the many tendencies to act to which literally dozens of special terms have been applied as descriptive labels – *trait, ability, habit, set, instinct, drive, temperament, sentiment, motive, faculty*, etc. – are all interpretable as dispositions. The theoretical problem that has spawned this terminological forest is the need to explain the regularity and consistency of behavior (more or less) independently of variation and alteration in the environment. **3.** A tendency to be susceptible. This meaning is common in psychiatric and clinical psychological writings, e.g. a disposition for schizophrenia. [Reber (2001)]

In contrast, an empirical characteristic is

**characteristic** Some individualistic feature, attribute, etc. that serves to identify and 'characterize' something. Generally used synonymously with *trait* in discussion of personality. [*ibid.*]

What a collage of colliding, intersecting, mutating, incestuous homonyms we have encountered by asking of psychology what had first seemed a simple question! Is gregariousness a trait or a tendency? It would appear that psychology is incapable of answering this because it doesn't know if there *is* a real difference between a "trait" and a "tendency." Its refusal to come to grips with metaphysics costs this empirical social science very dearly.

From its inception in the 19th century, psychology has sought to become a proper natural science. That today it is relegated to the social sciences (with the particular exception of psychiatry, which is a branch of medical science) must be seen as a disappointment of its aims. Let us put it on a rather better path. At root, all meanings are practical. In the case at hand here, the word "gregarious" is *used as a description of mannerisms of behaviors*. It is an idea in the mind of the psychologist (and, for that matter, other social scientists as well), and as such it is a mathematical object that *has no objectively valid ontological significance per se*. All mathematical concepts are *made* concepts – this is to say, their objects are not givable through receptivity but, instead, are givable only through spontaneity in thinking and reasoning. If we are to *use* the concept productively, our usage must be regulated by the principle of continuity, which in its case would be stated as *the cause of a person following the practice of gregarious behavior is not given in the sensible world*.

That many people exhibit behavior called 'gregarious' is an empirical fact. Most people do in fact live in groups and form associations with other people. To say that such a person tends to be or is characterized as having a disposition for "gregariousness" is to posit the *Dasein* of: (1) an inner cause of the behavior as a Quality of composition of actions; (2) *causata* for composing the form(s) of the exhibited appetite (which are concepts of Quantity); (3) a Relation of causality & dependency connecting the determined behavioral appetites to the person's capacities for expression; and (4) a Modality for a metaphysical *nexus* of determinables connecting the mathematics of behavioral determination to the person's natural power of Self-determination. *Doing* all this is to do nothing else than *to synthesize a mathematical concept that terminates in an objectively valid principal quantity of Critical mathematics*. The proper scientific task is not to explain gregariousness *per se* in ontological terms but instead to understand the inner Nature of being-a-human-being such that his Nature *is capable of expressing* those phenomena of behavior that are said to "exhibit gregariousness." So, too, is the case for all other traits or tendencies (exhibitions) that psychiatrists and psychologists study in attempting to understand personality.

And this brings us to the idea of "personality." What is personality? Psychologists certainly do not speak with one voice on this question either. Reber's *Dictionary* tells us

**personality** One of the classic 'chapter heading' words in psychology. That is, a term so resistant to definition and so broad in usage that no coherent simple statement about it can be made – hence the wise author uses it as the title of a chapter and then writes freely about it without incurring any of the definitional responsibilities that go with introducing it in the text. . . . G.W. Allport, back in 1927, was able to cull nearly 50 different definitions from the literature, and heaven only knows how many one could find today [*ibid.*].

In Critical epistemology, **personality** (*Personlichkeit*) is the entirety of the *nexus* of practical rules regulating a person's habits expressed by his physical and mental activities. This explanation is a mathematical one, that is, a concept of logical rather than real essence. But it is also a general idea (which is to say it is a concept at a high level of abstraction), and *to make use of it* we must identify *other* mathematical concepts that will bring us from this *secondary quantity* of Critical mathematics to *principal quantities* of Critical mathematics providing correspondences between mathematical analysis and the phenomena being analyzed. Happily for us, there is a college of psychiatry that has already found the next key concept we need:

One way to investigate the definition of a term is to examine how its meanings and usage have evolved over time. Historically, the word **personality** is derived from the Latin term **persona**, originally representing the theatrical mask used by ancient dramatic players. As a mask assumed by an actor, *persona* suggests a pretense of appearance, that is, the possession of traits other than those that actually characterize the individual behind the

mask. In time, persona lost its connotation of pretense and illusion and began to represent not the mask, but the real person's observable or explicit features. The third and final meaning personality has acquired delves "beneath" surface impression to turn the spotlight on the inner, less often revealed, and hidden psychological qualities of the individual. Thus, through history, the meaning of the term has shifted from external illusion to surface reality and finally to opaque or veiled inner traits. This last meaning comes closest to contemporary use. Today, personality is seen as a complex pattern of deeply embedded psychological characteristics that are expressed automatically in almost every area of psychological functioning. That is, personality is viewed as the patterning of characteristics across the entire matrix of the person. [Millon and Davis (2000), pg. 2]

Of course, to speak of "opaque or veiled traits" or of "patterns deeply embedded" means that this conception of "personality" is not the concept of the principal quantity we must reach in order to marry theory to experience. We have to peel the onion further and find concepts of analysis that meaningfully explicate these "inner qualities" with objective validity. Here, too, we find that a valuable, if underappreciated, mathematical tool has been forged for us, although there are some practitioners of psychology and of psychiatry who misuse the tool in manners that could be likened to shaving with an ax. The tool is a mathematical methodology, it belongs to that wing of mathematics called topology theory, and it is called *circumplex modeling*. By introducing this tool, we gain a powerful instrument for analyzing not only gregariousness but a whole complex of concepts pertinent to the social-natural scientific problem of social interactions.

## § 2. Circumplex Modeling of Interpersonal Styles

### § 2.1 Introduction to Circumplex Modeling

The idea of the circumplex model is slightly over sixty years old now. Its early origin began among psychologists interested in studying interpersonal relationships. Not long afterward, it was independently developed by psychologists interested in the study of emotions and, later, was extended to the study of personality when it became evident that affective perception and personality were somehow intimately linked.

The distinction between the study of interpersonal relationships and personality originated in the work of an interesting, if somewhat disorganized, mid-twentieth century psychiatrist named Harry Stack Sullivan. Sullivan's ideas were a reaction against the analytic and medical paradigms that dominated psychiatry in his day, especially psychoanalysis and Freudian theory. These models generally assumed that psychiatric disorders were caused by purely personal, inner factors without reference to the society and social situations with which people must constantly deal. Sullivan adopted that view that personality is "the recurrent set of interpersonal situations which characterize a person's life" [Sullivan (1953)]. Sullivan himself did not introduce the interpersonal circumplex. That was left to another rather colorful character, Timothy Leary<sup>4</sup> [Freedman, *et al.* (1951)].

More or less in parallel with these developments, another group of psychiatrists and psychologists primarily interested in studying emotions also was developing what in time became today's circumplex modeling paradigm. The term circumplex<sup>5</sup> was first introduced in 1954 by Guttman, and among the pioneers of circumplex modeling theory probably the foremost scholar

---

<sup>4</sup> This is the same Timothy Leary who became rather notorious in the 1960s for his public advocacy of the use of LSD. The widespread publicity he received at that time makes a good example of why so many lay people think most or all psychologists and psychiatrists are a bit nuts.

<sup>5</sup> from the Latin *circum-* (prefix), around, about, at several points, in many places; and *-plex* (equivalent to English '-fold'), *circumplexus* (1) curling around, encircling; (2) a latitudinal encircling zone (of sky).

after Leary was Robert Plutchik [Plutchik (1958), (1962), (1980)]. By the mid-1980s the Leary-Plutchik circumplex technique was being used to study personality disorders as well. The direction these studies took tended to concentrate the focus on disorders rather than on personality styles for obvious clinical reasons. The terminology used by this research community, which is still rather distinct from the interpersonal theory community, is colored by the labels given to personality disorders in clinical psychiatry. This brings me to a somewhat delicate point.

Some of the terminology used originated in psychiatry and the subfield of psychology known as abnormal psychology. Almost everyone has heard some of the terms used by these scientists, but very few people outside the professional field actually properly understand what they mean. In particular, there is one very common term, *personality disorder*, that is widely familiar and another – for our purposes more important – term barely known at all except to psychiatrists and psychologists, *personality style*. Both terms, when used with objective validity, denote mathematical constructs. It is important to understand the *defined* difference between them:

Styles and disorders are distinguished in terms of their relative level of pathology: personality styles shade gently into personality disorders, with styles falling in the normal range [of variations in human behaviors] and disorders falling into the pathological range. Both are higher-order constructs composed of personality traits<sup>6</sup>. More significantly, styles and disorders refer to constructs that integrate the part-functions of personality, whereas traits are simple behavioral consistencies within the various personality domains or perspectives. The distinction between these two levels is essential. . . . Personality styles and disorders are operationalized in terms of the various perspectives on personality; traits are not. [*ibid.*, pg. 97]

The context for this is the context of how well or not-well an individual functions and interacts with others in social situations, meets or does-not-meet the expectations of others framed in terms of social folkways and mores, and provokes or does-not-provoke affective acceptance by others of his actions and modes of behavior *relative to* how the greater majority of other people living in the same community perform in these same regards. *By definition* the greater majority of people is said to comprise the "normal range" and the small minority of people whose behaviors provoke not merely lack-of-approval but active disapprobation is said to comprise the "pathological range" of personality. Ruch and Zimbardo wrote,

[Definitions] of abnormality are basically statistical – how much does a given individual deviate from what most people do? "What most people do" (or what the most powerful people do), in turn, depends on the culture or epoch. Societies differ both in what the norm is and in how much variability they will tolerate before the behavioral differences are seen as significant deviations. But there is always a tendency to protect the social status quo by punishing nonconformers or treating them in a variety of ways designed to bring them back to the norm or eliminate them, in order not to permit the average response ("what most people do") to shift in their direction.

Psychologists function as agents of the society. Yet to adopt the simplistic view that what is good for Mr. Average Person is what is *healthy* makes deviants of critics and madmen of nonconformers. It becomes obvious that the "normality" of any group's norm must in turn be judged by other criteria. . . .

---

<sup>6</sup> Most theorists and clinicians who work in this field subscribe to what is called a psychoevolutionary theory of personality and emotion. Part of this paradigm holds that there must exist primitive "atoms" of personality and/or emotion (usually called 'primitives' or 'primes'). Millon & Davis' statement here is an example of this presupposition. These "traits" are regarded as personality primitives. However, the psychoevolutionary postulate completely lacks any ground of real objective validity, as does the postulate of personality, emotion, or motivation "atoms" ('primes'). We will not be using these Platonic phantoms.

Allport (1960) cogently argued that beyond the statistical and relative standards imposed by social systems and cultures there is an ethical standard to use in judging abnormality. He felt that a valid standard for sound and healthy personality should be based on human potentials rather than on any prevailing actualities. [Ruch and Zimbardo (1971), pg. 411]

We can and must ignore the mildly sermonizing flavor of this quotation as being impertinent to the topic at hand<sup>7</sup> and focus instead on the context of statistical analysis used in the practice of gauging and classifying personality. Now, to carry out any sort of statistical analysis, one must have some set of pre-defined factors upon which the statistical analysis is to be based. This raises what is possibly one of the *most* difficult central problems psychological methodology has always had to face, namely the problem of selecting or deciding what these factors are to be.

It is not too difficult to appreciate the scope of this problem when one remembers that psychology tries to be an empirical science that studies phenomena for which the principal objects of study are not directly givable through external experience (i.e., the objects of interest are supersensible objects of the *homo noumenal* aspects of being-a-human-being). In the case of the circumplex model, what is important to always bear in mind is that the circumplex is a tool for analysis. Furthermore, its *real* purpose must always be tied to what we want to use this tool to accomplish. This can be nothing else but discovery of principal quantities of Critical mathematics where the theory of *nous-psyche* can emerge to explain social behavior.<sup>8</sup>

To understand how this tool can be used, it is important to be aware of the following four ideas:

1. The circumplex is a reflection of certain types of relations or interactions. These include the idea of *similarity* and *polarity*. If the elements being considered vary in degree of similarity to one another (as do emotions, personality traits, and diagnoses) and show polarities (e.g., joy versus sorrow, dominance versus submissiveness, antisocial versus avoidant), then a circle as an analogue model may possibly be used to represent these relations. Statistically, a set of correlations among these elements should show systematic increases and decreases in the degree of correlation between the elements, depending on their degree of conceptual closeness and their degree of polarity. . . .

[It] is important to recognize that there are a number of different methods that can be used to determine the precise location of the elements of the circumplex. Any two uncorrelated variables can be used as axes and the relative location of all other variables can be estimated. Factor analysis can be used to determine two major independent axes and then factor loadings of all other variables can be plotted on these axes. . . . Other statistical methods have also been used (Russell, 1989) and new ones will probably be invented.

2. The idea of a circumplex does not imply that the elements of the circle need to be arranged with equidistant spacing. It does not imply that there needs to be any specific number of categories around the circumference of the circle . . . . And the circumplex model does not per se specify any particular set of axes as fundamental or basic. In a true circle, there are no special axes. . . .

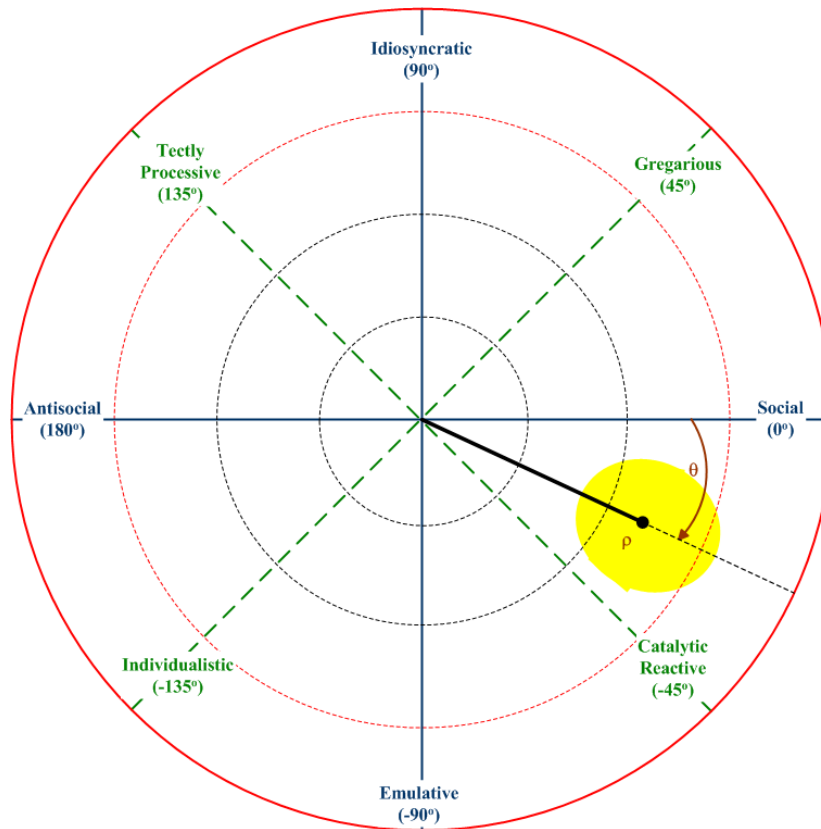
---

<sup>7</sup> This edition of their popular textbook was written during the period of civil war in the United States that took place over the issues of civil rights and the Vietnam war. Neither Ruch nor Zimbardo (or almost anyone else, including myself) were neutral about the issues and controversies of that time.

<sup>8</sup> Historically, this has not been the primary use to which psychiatrists have tried to put it to. They have, rather, been interested in using it to try to identify putative "traits" or "primes" evolutionary psychology has postulated as the causal factors of behavior. As has been true for almost every study of "trait psychology," the outcome has been unproductive. In the first place, statistical analysis *never* carries causal implications. In the second place, the fundamental premise of evolutionary psychology itself lacks objective validity.

3. The circumplex model as applied to personality primarily describes the interpersonal aspects of personality, not everything that investigators over the years have labeled personality. The circumplex probably does not apply well or at all to physical characteristics of a person, to pejorative terms, to intellectual abilities, to aptitudes, or to cognitive styles, all of which have been considered at one time or another to be aspects of personality.
4. The concept of polarity inherent in the circumplex model implies the idea of conflict between opposing elements. . . . Conflicts reflect such basic processes as approaching versus avoiding, taking in versus expelling, attaching versus disconnecting, and attacking versus retreating. These polarities may be thought of as control systems that regulate social interactions (Horowitz & Stinson, 1995). – [Plutchik (1997)]

The context for a circumplex model of interest to us in this treatise is the phenomenon of social contracting in regard to person-to-person interactions. This context informs the selection of the two orthogonal axes terms for the model. Figure 8.1 illustrates the circumplex I propose in this treatise. Its defining axes are given bipolar labels, antisocial-social and emulative-idiosyncratic, as shown in the figure. Although Plutchik holds that three descriptive labels suffice for determining a circumplex (and this is true; three points define a circle), I argue that four labels are better. This is because one has to account for the subjectivity and presuppositions of the persons who are *rating* the empirical descriptions being plotted on the circumplex – a classic source of *bias* in psychological evaluation. Two pairs of oppositely opposed labels provides some minimal level of data from which the analyst can do a blocked factor analysis that takes into account differences among the raters themselves in the factor analysis. The axis labels I present here are chosen in order to help facilitate post analysis of ratings using the constructs of mental physics.



**Figure 8.1:** Personality style circumplex model proposed in this treatise.



The term **antisocial** is chosen for reasons that are to some degree probably obvious in view of the context for the model. More specifically, behaviors symptomatic of antisocial personality disorder are fairly graphic in appearance and so it is relatively easier and more reliable to classify other behaviors in relationship to these. The *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) defines the following criteria for diagnosing antisocial personality disorder:

- A. There is a pervasive pattern of disregard for and violation of the rights of others occurring since age 15 years, as indicated by three (or more) of the following:
  1. failure to conform to social norms with respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest;
  2. deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure;
  3. impulsivity or failure to plan ahead;
  4. irritability and aggressiveness, as indicated by repeated physical fights or assaults;
  5. reckless disregard for safety of self or others;
  6. consistent irresponsibility, as indicated by repeated failure to sustain consistent work behavior or honor financial obligations;
  7. lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another.
- B. The individual is at least age 18 years.
- C. There is evidence of Conduct Disorder with onset before age 15 years.
- D. The occurrence of antisocial behavior is not exclusively during the course of Schizophrenia or a Manic Episode. – [American Psychiatric Association (1994)]

The polar axis term, **social**, is not as easy to define in terms of personality styles as one might think. Relative to traditional categories of personality styles, "social behavior" turns out to be something rather different from what most of us commonly take the term "social" to imply. A crisper label would be **un-antisocial** but this is not a common English word and it seems likely most people would take it to mean "social." (It is a different matter, however, when "social" is understood in terms of *interpersonal* style). Placement of the antisocial pole at the angle of 180° on the circumplex is arbitrary. This relative placement determines all the others.

The antisocial-social axis concerns the person's overt behavior with respect to the effects of his actions on others. The other axis pertains to the person's subjective orientation toward his actions. The label **emulative** is defined from the empirical reflective perspective of Critical metaphysics and means *personal mannerisms or habits characterized by a desire to equal or exceed norms subjectively based on examples set by others*. Note that this is not at all desire to conform to others' expectations. It rather suggests a basis in maxims of Self-love as the ground for the behavior. The person seeks an affective reward in being singled out (e.g., admiration, public acclaim, etc.) or seeks to avoid an affective punishment (censure, public disapprobation).

The polar axis term **idiosyncratic** is the opposite of this. The word *idiosyncrasy* comes from the Greek word *idiosynkrasia*: *idios*, one's own, peculiar; and *synkrasis*, a mixing together, tempering. The axis label is also selected from the empirical reflective perspective and means *characterized by personal peculiarity, mannerism, or habit with disregard for the opinions of others in relationship to subjective norms based on examples set by others*. If you have ever "marched to the beat of your own drum," you have exhibited idiosyncratic behavior. Placement of this pole at +90° on the circumplex is, again, arbitrary except for being orthogonal to antisocial.

Exhibited behavioral appearances are rated by a selected panel of evaluators who assign to the behavior a score based on its similarity to the four labels. For example, a score of -5 might be assigned if the behavior is judged to be identical to an "antisocial behavior" or +5 if it is judged to

be the opposite of this. It is assigned a score of 0 if it is judged to be unrelated to antisocial behavior. Each behavioral "symptom" is assigned a total of four scores, one for each axis of the circumplex, two for making a rater projection. The result is a vector characterized by a magnitude ( $\rho$  in figure 8.1) and an angle ( $\theta$  in figure 8.1). The larger the magnitude, the more the behavior approaches the characterization of being a disorder of some kind relative to a normal range of variations. I emphasize, however, that the purpose of this circumplex is to assess personality *styles* rather than disorders. Indeed, it can be strongly argued that a "disorder" is nothing else than an extreme style that "doesn't fit in" with what other people will tolerate.

You will note that in figure 8.1 the example "point" shown is surrounded by a colored region. This is the first important difference between this circumplex and older, traditional ones. The size and, to a first approximation, its shape is evaluated from the *variances* in the scores rendered by the evaluating judges. This is, Critically, an important point. The mathematics proper for natural science is based on Slepian's principle [Wells (2009), chapter 1] and is called *set membership* mathematics. This is in stark contrast to most circumplex models that have been published. These models, following a long scientific tradition, attempt to reduce the analysis to what is called a *point solution*. Researchers who ascribe to the paradigm of evolutionary psychology find themselves more or less committed to point solutions because the ultimate goal is to identify the 'primes' (primitive traits) that determine human behavior. These putative objects are supposed to constitute the causal underpinnings of human actions – a presumption that in an earlier era was the basis for the automaton theory of human nature and even included, at one time, the fanciful notion that among the atoms of physical nature would be found "psychological atoms"; these, which are in fact not-found anywhere in physical nature, were given the name "mind dust" by skeptics of the early automaton-evolutionary theory of psychology.

In more recent years, some psychologists have taken the position that it is empirically meaningless to assign point solutions in circumplex analysis. James Russell has been one of the leading figures in developing this way of understanding what the analysis does and does not convey. Russell employed a mathematical technique called "fuzzy set theory," which, as it happens, is a special case of set membership theory [Combettes (1993)]. Russell writes,

Membership in a category is not either-or but rather a matter of degree. In everyday conversation, we say that the glass is full, even when it is only 90% full. We tend to round off . . . ignoring other categories (rounding to 0%). Nevertheless, when asked, anyone can readily estimate degree of category membership. And cases exist that defy categorization. The borders of emotion categories are vague.

That categories admit their members in degrees and have fuzzy boundaries has turned out to be one of the most exciting, practical, and theoretically important ideas in a range of fields. Fuzzy logic supplants traditional two-valued (true-false) logic. The major uses so far have been in computer technology and engineering, but the impact has also been felt from linguistics . . . to psychology.

Rather than forcing us to draw an arbitrary line between, for example, the category of chairs and not-chairs, fuzzy categories allow us to note degrees of chairness. Or degrees of birdness (from robins to owls to emus to penguins to pterodactyls to bats), of humanity (adult humans to newborns to Neanderthal fetuses), or of emotions (from anger to pride to boredom to serenity) or of love (from mother's love and romantic love to infatuation to love of books). The fuzziness of emotion categories now has been well established [Russell (1997), pg. 209].

Critical metaphysics proper tells us that the *only* objectively valid way to link the world of mathematical concepts (facet B) to the world of real experience (facet A) is through use of set membership techniques. What Russell says above in praise of fuzzy logic is true even more so in

regard to its parent discipline. Set membership mathematics is not just a good or practical or fecund idea; metaphysically, *it is the law* for connecting mathematics and nature. Unfortunately, many American psychologists receive wholly inadequate training in mathematics (at some universities, a psychology major can avoid taking so much as a single freshman calculus class) and almost inadequate training in statistics. Further, training is not education, just as shop class training is not an education in mechanical engineering. Most students, in psychology and in most other fields, receive ***no education at all*** in math or statistics. There is little reason to think the situation is any better elsewhere on Earth. This is a major problem in education that must be corrected<sup>9</sup> or it will eventually bring on a new Dark Age from the complete collapse of science.

Figure 8.1 also depicts two other axes, the *gregarious/individualistic* axis and the *catalytic reactive/tectly processive* axis. Before explaining these, some concrete elaborations on how circumplex models are put to use is needed.

## § 2.2 Kiesler's 1982 Interpersonal Circle Circumplex

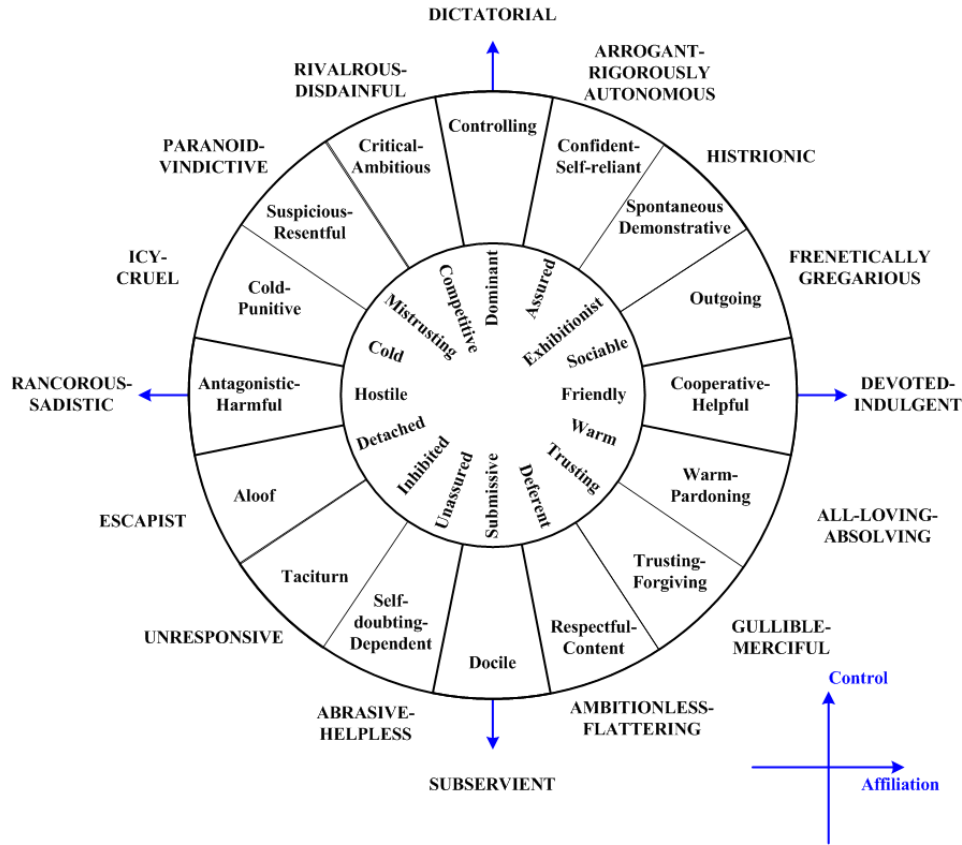
The study of the nature of interpersonal relationships in various social situations is and has always been one of the most important practical applications of personality theory. The scholarship tends to remain oriented to Sullivan's original proposition even as interpersonal circumplex models have developed over the years. Figure 8.2 depicts what has been one of the more popular and widely cited interpersonal circumplexes to date, the Kiesler "1982 interpersonal circle" circumplex [Kiesler (1983, 1985)]. We will call this the 82IPC circumplex.

The Kiesler circumplex is a model of interpersonal behaviors employed when two people interact with each other. It is set up in terms of two axes, denoted *control* and *affiliation*. These reflect two commonly recognized dimensions of interpersonal interactions that jointly express the behaviors of two individuals when they interact. Control denotes types of behavior by one person that tend to modify and change the behavior of the other person. Affiliation denotes types of transactional reactions that the behavior of the first person invites. Kiesler *et al.* described ***complementarity*** (reciprocity of observable behaviors) in the following words:

The broadest notion of reciprocity or complementarity is that interpersonal acts are designed to invite, pull, elicit, draw, entice, or evoke restricted classes of reactions from those with whom we interact, especially from significant others. Reactions by others to these acts are not random, nor are they likely to include the entire range of possible reactions. Rather, they tend to be restricted to a relatively narrow range of interpersonal responses. . . . Complementarity occurs on the basis of (a) reciprocity in respect to the control dimension (dominance pulls submission, submission pulls dominance) and (b) correspondence in regard to the affiliation dimension (friendliness pulls friendliness, hostility pulls hostility). In other words, complementarity exists among interactants when Interactant B reacts to Interactant A with interpersonal acts that are reciprocal in terms of control and corresponding in terms of affiliation. [Kiesler et al. (1997), pg. 223]

---

<sup>9</sup> Simply requiring students to take more math courses won't solve it. This is because math departments in the United States are failing to teach mathematics. They are mired in their own pseudo-metaphysical prejudices (among them, the bankrupt pseudo-philosophy of the Bourbaki and a fanatical yet wholly useless commitment to formalism that has never yet solved one *real* problem) and have lost touch with *why* mathematics is important. They know it is; they no longer know why it is. They can, and do, teach the *mechanics* of mathematics without teaching students *how to use mathematics*. By omitting the latter, they deprive mathematics of its *real meanings*. Why do the majority of people dislike mathematics? Because this fanatics' pedagogy not only fails to teach it but also imparts the *affective* lesson "this isn't for you, kid; go do something else with your life." But mathematics is not nearly as difficult as mathematics professors manage to make it appear. Among *practicing* statisticians we do, after all, find individuals who set up and run gambling operations and bear such nicknames as "Icepick" and "Bugsy."



**Figure 8.2:** Kiesler's 1982 interpersonal circle. The outer ring of labels denote extremes of behavior.

The 82IPC circumplex is divided into sixteen segments blending mathematically weighted combinations of control and affiliation. Each is given a label (inner circle of figure 8.2) intended to describe how the behavior is effected. The radial distance in the circle denotes the intensity of the behavior exhibited. The circumplex is formally divided into two ranges, with the center ring denoting normal range behavior and the outermost ring labels denoting extreme behavior.

Kiesler carefully defined how the behavioral labeling is to be interpreted [Kiesler (1985)]. Each segment of the circumplex is described by three to five "operationalizations" descriptive of the overt behavior being exhibited. His taxonomy provides 128 such descriptions, each of which in turn has its own extensive verbal description [Kiesler (1985)]. Table 8.1 summarizes the main operationalization terms employed in the normal range segments of the 82IPC. It is, of course, not practically feasible to reproduce Kiesler's manual [Kiesler (1985)] in this chapter.

Kiesler is very specific in stating that the segments of the 82IPC circumplex refer to overt behaviors and not to personality traits. In principle, it is possible for a specific individual to be able to exhibit any behavioral segment of the 82IPC as his perception of the situation seems to call for. Such a person is said to have *versatile* interpersonal ability. Commonly, however, it is usual for individuals to adopt particular *habits* of interpersonal interaction, and such a person is said to have an *interpersonal style*. These styles can likewise be described with a circumplex. In the next section we will look at two such examples. *Abnormal behavior* is said to characterize a person's interpersonal style when either (a) he exhibits rigid adherence to one or a few of the sixteen segments of the 82IPC; or (b) consistently exhibits extreme behavioral levels at one or a few segments. This is hypothesized to be linked to a personality *disorder*. It is possible to apply the 82IPC segments (as eight octants of the circumplex) to describe personality disorder symptoms.

TABLE 8.1  
Kiesler (1983) Levels and subclasses for the eight pairs of opposing segments of the '82IPC

<b>Dominant (Controlling):</b> a. Leading/influencing b. Active/self-assertive c. Strong/managing d. Taking charge	<b>Submissive (Docile):</b> a. Following/complying b. Passive/acquiescent c. Weak/yielding d. Obedient	<b>Hostile (Antagonistic/Harmful):</b> a. Antagonistic b. Quarrelsome c. Impolite d. Harmful	<b>Friendly (Cooperative/Helpful):</b> a. Cooperative b. Agreeable c. Courteous d. Helpful
<b>Competitive (Critical/Ambitious):</b> a. Energetic b. Enterprising c. Competitive d. Critical	<b>Deferent (Respectful/Content):</b> a. Insolent b. Unimaginative c. Content d. Approving	<b>Detached (Aloof):</b> a. Disinterested b. Distant c. Preoccupied	<b>Sociable (Outgoing):</b> a. Involved b. Sociable c. Extraverted
<b>Mistrusting (Suspicious/Resentful):</b> a. Vigilant b. Suspicious/jealous c. Cunning d. Resentful e. Covetous/stingy	<b>Trusting (Trusting/Forgiving):</b> a. Unguarded b. Trusting c. Innocent d. Forgiving e. Generous	<b>Inhibited (Taciturn):</b> a. Silent/private b. Undemonstrative c. Stiff/controlled d. Opinionated	<b>Exhibitionist (Spontaneous/Demonstrative):</b> a. Talkative/disclosing b. Demonstrative c. Casual/spontaneous d. Suggestible
<b>Cold (Cold/Punitive):</b> a. Cold b. Stern c. Strict/punitive	<b>Warm (Warm/Pardoning):</b> a. Warm b. Gentle c. Lenient/pardoning	<b>Unassured (Self-doubting/Dependent):</b> a. Self-doubting b. Dependent c. Unassured d. Awkward e. Glum	<b>Assured (Confident/Self-Reliant):</b> a. Confident b. Self-reliant c. Assured d. Self-composed e. Cheerful

TABLE 8.2  
Kiesler (1986) Interpersonal Circumplex Description of *DSM-III* Personality Disorders

	DSM-III personality disorder										
	PRN	SZD	SZT	ATS	BDL	HST	NCS	AVD	DPD	CPS	PAG
<b>Dominant-assured</b>							X				
<b>Exhibitionist-sociable</b>						X	X				
<b>Friendly-warm</b>					X						
<b>Trusting-deferent</b>					X						
<b>Submissive-unassured</b>								X	X	X	
<b>Inhibited-detached</b>			X	X			X	X		X	X
<b>Hostile-cold</b>	X			X	X						X
<b>Mistrusting-competitive</b>	X		X		X						

Note. PRN = paranoid, SZD = schizoid, SZT = schizotypal, ATS = antisocial, BDL = borderline, HST = histrionic, NCS = narcissistic, AVD = avoidant, DPD = dependent, CPS = compulsive, and PAG = passive-aggressive (AKA negativistic)

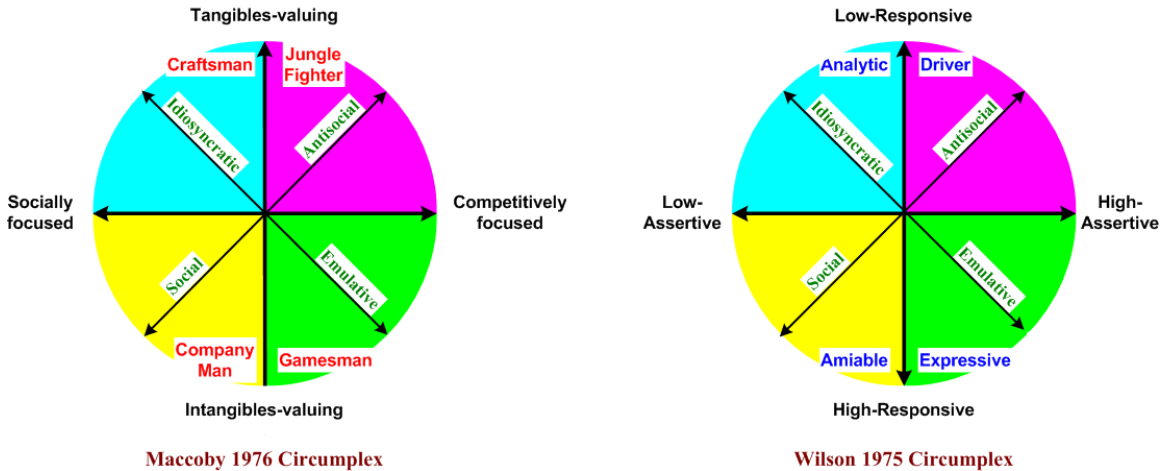
Table 8.2 illustrates Kiesler's proposed coding scheme for relating interpersonal behaviors to the categories of personality disorders as these categories were defined in the third edition of the DSM (*DSM-III*). Note that each octant in this table is comprised of two immediately neighboring segments of figure 8.2. Note also that to apply this scheme to personality disorder the behaviors must be extreme (outer ring of labels in figure 8.2). Table 8.2 implies that the antisocial, histrionic, and dependent personality disorders are, in some sense, "pure" disorders because each is characterized by a single octant in the 82IPC. Whether or not this same coding scheme can be accurately applied to normal range personality *styles*, and, if so, how accurately, is not presently known. However, as we will see in what follows, there is strong empirical reason to doubt that this coding scheme is accurately applicable to normal range personality style or even to normal range interpersonal behavior. The question is currently unsettled in empirical psychology.

One thing that table 8.2 does strongly imply is that real behaviors are much more complex than traditional personality theories assumed. This interpretation is consistent with what we expect from mental physics. Overt behaviors are consequences of the manifold of rules in

practical Reason. In a normally-developing individual, this complex interconnecting manifold provides many possible maxims of acting that the individual calls upon in specific situations. All actions are actions taken *in the specific*, and this implicates specific maxim *systems* within the overall manifold of rules.

Individuals growing to maturity in the same cultural environment, or acclimated to a new cultural environment through long residence, are likely to encounter many similar experiences that lead to similar organizational structures in their manifolds of rules. (Recall that the manifold of rules is *developed* through experience and is not an innate structure). This implies that people maturing within the same or similar cultures should, on the average, exhibit similar patterns of interpersonal interactions in specific social situations. Empirical psychology does present some evidence that this is the case – indeed, that evidence is the basis for complementarity theory in interpersonal psychology. Kiesler (1983) summarized this in the following set of propositions:

1. A person's interpersonal actions tend (with a probability significantly greater than chance) to initiate, invite, or evoke from an interactant complementary responses that lead to a repetition of the person's original actions;
2. For interpersonal behavior as operationalized by the two-dimensional interpersonal circle, complementarity occurs on the basis of (a) reciprocity in respect to the Control dimension or axis (dominance pulls submission, submission pulls dominance), and (b) correspondence in respect to the Affirmation dimension (hostility pulls hostility, friendliness pulls friendliness);
3. For interpersonal behavior as operationalized by the two-dimensional interpersonal circle: (a) *complementarity* exists among interactants when Respondent B reacts to Person A with interpersonal acts reciprocal in terms of Control and corresponding in terms of Affiliation; (b) *anticomplementarity* exists when Respondent B reacts to Person A with behavior both nonreciprocal in terms of Control and non-corresponding in terms of Affiliation; (c) *acomplementarity* exists among interactants when Respondent B reacts to Person A with actions either reciprocal on Control or corresponding on Affiliation, but not both; (d) *isomorphic complementarity* exists when Respondent B reacts from circle segments identical to those used by Person A; and (e) *semimorphic acomplementarity* exists when Respondent B reacts from circle segments directly opposite to those used by Person A. [This proposition is a set of definitions.]
4. Interpersonal complementarity and non-complementarity operate precisely only within the same level or intensity of behavior. That is, interpersonal actions at a particular level of intensity tend (with a probability significantly greater than chance) to initiate, invite, or evoke from interactants complementary responses at the equivalent level of intensity (mild-moderate actions pull mild-moderate complementary responses, extreme acts pull extreme complementary responses).
5. A given instance of the complementary response consists of a two-stage sequence occurring rapidly in an interactant: (a) a covert response, labeled the "impact message," and (b) the subsequent overt action, labeled the "complementary response."
6. The more extreme and rigid (maladjusted) the interpersonal style of Interactant B, the less likely he or she is to show the predicted complementary response to the interpersonal actions of Person A. An important exception occurs when the predicted complementary response to A falls at the exact segments that define B's extreme and rigid style.
7. Interpersonal complementarity applies primarily to naturally occurring, relatively unstructured interpersonal situations. The extent to which it applies in various structured situations or in other environmental contexts remains to be determined.
8. It is unclear how interpersonal complementarity applies over the temporal range of continuing transactions between interactants. [Kiesler (1983)]



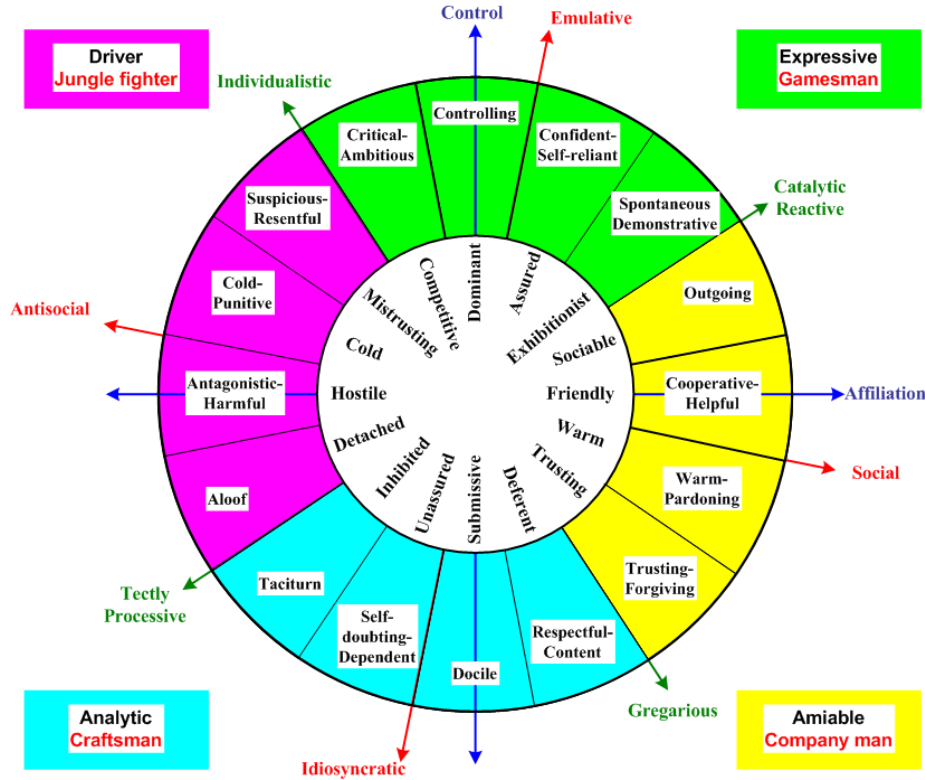
**Figure 8.3:** The Maccoby and the Wilson circumplexes for characterizing interpersonal relationship styles.

The 82IPC is a tool aimed at analyzing interactions between pairs of individuals in social situations. We must also consider the individual and the habits he exhibits. These habits are a mediate clue to the structure of his manifold of rules insofar as the capacity for adaptation and assimilation is promoted or hindered by the rule structure he has developed. These considerations, of course, pertain to personality style. This brings us to our next type of circumplex model.

### § 2.3 The Wilson and the Maccoby Circumplexes

Outside the clinical setting, interpersonal style theory has important applications in business and, indeed, most types of organizations. Managers, supervisors, foremen, etc. must manage and deal with others' interpersonal styles. Typically these settings do not have trained psychologists or counselors on hand. Furthermore, the great majority of transactions occurring in these social environments involve normal-range behaviors. Because in such settings too much detail in an interpersonal style model is more likely to be misinterpreted and misused by non-professionals, it is common for consultants who train organizations' personnel in the rudiments of interpersonal relations theory to employ less-categorized circumplex models. Here we discuss two such models, the 1975 Wilson model and the 1976 Maccoby model. Figure 8.3 illustrates these circumplexes. Other than for terminology and application context the two models are more or less identical. Figure 8.3 also shows the overlay of our personality style circumplex on each model.

The Maccoby model was implicitly presented in social psychologist Michael Maccoby's book on management styles [Maccoby (1976)]. Maccoby did not explicitly present a circumplex model in this book, but one is easily deduced from his material [Wells (2010), chap. 11, §3.1.2]. The behavioral axes in this circumplex are broken down between dimensions of valuing and focusing (as shown in figure 8.3). It is important to note that these axes are described in terms of *how other people view the person's actions and behaviors* and not how the specific individual views *himself*. Frequently individuals who have been informed of where analysis places them in the circumplex either deny the placement ("that isn't me!") or feel misjudged or misunderstood by those whose responses to survey questions were used by the analyst. It is, furthermore, also of great importance to understand that category placement of a specific individual in a circumplex is *dependent upon the social environment* in relationship to which the survey respondents know the individual being evaluated. One can be a "jungle fighter" in the workplace and a "company man" in family settings. The Maccoby circumplex, like the Wilson circumplex, evaluates interpersonal relationship styles (not personality) and does so in specific social settings.



**Figure 8.4:** Kiesler-Wilson circumplex mapping. The figure also depicts where the axes of figure 8.1 fall on this same map. This provides an overall unified picture of general interpersonal social behavior.

The dimensional axes in the Maccoby model are labeled in terms of how others view the person's goals and purposes. The Wilson circumplex, in contrast, defines its axes in terms of others' recognitions of overt behaviors. For this reason, the two circumplexes can be compared to Kiesler's 82IPC and they can be mapped onto one another. The Wilson axis dimensions are labeled high-assertive/low-assertive and high-responsive/low-responsive. Assertiveness is, not surprisingly, closely related to the control dimension in complementarity theory, while responsiveness is similarly related to affiliation. As is the case in all circumplexes, any specific place in the circumplex is viewed as a vector quantity with intensity and degree of the exhibitions of behavior being proportional to the vector's magnitude.

Figure 8.4 illustrates the mapping onto Kiesler's 82IPC of the Wilson circumplex (and, by linkage through the axes of the personality circumplex of figure 8.1, the Maccoby circumplex). The mapping is carried out by: (1) matching the Wilson behavioral descriptors [Wilson (2011)] with Kiesler's operationalization factors [Kiesler (1985)]; and (2) similarly matching the Maccoby descriptors. Where the axes for the circumplex of figure 8.1 fall is also determined by analysis and matching of personality-related habits to Kiesler's behavioral operationalizations and the consequent characteristics observed for complementarity relationships. The outcome of this synthesis produces an overall systematic and self consistent picture of social interactions.

For an explanation of the principal concepts employed in this empirical synthesis, we begin with the Maccoby descriptions of "competitive drives" and what he called the "source of psychic energy for competitive drive" for his four categories of interactants. These are:

**A. Typical Meanings of Competitive Drives**

1. *Craftsman*: drive to build the best; competition vs. self and materials;



2. *Jungle Fighter*: kill or be killed; dominate or be dominated;
3. *Company Man*: climb or fall; competition as the price for secure position;
4. *Gamesman*: win or lose; triumph or humiliation.

#### B. Sources of Psychic Energy for Competitive Drives

1. *Craftsman*: interest in work; goal of perfection; pleasure in building something better;
2. *Jungle Fighter*: lust for power and pleasure in crushing opponent; fear of annihilation; wish to be the only one at the top;
3. *Company Man*: fear of failure; desire for approval by authority;
4. *Gamesman*: the contest; new plays; new options; pleasure in controlling the play.

Maccoby chose and classified the subjects of his study on the basis of information provided to him by the subjects' coworkers. To get at the personality-related characterizations listed above, he conducted interviews with the subjects themselves and observed them for a time in the workplace setting. He also contrasted these observations with those he had previously made during a study of the sociology of a Mexican village [Maccoby (1976)] and found numerous commonalities between subjects in these two different types of social situations/environments. The brief descriptions provided above are the outcome of his synthesis of these various data.

The Wilson circumplex defines the four interpersonal styles in relationship to two axes labeled *assertive* and *responsive*. These axes are arranged in terms of polar opposite descriptions of behaviors the person exhibits and by which the person's habitual interpersonal style can be recognized by an observer. Like the Maccoby circumplex, these axes divide the overall circumplex into four quadrants. The axis behavioral exhibitions are [Wilson (2011)]:

#### Low Assertive

- Seldom uses voice to emphasize ideas;
- Expression and posture are quiet and submissive;
- Deliberate, studied or slow in speech;
- Indifferent handshake;
- Asks questions more often than makes statements;
- Vague, unclear about what is wanted;
- Tends to lean backwards.

#### High Assertive

- Emphasizes ideas by tone change;
- Expressions are aggressive or dominant;
- Quick, clear or fast paced speech;
- Firm handshake;
- Makes statements more often than asks questions;
- Lets one know what is wanted;
- Tends to lean forward to make a point.

#### Low Responsive

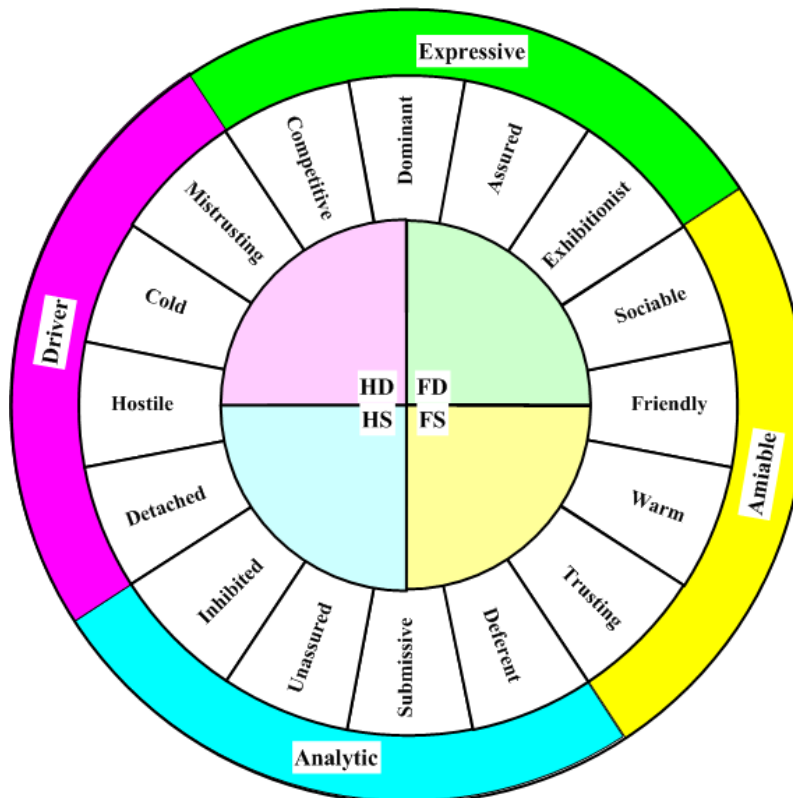
- Reserved, unresponsive;
- Poker faced;
- Actions cautious or careful;
- Wants facts and details;
- Eye contact infrequent while listening;
- Eyes harsh, severe or serious;
- Limited use of hands, clenched tightly, folded or pointed;
- Limited expression of personal feelings, story telling or small talk;
- Preoccupied or vigilant.

**High Responsive**

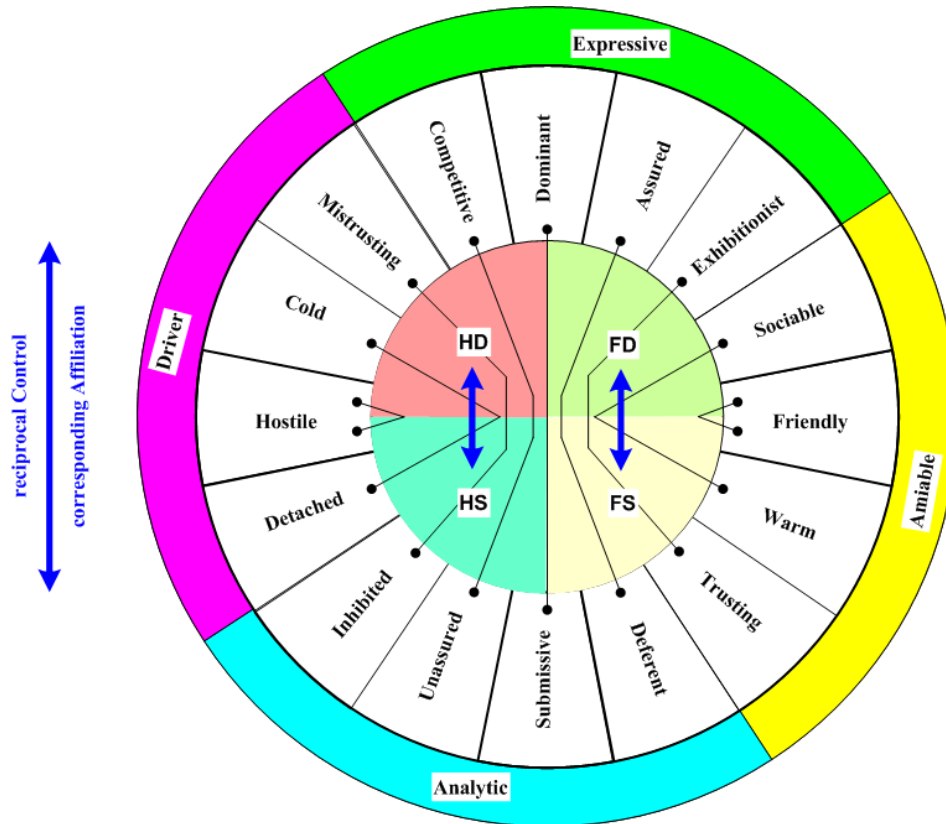
- Animated use of facial expressions;
- Smiles, nods, frowns;
- Actions open or eager;
- Little effort to push for facts;
- Eye contact frequent while listening;
- Friendly gaze;
- Hands free, palms up, open;
- Friendly gestures;
- Shares personal feelings;
- Attentive, responsive, enjoys the relationship.

Kiesler likewise divided the 82IPC into four quadrants, which he called the FD (friendly dominant), FS (friendly submissive), HS (hostile submissive) and HD (hostile dominant) quadrants. The principal challenge in mapping the Wilson-Maccoby circumplexes onto 82IPC is due to the fact that Kiesler's four quadrants do not align with the Wilson-Maccoby quadrants. Figure 8.5 illustrates the skew between the Kiesler and the Wilson-Maccoby quadrants.

It is especially important to remember that the segments of the 82IPC are designed to describe complementarity in interpersonal transactions rather than personality factors. If the analyst forgets this, the operationalization descriptions of the 82IPC become very problematic and easily misinterpreted when the analyst engages in a tendency to interpret the behaviors as personality rather than interpersonal transaction terms. The Kiesler quadrants are defined so as to easily identify the Control and Affiliation relationships involved in complementarity and anticomplementarity.



**Figure 8.5:** The 2011 Kiesler-Wilson-Maccoby circumplex with the 82IPC quadrants of complementarity.



**Figure 8.6:** The normal complementarity relationships between two interactants.

Kiesler's first three propositions stated earlier lead to a graphical depiction of complementarity as figure 8.6 illustrates [Kiesler (1983)]. In regard to this circumplex, it is important to bear in mind Kiesler's 4th proposition, *viz.* that the "precise" complementarity pairs shown here operate "only within the same level of intensity of behavior." Complementarity in interactant transactions only "tends to occur with a probability significantly greater than chance." This also means that sometimes complementarity *fails to occur* during some interactant transactions. Figure 8.6 provides us with a glimpse into how this happens.

Remember that the Wilson interpersonal styles are *styles of habit*, *i.e.*, "default behavior patterns" that the individual falls into more or less automatically as a consequence of practical *satisficing maxims* in his manifold of rules. But precisely because these behaviors are habitual, they are not "hard-wired" or unalterable. Most people can and do make situational adjustments that can be described as "rotating themselves out of" their habitual classification (*e.g.*, Driver) and into another behavioral classification (*e.g.*, Analytic). Wilson calls this the **versatility** dimension of his interpersonal circumplex. People said to have *low versatility* find it more difficult to effect such a rotation than do people said to have *high versatility*. A person with extremely low versatility is rigid and unadaptive in his transactional relationships with others, and this situation conduces what typically but not always accurately gets called a personality disorder. Looking at this from the viewpoint of mental physics, low versatility is indicative of the individual having constructed a somewhat fragmented structure in his manifold of rules that leaves him with fewer practical maxims particular social situations can provoke. He is less adaptable to circumstances.

It follows directly from this, however, that because the cause of low versatility interpersonal behavior is a relatively fragmented manifold of rules, it is also possible that training (or, in more extreme cases, therapy) can assist the individual in constructing new maxims within the manifold

that make his behavioral schemes more mobile and adaptable. Kiesler, in fact, put forward three propositions in Kiesler (1983) for tactics a therapist (or a trainer) might employ to help the individual develop more flexible interpersonal relationship habits. Most normal-variant-range people have developed enough versatility in their socio-transactional habits that complementarity in such transactions, at least initially, occurs with statistically significant regularity. Interactions characterized by complementarity are those where the reactor (Person B) responds to the first actor (Person A) with a Kiesler operationalization that is reciprocal in Control (moves vertically in the circumplex from the actor's quadrant into the quadrant vertically opposed to it, e.g. from HD to HS or vice versa) and conforming in Affiliation (remains within the same hemisphere of the circumplex as the actor's operationalization). This is what the connecting lines in figure 8.6 illustrate.

However, Person B does not always respond in such a way as to produce complementarity in the interpersonal transactions. He may, for example, lack the versatility to effect enough of a rotation in the Wilson circumplex to be able to "reach" the complementary operationalization behavior. If his operationalization response moves horizontally in the Kiesler circumplex (e.g. the actor uses a Competitive operationalization and the reactor responds with an Assured operationalization), the transactions is said to exhibit *anticomplementarity*. Figure 8.7 illustrates the eight anticomplementarity transactions. In general, any transaction that is not a complementarity transaction is called *acomplementarity*. Anticomplementarity is one specific example of this. Others include *semimorphic acomplementarity*, in which the actor's operationalization is responded to by a polar opposite operationalization (e.g., actor operationalizes Competition, reactor responds with Deferent operationalization), and *isomorphic acomplementarity*, in which the reactor responds with the same operationalization behavior that the actor used. Others are also possible.

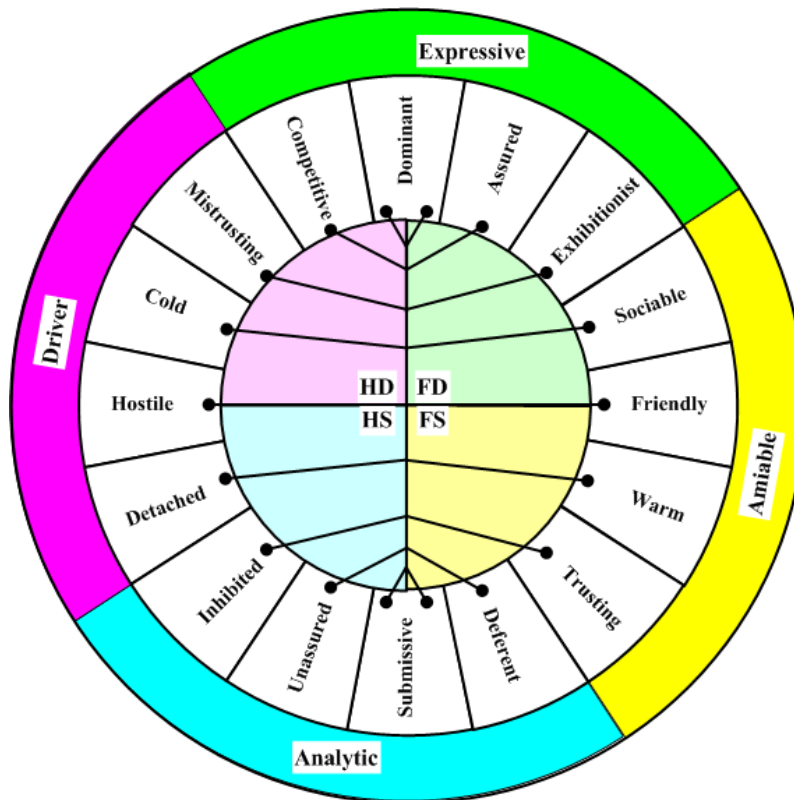


Figure 8.7: Kiesler's anticomplementarity transactions.

The significance of complementarity in interpersonal transactions is this: Complementarity establishes a stable cycle of behavioral exchanges between the two interactants. The actor's operationalizations "pull" or "draw" the complementary reaction from Person B, which in turn reinforces Person A's original operationalization. In this way an equilibrium in behavioral exchanges is set up. A complementarity, in contrast, produces a disturbance in the transactional exchange. It is possible for this to lead to an entirely different stable transaction cycle if at least *one* of the interactants is not low-versatility. It is important to understand that complementarity in and of itself is not necessarily productive of goal satisfaction for either person. Complementarity merely establishes a cycle of behaviors, and one should never presume it indicates sincere agreement or that the transaction is even an "affectively honest" transaction.

Earlier in this treatise I introduced the idea of a social-natural chemistry model for quantitatively understanding social situations among individuals. An established transactional equilibrium can, metaphorically speaking, be described as a sort of social-natural chemical bonding (or, in the case of conflict, antibonding) that reflects the dynamics of the social situation. It is readily apparent from what was said just above that there is a large number of possible variations in possible interpersonal transaction behaviors. It is the goal of theory to bring a unity of understanding to such manifold possibilities. This is why it is important that we be able to relate not just the Maccoby-Wilson circumplexes and the Kiesler circumplex but *in addition* also tie this relationship to the Critical personality style circumplex (figure 8.1).

Is it really possible for a person to learn how to adapt his or her interpersonal style? Here I can report from first-hand experience that the answer is "yes." A little over thirty years ago I was a participant in a Wilson Learning course<sup>10</sup> as part of the management training program I was going through at the company where I worked. I went into this course with the expectation that I would be categorized as an Expressive type. It was a rather big shock to me when I was told the initial surveys, conducted prior to the start of the course, had placed me as a low versatility Driver type. This was such a disequilibrating event that I found myself jolted out of, in Piagetian terms, egocentrism in the way I looked at social situations. This led to me developing my ability to behave in social situations from a developmentally more advanced stage of cooperation. (I refer here to the Piagetian rule stages from chapter 5, re-depicted in figure 8.8 below).

The course, and the considerable practice I put into applying what I learned there afterwards, had results that came to recognizable culmination a few years later when I was participating in another (different) management training course. In that course, one of the team exercises required each person to stand at an easel and write down adjectives the other participants were tossing out as descriptions of the person at the easel. When you were at the easel, you were not allowed to respond to what the others were saying about you or to defend yourself; you had to write down each adjective on the easel and do nothing more whatsoever. Among the adjectives that were brought out as descriptions of me, there were included Expressive, Analytic, and Amiable. The adjective Driver was not used even once. (But anyone who knows me very well will not hesitate to tell you that "Driver" is still an adjective that applies to me). I will also add to this the following remarks: Thirty years ago, I would not have shared this personal anecdote with you. (Drivers are Low-responsive actors). Today I am not the least bit uncomfortable about doing so.

In terms of social situation appraisal and transactional initiations and responses, development of better equilibrated practical maxims in the manifold of rules is exhibited by increased versatility in interpersonal relationship transactions. Again, the categories of Driver, Expressive, Amiable and Analytic in the circumplex models represent habitual satisficing practical maxims in operation. These categories are, in logical essence, "baselines" or "norms" for characterizing likely behavioral transactions. We will look at each one in turn.

---

<sup>10</sup> The Wilson Learning Corporation of Eden Prairie, Minnesota.

### § 3. The Interpersonal Styles

#### § 3.1 The Analytic Interpersonal Style

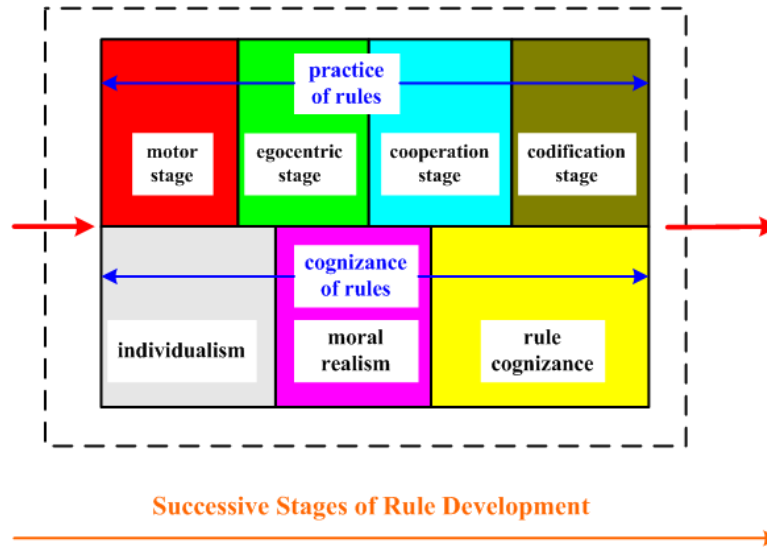
Analytic behavioral manifestations blend four of Kiesler's segments of operationalizations, specifically, the Inhibited, Unassured, Submissive and Deferent segments in the normal range of variants [Kiesler (1985)]. The relevant operationalization segments are:

- **Inhibited:** to engage others as Taciturn; these mannerisms are interpreted by others in a way that tends to pull a Mistrusting reaction from them;
- **Unassured:** to engage others as Self-doubting/Dependent (mannerisms interpreted by others as expressive of doubt, uncertainty or misgivings, especially in regard to oneself, or as modesty or bashfulness); they tend to pull Competitive reactions from others;
- **Submissive:** to engage others as Docile (following/complying, passive/acquiescent, weak/yielding, and obedient); these tend to pull Controlling reactions from others;
- **Deferent:** to engage others as Respectful/Content, an operationalization interpreted by others in a way that tends to pull Assured reactions from them.

I repeat and emphasize that these operationalizations are descriptive of how a person's behavioral expressions *tend to provoke complementarity behaviors by others* and *not* how the person actually regards *himself* (which is not something that is externally expressed through physically observable actions by people in the normal variant range of the Craftsman/Analytic interpersonal style). In the normal variant range, the Craftsman/Analytic's *internal* self-regard is described by Maccoby's factors. Because (1) the Craftsman/Analytic style is low-responsive and low-assertive; (2) his personal interests are thing-oriented rather than people-oriented; and (3) his social interactions are cooperative rather than interpersonally competitive, people in this quadrant of the interpersonal relation circumplex are probably the most difficult people for others to "read" and interpret correctly. They simply don't give out many clues to how they really feel about the situation or what they really think about it. For that reason, the operationalization factors listed above are accessible primarily through reference to the *complementary* interactant, and the language Kiesler used tends to emphasize how the *other* interactant reads the situation. To use a chemistry metaphor, the Craftsman/Analytic tends to be a "closed shell" social atom; his social bonding (or, as the case may be, antibonding) dynamics tend to be "ionic" rather than "covalent."

The idiosyncratic personality does not care about, and does not engage in, trying to dominate other people. In Piagetian terminology, his action expressions are a combination of moral realism and cooperation (refer to figure 8.8, which, for convenience, presents again the successive stages of practical rule development). Consider the body-language descriptions in Wilson's low-assertive dimension. Kiesler referred to Control and Affiliation as being like a "force field emitted by human interactants," and body language can be likened to a sort of psychological "force field." What sorts of complementarity response does the Craftsman/Analytic "force field" attract? Kiesler *et al.* provide us with an example:

A given instance of successful negotiation for the complementary response consists of a two-stage sequence occurring rapidly in Interactant B: (a) a covert response, labeled the *DE impact message*, and (b) the subsequent overt reaction, labeled the *complementary response*. To illustrate, Person B initiates a transaction with Person A, whose characteristic interpersonal behaviors are measured at the circle octant hostile-submissive [HS]. As their transaction proceeds, B increasingly experiences the covert first stage of complementarity pull by registering covert impacts that are complementary to Person A's circle categories: direct feelings such as feeling "superior to him" and "frustrated that he won't defend his position"; action tendencies such as "I should be very gentle with him" and "I could tell him anything and he would agree"; and perceived evoking messages such as "he thinks he



**Figure 8.8:** The successive stages of practical rule development and cognizance.

inadequate" and "he would accept whatever I said." As B continues to experience these pulled-for complementary internal engagements, his actions (the second stage of the complementary response) increasingly reflect overt behaviors from the complementary circle octant, hostile-dominant [HD]. [Kiesler *et al.* (1997), pp. 224-225]

Although Kiesler *et al.* (1997) are unnecessarily ambiguous here with regard to the "octant" in the circumplex, the specific Person A responses quoted here are found in Kiesler (1985) under the segments Unassured and Submissive – both segments falling in the center of the Analytic quadrant. (This is, apparently, what Kiesler *et al.* meant by referring to "octants" in the circumplex; hostile-submissive is not an octant but, rather, a quadrant). Person A in this example is acting as a behavioral Analytic. His behaviors are pulling Person B into Expressive quadrant behavior (see figure 8.6). This is a "poison relationship" and doesn't bode well for either person.

This example is predicated on a premise that we are looking at an equilibrium transaction of complementary responses. We must, I think, take Kiesler's word "successful" here with a large grain of salt. What Kiesler *et al.* probably should have said was "an actual stabilizing negotiation of complementary responses" because "successful" carries the connotation that Person A *intentionally drew* Person B into Expressive-like behaviors. Not likely. Therapists, counselors, and trainers might do this – as part of helping a person raise his interpersonal versatility – but the great majority of interpersonal transactions are not so deliberative. On those occasions when they are outside of training or therapy, observers are more often inclined to say Person A *manipulated* Person B – which is, however you feel about the word "manipulated," a fairly potent tactic sometimes employed by higher-versatility managers and supervisors.

Another personal anecdote can help to clarify this. A little over twenty years ago I was working as the production engineering manager for a large factory. One of the people I relied on to ensure our factory was producing high-reliability products was a low-versatility habitual Analytic who worked, naturally, in the Quality Assurance Department. This person had a habit of presenting me with piles of data – all expressed in the arcane terminology of his field – and then just stopping without making any sort of recommendation or even telling me whether or not he had just shown me a problem that needed to be addressed. *He*, I will point out, was never in the least doubt that something should or shouldn't be done about it. He just wouldn't tell *me* what he thought. "Making the decision" was, in his mind, my job, not his. The problem with that was that I often didn't understand what he was telling me at all (see low-assertive behavior above).

I didn't take the bait and give him back the complementarity response (Mistrusting) I would have if I hadn't been aware of the concepts we're talking about here. Instead, I deliberately responded to his Inhibited operationalizations with a one-off Analytic reaction, the Unassured operationalization. Basically, I have a "helpless/clueless" act I use sometimes to try to draw Analytics into more dominating behaviors. In this particular case, after only a couple weeks my Quality analyst had developed the habit of following up his data presentations with specific action recommendations – all of which, as it turned out, were extremely well thought out and that we went on to implement. An Analytic might draw you into thinking he has no firm opinions of his own, but I assure you that is usually not even close to being true. I *did* manipulate my Quality analyst, I *did* do it on purpose, I *did* do it partly out of self-interest, but I *didn't* do it with any hostile or dominating intention. And that is the point of this anecdote. Interpersonal styles are not personality traits. They're learned habits of satisficing behaviors. Low-versatility styles do tend to cluster around a mental physics axis (because they are satisficing behaviors); for the Analytic style this is the idiosyncratic axis. But normal variant range people do not have their "style shoes" nailed to the floor and are capable of developing higher versatility interpersonal capacities.

Wilson (2011) describes the Analytic social style in the following terms:

- Detail-oriented, deliberate and well-organized;
- Listens to and studies all information carefully before weighing all alternatives;
- Lets others take the social initiative; prefers an efficient, businesslike approach;
- Prefers information presented in systematic manner [like my Quality analyst did];
- Conservative and practical in business matters; technically oriented;
- Relies on structural approach and factual evidence [my QA guy was devoted to this];
- Seeks to enhance reputation as a technical expert by making the right decision in the right way; values being recognized for accomplishments and respected for expertise.

### § 3.2 The Driver Interpersonal Style

There is probably no grimmer, or more frightening to others, interpersonal style than a low-versatility Driver social style. Low-versatility Driver habits tend to develop and cluster around the antisocial axis in figure 8.1 – a fact that is reflected by the various names often given to the low-versatility Driver: dictator, tyrant, Jungle Fighter, predator, Ebenezer Scrooge, crook, bastard. If this happens to be your default interpersonal style but you don't really relish living your life in an on-going state-of-nature swirl of passive-aggressive resistance, manifold conspiracies, with no true allies you can trust, and knowing the sword of Damocles is dangling over your head, here's some Expressive quadrant friendly-dominant advice you can choose to regard as an available option to employ: Think about building yourself a broader set of satisficing operationalizations. You'll get consistently better results. Deliberately conserving a low-versatility Driver style isn't commendable, courageous, or virtuous; it's a short-sighted and socially stupid act of ignorance you'll pay for sooner or later. Hercules slew Augeas for making him clean the stables.<sup>11</sup>

The Kiesler operationalizations corresponding to the Driver interpersonal style in the normal variant range of behaviors are:

---

<sup>11</sup> If you're keeping notes, what you just read is a Competitive operationalization designed to provoke Self-doubting introspective tension in a Driver's motivational dynamic for the purpose of inclining him to make a practical adaptation responding to a practical hypothetical imperative of Duty-to-Self. Refer to figure 8.6. A person with a normal variant range Driver-oriented personality structure in his manifold of rules usually can be irritated by but cannot be antagonized by a single transaction. It usually takes a sequence of transactions to accomplish that – and accomplishing it isn't a particularly wise thing for you to do. Normal range Drivers won't like the idea that other people can be taught how to manipulate their orientation of behavioral preferences. That isn't hard to do. It works better if you draw them into thinking they are manipulating you.



- **Mistrusting:** to engage others as Suspicious/Resentful (i.e., behaviors impress others as being vigilant, suspicious or jealous, cunning, secretive and resentful);
- **Cold:** to engage others as Cold/Punitive (i.e., to appear indifferent, unmoved or unfeeling and unaffectionate for others, and to appear to be uncompromising, strict and stringent in judging others, and to be a hard-hearted disciplinarian or judge);
- **Hostile:** to engage others as Antagonistic/Harmful (i.e., to impress others as a person whose attitude towards others is unfriendly or even hostile, as being one whose only agenda is his own and who will oppose or hinder anyone who stands in its way, to be contentious and argumentative, discourteous and brusque, and not hesitant to criticize, attack, injure or damage others if he feels it necessary or advantageous);
- **Detached:** to engage others as Disinterested, Distant, and Preoccupied (i.e., to come across to others as a person who lacks any interest or concern for other people, as one who shuts himself off from the society of others, who frequently appears to be engrossed in thought, who tunes others out, and who attends primarily to his own private thoughts and feelings).

Maccoby's Jungle Fighter characterizations tend to be accurate only at the higher-intensity end of the behavioral range (and in cases where the extremity effectively amounts to a personality disorder). Again, the habitual operationalizations reflect what the behaviors draw as the reactions from other people. Most Driver-style persons do not so much want to "be the only one at the top" as they tend to have an inner conviction they are the ones best suited (and sometimes the only one suited) to get the job done or the mission accomplished. Drivers do tend to be judgmental, sometimes harshly so, of others. However – and this is a point often not understood by non-Drivers – a Driver's harsh judgments of another person are not necessarily (or even very often) accompanied by any malignant intentions toward that person. (Maccoby didn't like Drivers).

People of a warmer, more socially inclined disposition can find this hard to understand, but a Driver is *primarily* results-oriented and frequently inclined to regard other people mainly as tools or means of getting results. He does tend to treat people as objects, but if you have a kitchen knife that gets dull you don't throw it away or break the blade in two; you sharpen it. The person with a Driver interpersonal style tends to try to "develop" people he thinks are in need of it rather than to get rid of or injure them – unless, of course, that other person actually is a competitor, or poses some other sort of actual threat, or is "not on his (the Driver's) team or side." In the latter case, the person who habitually exhibits the Driver interpersonal style operationalizations is quite capable of being a real and ferocious enemy. He might feel a little bad (though rarely more than just a little) about crushing an enemy or firing a subordinate, but he will do it *as a matter of fulfilling his duty*. In many ways, he is like a combat fighter pilot who prefers to think he shoots down enemy planes, rather than to think he kills the other men flying those planes (although, of course, the one usually results in the other as well, and he knows this).

Although people who habitually exhibit the Driver interpersonal style are usually not *more* inclined than are the other style types to use people as means to an end, in point of fact the Driver really isn't affectively conflicted by this. The other styles are more likely to tend to engage in some personal exercises of moral agonizing about it before they, too, *do the same thing*. If you do, and you display to or share your doubts with a Driver, he'll tend to think you are either weak or hypocritical because, in the end, you did just as he would have done only he would have done it sooner and "cleaner" than you did. A Driver type can fire a chronically underperforming employee and hold nothing personal against that individual. Other types, and especially the Expressive and Amiable types, are more likely to demonize that person first (and if they do, they can be crueler in their actions than a typical Driver would be). A Driver is often more inclined to help a terminated ex-employee find a new job than an Amiable is. He is also more inclined to help that person get a job with a competitor if he thinks that will work to the competitor's disadvantage. It's usually safer to be fired by a Driver than by an Amiable.

He is often a forward-looking organizer and strategic planner, less detail-oriented than an Analytic, but far more externalizing and specific about *results* he wants to achieve. You usually don't have to guess what's on a Driver's mind for very long. He'll *tell* you, often bluntly, directly and succinctly, what's on his mind and what he wants to have accomplished – and these will be tangible *results*, not *processes*. He is far more flexible about process than an Analytic. He won't often tell you *why* he wants it accomplished. To him, the why of it seems obvious (because he has put a lot of thought into it). If you don't see it, too, then . . . well, as I said, he's judgmental and might wonder if you are a blade that needs a bit of a sharpening. Unless his habits are in the low versatility range, he will tend to tangibly support your efforts at self-development and self-improvement (although he usually will manage to hide his enthusiasm for it from you). It's true enough that he doesn't do this, typically, because he loves and cares about you as a person; he does it because you'll become more useful to the team. As I said, Drivers tend to plan for things far ahead of events, and with contingencies and options flexibly road-mapped. If he supports you in your endeavors, does it *actually* matter to you *why* he does? *When* he does it is usually because he has decided your interests and his interests are *common* interests. He will see *your* achievement as being, indirectly, *his* achievement too if he has played any important part in it.

Normal variant range Drivers are often the most *teamwork*-oriented individuals in any social environment (including the business environment) – not for any abstract moralizing reasons but because of nakedly practical ones. This does cut both ways. If he thinks you are an asset to the team, he'll value you more than Midas valued gold; if he thinks you are an active hindrance to the team – well, he *is* something of a specialist in social surgery. There is a kind of irony in the Driver's dedication to his team, however, because *his own interpersonal style* can be, and often enough is, the greatest hindrance to good teamwork. He is a labor union's best friend in terms of providing incentive to form one; if he's on the other side of the negotiating table, he's also its worst enemy. Expect a Driver who figures this out to pour a lot of effort into sharpening up his own interpersonal skills. You might have to suffer the inconvenience of being made to serve as a kind of social-skills guinea pig for awhile as he is experimenting and learning how to sharpen himself as a blade<sup>12</sup>. If you seize this as an opportunity and help him accomplish this goal, you'll win a very rare prize: he'll take you into his heart as a trusted friend and then he'll stand by your side with a loyalty nothing short of ferocious. He might even develop more of a habit of showing it – to you; he's not likely to show his affection for you to others (favoritism is bad for teamwork).

Most experienced individuals feel, somewhere down inside, that *they* are more qualified than others to decide *how* to do their own jobs or perform their own duties. A Driver's conviction of this permeates his affective being. He will listen to and accept an organization's goals and objectives, and make them his own. But he will fiercely and overtly resist being told *how* to do his part. He'll accept criticism of his results – he is devoted to getting good results – but he won't easily accept anything stronger than advice on how he *might* improve how he goes about trying to achieve them. The only advice he is likely to accept is that which is tactically specific and for which sound reasons can be given. He won't buy into general euphemisms or vague, over-generalized platitudes. A Driver is control oriented, opportunistic, and prone to take the initiative. He likes to hear about options and probabilities; he's not very keen on taking orders.

He is also not socially subtle and won't understand hints. If you have to tell him something, be polite but plain and to the point about it. *His* style is blunt, and he'll understand if you treat him the same way he treats others. Versatile Drivers use the word "we" a lot<sup>13</sup> – a team is a kind of object to him – and it's a good idea for you to use this word on him, especially if by "we" you

---

<sup>12</sup> When a Driver turns his attention to himself in this way, he regards himself just as much as an object as he usually regards other people as objects.

<sup>13</sup> Low versatility Drivers use the word "you" much more often than "we." Drivers tend to *tell*, not *ask*.

really mean *him*. "We" is never an adversary to a Driver. "You," on the other hand, can often be taken as an adversarial word – which, ironically, a typical Driver appreciates on the Affiliation axis but often fails to recognize on the Control axis of Kiesler's circumplex.

A Driver respects processes and procedures when they are useful and productive, and does not hesitate to change or ignore them when they prove to be more of a hindrance than a help. He is a fairly predictable bureaucrat when bureaucracy works and innovates around established process when process or procedure gets in the way of results. He thinks it is better to ask for forgiveness than for permission. In this sense, and to use a chemistry metaphor, he is a kind of transition metal – a high-valence social-atom forming malleable social compounds held together by a pervasive "electron gas" bond of operational results-directed objectives. By way of contrast, an Analytic tends to be devoted to established process, while Expressives and Amiables have heard that there are such things as processes but are relatively ambivalent about them. Wilson (2011) describes the Driver's social style in the following terms:

- Businesslike and results-oriented;
- Likes to take charge and take the initiative;
- Likes challenges; makes quick decisions;
- Direct and to the point; strong opinions and convictions;
- Hard-working, efficient, confident, and competent;
- Productively coordinates the work of others; likely to challenge new ideas; quick to respond;
- Inclined to correct, modify or add to others' ideas;
- Straightforward, responsible; makes things happen;
- Seeks to control the tangible resources of a project such as time, budget, people;
- Prefers to be given options and probabilities and allowed to make his own decisions; values receiving more authority, control or power over the situation or environment.

Because he is high-assertive, an average Driver's exhibited *interpersonal* habits tend to better match the criteria for normal variant *personality* style much more closely than any of the other three types. As you might have already guessed, this is the antisocial personality style. Maccoby's profile of the Driver (Jungle Fighter) tends to emphasize more the disordered personality than is actually appropriate for normal variant range Drivers. It is more instructive to look at Sperry's description of normal variant range antisocial personality style [Sperry (2003), pg. 39]:

- Prefer free-lancer living, and live well by their talents, skills, ingenuity, and wits;
- Tend to live by their own internal code of values and are not much influenced by others or society's norms;
- As adolescents were usually high-spirited hell-raisers and mischief makers;
- Tend to be generous with money;
- Tend to be wanderlusts but are able to make plans and commitments, albeit for limited time spans;
- Tend to be silver-tongued, gifted in the art of winning friends<sup>14</sup>;
- Tend to be courageous, physically bold and tough; will stand up to those who take advantage of them;
- Tend not to worry too much about others, expecting others to be responsible for themselves;
- Tend to live in the present and don't feel much guilt.

This more or less well-fitting accord between personality style (figure 8.1), interpersonal style

---

<sup>14</sup> You might find this surprising, considering all you've read about Drivers here. But Drivers *do* have friends. Often not as many as other people, true enough, but their friendships are solid *quality* friendships.

and operationalization behaviors makes the Driver type a particularly good reference point in analyzing the alignment between the Maccoby-Wilson circumplexes and the Kiesler circumplex.

### § 3.3 The Expressive Interpersonal Style

The best bosses I've ever worked for (in terms of enjoyment, success of our enterprise, overall team spirit, and profitability) have been Expressives. This is an opinion not too likely to be entirely shared by lower versatility Analytics/Craftsmen. Ask a typical Analytic or Driver for his resume and you'll often get a list of past positions, projects, and accomplishments. Ask this of an Expressive and you'll get a long, long list of names of people he's worked with in the past and, oh, by the way, it was somewhere-or-other, on something-or-other, somewhen-or-other. Expressives are team bonders. To use a chemistry metaphor, they are the social-chemical carbon atoms. While the Driver values teamwork, the Expressive values the team itself.

The Kiesler operationalizations corresponding to the Expressive interpersonal style in the normal variant range of behaviors are:

- **Competitive:** to engage others as Critical/Ambitious, i.e. by being energetic, enterprising, contesting with others for power, fame, wealth, a prize, profit, supremacy, or acknowledgement, to pursue the winning of games or contests, and by finding fault or belittling the accomplishments of others;
- **Dominant:** to engage others as Controlling, i.e. by leading and influencing, by being active and self-assertive, by appearing strong and managing, and by taking charge;
- **Assured:** to engage others as Confident/Self-Reliant, presenting oneself as sure, clear, certain, firm and resolute, and as calm, tranquil or serene, competent, and poised in pursuing daily life or in interactions with others;
- **Exhibitionist:** to engage others as Spontaneous/Demonstrative, i.e. by being inclined to talk freely or a great deal with others, to be unreserved in speech, by easily joining in conversations, revealing one's thoughts, feelings, and beliefs, to speak or act passionately, let one's feelings show, and by being inclined to be influenced easily by the ideas, plans, and opinions of others, and to conform one's own opinions, values, activities, etc. to direct, insinuated or implied pressure from others.

The Expressive is as devoted to success – and as highly assertive – as the Driver, but he defines success in terms of intangibles. The Driver, by contrast, defines it in terms of tangible outcomes. Also unlike the Driver, the Expressive isn't all that interested in plans and details. His typical idea of a plan often has an almost "let's go that-a-way" quality to it. He's not big on doing a lot of fact checking but he is big on testimonials and acting on intuition. He tends to measure personal value by the sound of applause.

He likes to stay "in touch" with people in a quite literal way – an Expressive attribute that Analytics tend to abhor. Analytics tend to establish a "personal space" around themselves and don't like it when anyone barges impulsively into that space. I once saw an Expressive manager back an Analytic right up against the thick glass windows of the skyscraper where we all worked. J.R., the Analytic, retreated inch by inch from the boss's warm and friendly invasion of his personal space until J.R. finally could retreat no further. Al, the Expressive, liked to get so close to people he was talking to that their noses almost touched. J.R. was so agitated by this close proximity that I wasn't too sure he wouldn't vaporize and outgas himself right through the glass. I doubt if he really heard one word Al was saying. It was lucky for all that the glass was so thick.

Expressives tend to promote a festive social atmosphere (as do Amiables). This is in sharp contrast to the Driver or the Analytic. The Analytic seems to be able to take it or leave it but will take a kind of passive enjoyment from it. It is often the case that festivity never even enters a Driver's mind and he tends to recognize its value *ex post facto*. It's the one thing a Driver tends to

habitually *not* include in his planning. There are limits to the value he accords to it. I once heard a Driver manager say to one of his Expressive subordinates, "If your group can't be productive, at least be quiet." The Expressive resented that bit of feedback from the boss. Many Expressives do exhibit a tendency for harboring resentments. Drivers tend to view people as valuable or non-valuable; Expressives tend to view them as friends or enemies.

Expressives are energetic team *builders* and group *gatherers*. They tend to be founders of organizations. To use a chemistry metaphor, they are social atoms forming multiple covalent interpersonal bonds. Wilson (2011) describes the Expressive social style in the following terms:

- Energetic, inspiring, emotional, fast-paced;
- Comfortable with taking social initiative; engages freely in conversation before tackling tasks;
- Futuristic, talkative, and intuitive; willingly shares ideas, insights, dreams and visions;
- Risk-taker; competitive; creative; enthusiastic;
- Likes an audience; ambitious;
- Seeks to be highly visible and to stand out from the crowd, to be seen as unique and showing leadership;
- Values recognition for accomplishments, publicity, and symbols of accomplishment.

Although to a lesser degree than is the case for the Driver, the Expressive category does exhibit central behavioral tendencies that are fairly well described by a *DSM-IV* personality style. In their case, this is the histrionic personality style [Sperry (2003), pg. 133]:

- Enjoy compliments and praise;
- Charming, engaging, and appropriately seductive in appearance and behavior;
- Attentive to their appearance and grooming, enjoying clothes, style, and fashion;
- Lively and fun-loving, often impulsive but can delay gratification;
- Enjoy being the center of attention and can rise to the occasion when all eyes are on them;
- Sensation oriented, emotionally demonstrative, and physically affectionate; react emotionally but appropriately;
- Utilize a style of speech that is appropriately global and specific.

In my opinion, one of the most potent combinations of leaders is one in which the chief official is a versatile Expressive who has a versatile Driver for his operational lieutenant. This is the classic Captain-and-Executive-Officer or good cop/bad cop organization model. When both individuals are versatile in their interpersonal social styles, they tend to complement each other and balance out each others' shortcomings. On the other hand, a low-versatility Expressive teamed up with a low-versatility Driver for a lieutenant tends to be a pretty bad leader combination (although not as bad as a low-versatility Driver with a low-versatility Amiable as the lieutenant).

### § 3.4 The Amiable Interpersonal Style

Now we come to the most "social" of the interpersonal styles: the Amiable. In a nutshell, the Amiable interpersonal style is the polar opposite of the Driver<sup>15</sup>. Three quarters of their habitual Affiliation response operationalizations are anticomplementary to the Driver's habitual Affiliation operationalizations and three quarters of their habitual Control operationalizations stand in a relationship of semimorphic complementarity to those of the Driver. Basically, each style type is an interpersonal puzzle to the other. They share no *habitual* complementarity relationships with

---

<sup>15</sup> Similarly, the Analytic interpersonal style is the polar opposite of the Expressive.

each other and every interpersonal transaction tends to be an affective negotiation in which the Amiable will not take the initiative in establishing the transaction. With very good reason, Wilson calls the Driver-Amiable pairing a poison relationship.<sup>16</sup> If their behavioral transactions follow habituated behavioral responses, the Amiable becomes an on-going source of frustration to the Driver and the Driver becomes an increasingly menacing "dark lord" figure to the Amiable. Low-versatility Drivers tend to not give the Amiable his due credit for, e.g., the good job he does; low-versatility Amiables tend to flinch from a shadow of animosity they think they perceive from the Driver that often is not actually there at all. They do, however, correctly recognize that the low-versatility Driver habitually tends to regard them more as objects than as people.

Because neither one's habitual operationalizations stand in a relationship of complementarity with those of the other, unless at least one of them has high versatility interpersonal capacities the Amiable and the Driver will have great difficulty establishing even habitual patterns of stable and equilibrated social transactions. The social bonding is then very fragile and transient. This is especially worrisome and troubling to the Amiable because for people habituated to this style establishing and maintaining the personal relationship is of paramount importance – whereas the Driver habitually hardly values it at all. With low-versatility actors, each style tends to not give the other what that person wants and needs. The most frequent gift the low-versatility Amiable and the low-versatility Driver exchange is the ulcer.

Amiables tend to want and need to trust other people, but they also make people *earn* that trust first. Affable is a better description for them than amiable. They are not the Pollyanna persons the style label tends to imply and are in many ways wary of strangers. They prefer to size up another person first and do not take the initiative of taking the first overt steps to establish a relationship. At most they *hint* that they are open to establishing one, primarily by friendly but ambiguous small talk and body language. This style is low-assertive about *everything*. Not surprisingly, the operationalizations are in a relationship of complementarity only with Expressives and other Amiables. They place a high priority on getting along with others. They tend to avoid and hide interpersonal conflicts and present a quiet, cooperative and *passively* supportive appearance. They tend *not to be* people who forgive and forget if the relationship goes bad, and their enmity is *final*.

Among their good qualities, they give good advice and counsel, tend to make positive comments about the contributions and accomplishments of others, and are willing to pitch in and help where needed. However, they are not inclined to move ahead without strong support from others to back them up. They require time to build personal relationships as well as a lot of feedback and cooperation before saying yes or no to anything. To use a chemistry metaphor, forming a personal bond with an Amiable is an endothermic reaction: a lot of energy has to be put into it to form the bond. And like endothermic compounds, the resulting interpersonal compound is sometimes unstable. Wilson (2011) describes the Amiable social style in the following terms:

- Quiet, unassuming, supportive, warm;
- Friendly listeners; easy to get along with; enjoy personal contact;
- Shares responsibility; is concerned about collaboration, providing support, and reaching agreement;
- Requires extensive data for decision-making; prefers to have consensus before moving

---

<sup>16</sup> The same is true for the Expressive-Analytic pairing but for a different reason. Three-quarters of the operationalizations for both of these types do stand in complementarity with each other, but this doesn't mean they understand each other. Complementarity just means their habitual behaviors reinforce the prejudices each has in regard to the other's personality. Their transactions therefore tend to "lock in" and become mutually reinforcing and stereotyped. That *doesn't* mean they like each other. Socially, each wants what the other habitually tends to not give. The Expressive gets little or no applause from the Analytic; the Analytic won't "open up" with the Expressive; and the Analytic's detailed labor and expertise goes unsung.

- ahead;
- Often focuses on personal ties before goals;
- Seeks and needs approval; seeks to promote or gain agreement from others and to be included as part of the group or team;
- Values receiving others' approval and having a positive impact on others.

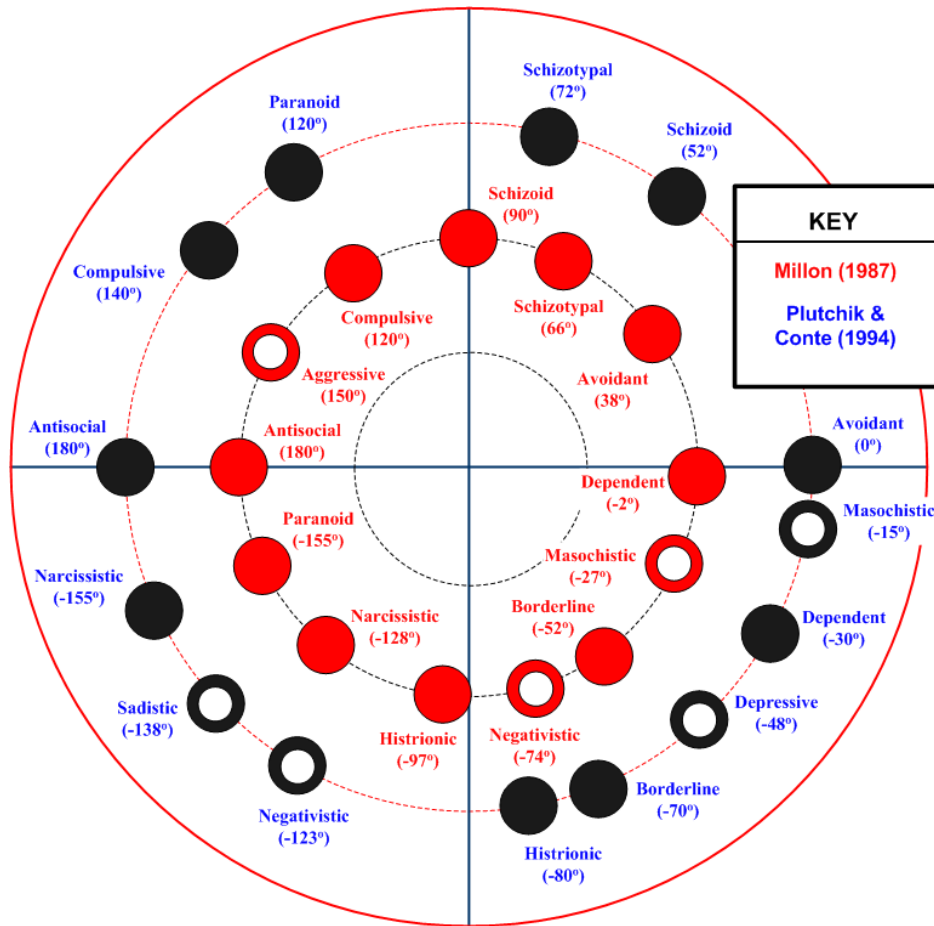
The Kiesler operationalizations corresponding to the Amiable interpersonal style in the normal variant range of behaviors are:

- **Sociable:** to engage others as Outgoing, i.e., to show interest in and concern about others and their affairs, to readily talk to or get to know others, to readily associate with others and be in the company of others, to readily direct one's attention outside oneself;
- **Friendly:** to engage others as Cooperative/Helpful, i.e., to readily work or act together with, or facilitate, aid, or assist others, to express friendliness and agreeableness, to readily agree, consent, or conform to others; to readily accede, assent to, or concur with the opinions, feelings, or actions of others; to show awareness and regard, or positive, sincere and thoughtful consideration for others; to speak and act with politeness and with good manners; to readily aid, assist, succor, support, or be of service to others; to expend time and resources to facilitate the actions or tasks of others;
- **Warm:** to engage others as Warm, Gentle, and Lenient, i.e., to readily show cordiality, affection, tender feelings, fond attachment or liking to others; to be affectionate and emotional in interacting positively with others; to present a relaxed, sunny, soft, inviting, or approachable bearing, manner, or appearance to others; to come across as mild and not hard or rough with others; to be permissive and tolerant of others regarding conformity to principles, rules, requirements, and obligations; to be easy, compromising, undemanding, and moderate in judging or interacting with others; to tend to impose a soft, easy, and loose discipline on others; to be inclined to overlook, minimize, excuse, or forgive transgressions by others of rules and regulations or violations of principles and obligations; to be hesitant or reluctant to inflict or administer penalty or punishment on others for their transgressions;
- **Trusting:** to engage others as Trusting/Forgiving, i.e., to not appear cautious, watchful, wary, or guarded against danger, harm, or undesirable actions by others; to rely upon or be confident about the good intention of others; to act upon the belief that others are good, right, true, innocent, genuine, etc. based on little or no proof or evidence; to be open, frank, guileless, straightforward, etc. and to expose to, not conceal from, others one's motivations, goals, or the real purposes of one's actions; to be ingenuous or free from dissimulation and free from harmful intent or motive; to readily pardon, excuse, or absolve others; to cease to feel resentment toward others for their offenses, injury, or wrongdoing against oneself.

Again it must be emphasized that all of these are externalized expressions of behavior, not the person's inner personality laid bare. It is more accurate to say that an Amiable is inclined to give you the *benefit of the doubt* than he is to actually *trust* you. His real trust you must earn. He is an inviting person, but understand that he is inviting you to *purchase* a personal relationship; he doesn't give them away for free. An Amiable is high-responsive for *entering* into a friendship; he is low-assertive in *forging* one. An Amiable will show you the spirit of the relationship he desires, but he does not show you his *soul*. This is a crucial difference between an interpersonal style and a personality style. And if the relationship goes bad, he will never forget it the rest of his days.

#### § 4. Psychological Personality Styles

From the theoretical Standpoint of mental physics, personality is the entirety of the person's *nexus* of practical rules in the manifold of rules. These rules regulate all the person's habits that are expressed by his physical actions (including somatic actions said to express emotion).



**Figure 8.9:** Two empirically estimated personality style circumplexes. The solid circles denote personality types officially recognized in *DSM-IV*. The annuli denote putative speculations of possibly distinguishable personality styles that are presently controversial among psychiatrists and are not officially recognized as distinct personality types in *DSM-IV*. The key refers to references given at the end of the chapter.

The manifold of rules is never perceived by the individual; it can be called an *autistic* structure within the person's mental anatomy. Not surprisingly, then, its behavioral manifestations in empirical experience are open to a wide variety of various interpretations. Among these are the psychological and psychiatric interpretations of personality style. These, in point of fact, are arrived at typically by starting with the characteristics of personality disorders and then normalizing the disorder behaviors to estimate the characteristics of normal variant range styles. Also not surprisingly, measured empirical estimations of these show a great deal of experimental variance from researcher to researcher and even from study to study conducted by the same researchers. Figure 8.9 illustrates two examples of empirically determined circumplex models, both obtained by respected experts in the field [Plutchik and Conte (1997)]. The models have been oriented to place the antisocial personality style at a location of 180° on the model. The measurements are shown at different radii merely to allow the two results to be easily compared and in this figure do *not* denote relative intensity levels (as circumplex radii otherwise would).

In this treatise we will be concerned only with those personality categories currently recognized in *DMS-IV*. This is because the others are presently regarded as too speculative and there is disagreement over whether they should even be regarded as personality traits rather than as paraphilias (sadistic, masochistic) or as mood disorders (aggressive, depressive, negativistic).



Of the ten recognized categories that remain, the two studies show reasonably good agreement for six of the categories (angular difference less than 30° in the circumplex) while the remaining three (schizoid, avoidant, paranoid) show pronounced differences in their locations on the circumplex. Note that the agreement between the two antisocial data points is forced by defining antisocial personality to lie at 180° on the circumplex. The published data did not report the variances of the measurements for either study [Plutchik and Conte (1997)].

It is an accepted tenet of modern psychology and psychiatry that personality traits (which the categories in figure 8.9 are regarded as representing) are linked to something in the brain. Mental physics agrees with this but *only* to the extent that mind and brain are co-determining (i.e., that they stand in a Relation of mutual reciprocity and *not* in a Relation of Causality & Dependency). A number of psychologists and psychiatrists, including Plutchik [Plutchik (1980)] and Millon [Millon and Davis (2000)], subscribe to the premises of a speculative paradigm known as the *psychoevolutionary* theory of mind. Our first order of business is to dispose of this paradigm.

#### § 4.1 The Pseudo-Ontology of the Psychoevolutionary Premise

The psychoevolutionary premise is grounded in an ontology-centered pseudo-metaphysic. Plutchik described this premise in the following way:

Darwin was the first to recognize that the concept of evolution should apply not only to the development of physical structures but to the evolution of mind and emotion as well. In his book *The Expression of Emotions in Man and Animals*, which was published in 1872, he gave many illustrations of parallel ways emotions are expressed in different animals. He felt that such observations would provide a safe basis for generalization about the origins of various types of expressive behavior, since the expressions of animals, in contrast to those of humans, are not likely to be based upon social conventions.

The expansion of research has confirmed Darwin's conception of the basic unity of living systems. There seems to be little question that basic processes exist in common at all levels of biologic development. At the same time it must be recognized that evolution has introduced something new in the structure and behavior of living organisms. We are thus faced with a twofold problem: first, to recognize the basic elements found at all evolutionary levels; and second, to recognize and identify the newly emergent characteristics that also appear. [Plutchik (1980), pg. 119]

Must it be recognized that "evolution has introduced something new in the structure and behavior of living organisms"? *No*. There is no necessity here whatsoever. Evolution *is* a primary biological fact of the physical-natural world.<sup>17</sup> The *Dasein* of mental Nature in human beings is likewise *certainly* a fact of *homo noumenal* Nature. Is the *Dasein* of a mental Nature in dogs a fact? Here many researchers, myself included, think it is *likely to be factual*; is it *known* to be factual? *No*. The *Dasein* of a dog-mind is an hypothesis and nothing more. Is the **non-Dasein** of an amoebic mind a fact? *Yes*. There is nothing whatsoever that an amoeba does that cannot be explained by completely physical dead-matter models. There is no objectively valid ground whatsoever to introduce the notion of an amoebic mind. What we do know is that *it appears to be likely* that, somewhere along the phylogenetic trail between amoeba and man, natural phenomena of *Existenz* pointing to the *Dasein* of a mental-natural side to organisms can be discovered. It is certainly present in man, and it is certainly absent in amoebae and bacteria. But does this mean that *evolution caused it*? There is no objectively valid ground to say this whatsoever. There is

<sup>17</sup> As a physical phenomenon of Nature, evolution can be and has been observed in the laboratory and its manifestations are innumerable in the physical world. Evolution is not a theory; *natural selection* is a theory. The *genetic model* of evolution is a theory. Evolution *per se* is a *fact* theory seeks to explain in terms of something more fundamental, namely laws of *physical* nature.

nothing whatsoever in our understanding of physical nature that is capable *even in principle* of causing the "emergence of mind." To say that once the brain reaches some level of complexity "mind emerges" is to say that something magical has transpired. There is no place for magic in science.

Nor is it the least bit necessary to make such a postulate. The *Dasein* of any *thing* is *essentially inexplicable*. Science does not seek to explain *Dasein*; it seeks to understand *Existenz*. Further, the postulate of mind-as-emergent-property-of-evolution utterly lacks any fecundity. It predicts nothing whatsoever. It leads to no new discoveries whatsoever. It is to modern psychology and psychiatry what *vitalism* was to biology. To borrow the words of Claude Bernard<sup>18</sup>, to say that mind emergences as a consequence of evolution "is to explain darkness by an even greater darkness." William James could not have been more clear on this point:

In a general theory of evolution the inorganic comes first, then the lowest forms of animal and vegetable life, then forms of life that possess mentality, and finally those that possess it in a high degree. As long as we keep to the consideration of purely outward facts, even the most complicated facts of biology, our task as evolutionists is comparatively easy. We are dealing all the time with matter and its aggregations and separations; and although our treatment of it perforce be hypothetical, this does not prevent it from being *continuous*. The point which as evolutionists we are bound to hold fast to is that all the new forms of being that make their appearance are really nothing more than results of the redistribution of the original and unchanging materials. The self-same atoms which, chaotically dispersed, made the nebula now, jammed and temporarily caught in peculiar positions, form our brains; and the 'evolution' of the brains, if understood, would be simply the account of how the atoms came to be so caught and jammed. In this story no new *natures*, no factors not present at the beginning, are introduced at any later stage.

But with the dawn of consciousness an entirely new nature seems to slip in, something whereof the potency was *not* given in the mere outward atoms of the original chaos.

The enemies of evolution have been quick to pounce upon this undeniable discontinuity in the data of the world, and many of them, from the failure of evolutionary explanations at this point, have inferred their general incapacity all along the line. Everyone admits the entire incommensurability of feeling as such with material motion as such. "A motion became a feeling!" – no phrase that our lips can frame is so devoid of apprehensible meaning. Accordingly, even the vaguest of evolutionary enthusiasts, when deliberately comparing material with mental facts, have been as forward as anyone else to emphasize the 'chasm' between the inner and the outer worlds. . . .

None the less easily, however, when the evolutionary afflatus is upon them, do the very same writers leap over the breach whose flagrancy they are the foremost to announce, and talk as if mind grew out of body in a continuous way. . . . The fact is that discontinuity comes in if a new nature comes in at all. The *quantity* of the latter is quite immaterial. The girl in 'Midshipman Easy' could not excuse the illegitimacy of her child by saying, 'it was a very small one.' And Consciousness, however small, is an illegitimate birth in any philosophy that starts off without it and yet professes to explain all facts by continuous evolution.

*If evolution is to work smoothly, consciousness in some shape must have been present at the very origin of things.* Accordingly we find that the more clear-sighted evolutionary philosophers are beginning to posit it there. Each atom of the nebula, they suppose, must have had an original atom of consciousness linked with it; and, just as the material atoms have formed bodies and brains by massing themselves together, so the mental atoms, by an analogous process of aggregation, must have fused into those larger consciousnesses which we know in ourselves and suppose to exist in our fellow animals. Some such doctrine of

---

<sup>18</sup> Bernard (1865), pg. 201.

*atomistic hylozoism* as this is an indispensable part of a thorough-going philosophy of evolution. [James (1890), vol. I, pp. 146-149]

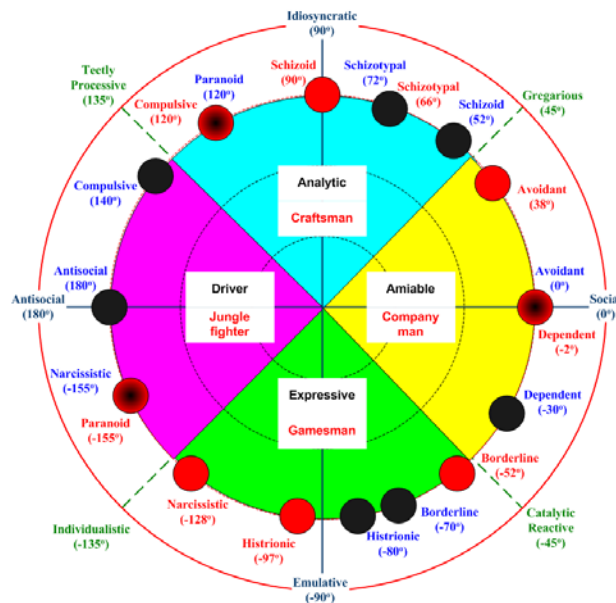
This naked speculation was called "the mind dust hypothesis." Its origins can be traced to the rationalist philosophy of Leibniz and his notion of "monads," and James goes on to utterly demolish it. Unfortunately for psychoevolutionary theory, no evidence of mind dust has ever been found and the only reason for positing the *Dasein* of mind dust is to save the *presumed* connection between biological evolution and the phenomenon of mind. This argument is patently one that begs the question. If mind dust does not exist (and physicists are adamant that it does not), then maintaining the *presupposed* causality & dependency Relation between evolution and mind comes at the price of *invalidating the premise of evolution itself*. The entire psychoevolutionary postulate, and the theory that follows from it, is internally inconsistent and it self-destructs. The premise is a transcendent fantasy with utterly no objectively valid ground.

Fortunately, we do not need to save the hypothesis because we do not need it. Science no more seeks to explain the origin of a primary natural fact – the phenomenon of human mind – than it seeks to explain the origin of the primary physical fact that we exist at all. Theologians can debate and argue that point. Scientists cannot and must not take any part in that supernatural speculation. The metaphysics of mental physics is epistemology-centered, not ontology-centered.

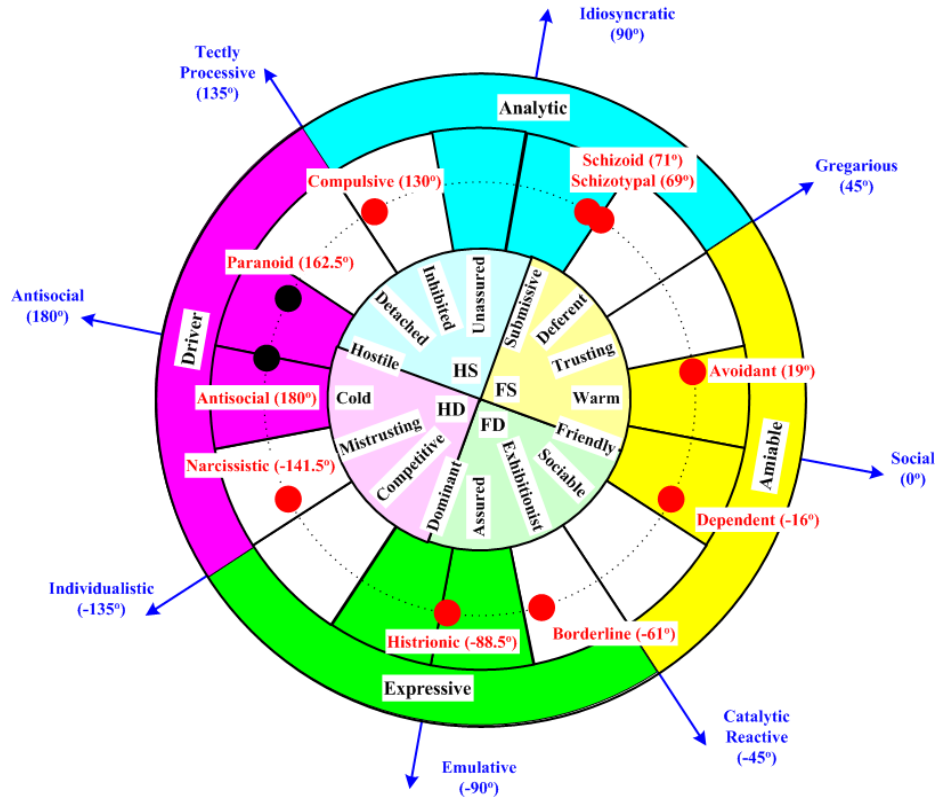
This same argument, I will note in passing, also puts a stake through the scientific heart of a similarly specious fantasy adhered to by some sociologists. That one is called *sociobiology*. As a doctrine it is as barren, as groundless, and as useless as the psychoevolutionary speculation.

## § 4.2 The Personality Style Octants

*Personality style* is the phenomenal appearance of personality expression. As phenomenal appearance, it is a fit subject for study by empirical science. As a phenomenon of human Nature, it must be connected with the phenomenal appearance of human social intercourse. Figure 8.10 illustrates how the personality style and interpersonal style circumplexes overlay each other.



**Figure 8.10:** Empirical models of *DSM-IV* personality style and interpersonal style overlaid. Black circles: categories from the Plutchik-Conte circumplex. Red circles: categories from the Millon circumplex. Red-black circles: locations where Plutchik-Conte categories coincide with Millon categories.



**Figure 8.11:** The DSM-Personality/Interpersonal /Operationalizations Styles (D-PIPOS) Circumplex.

Figure 8.10 provides an indication of how large the empirical variance is in ascertaining the location of the *DSM-IV* personality styles on a circumplex. Although the paucity of specific data in the published reports makes a calculation of a mean value location for the ten *DSM-IV* categories subject to an unascertained standard deviation of the mean, we can obtain an approximate circumplex location by taking an unweighted average of the category locations reported by Millon and by Plutchik-Conte. To complete the overall synthesis, we must also rotate the circumplex presentation to properly align the *DSM-IV*, Maccoby-Wilson, and Kiesler '82IPC presentations so that complementarity relationships in transactions operationalizations are correctly preserved in a unified circumplex model. Figure 8.11 presents the outcome of that synthesis. The figure now shows how the original eight axes presented in figure 8.1 align with the empirical factors we have examined in this chapter.

Viewed from the perspective of mental physics, the *DSM-IV* categories cannot be regarded as crisp categories (innate traits). Rather, the category circles presented in figure 8.11 must be regarded as depicting approximate centroid locations for solution *sets* of behavioral characterizations distributed across conic regions that each category labels. For example, figure 8.11 places the 'paranoid' label at 162.5°, but figure 8.10 illustrates that the Plutchik-Conte and Millon values are spread over an arc running from 120° to 205°. Given this large range, it seems dubious that the paranoid personality style can properly be uniquely associated with just one interpersonal style at all. Applying the same mathematical reasoning to the other *DSM-IV* labels, figure 8.11 suggests that the circumplex is better regarded in terms of eight octants of behavior expressions rather than either four quadrants or sixteen *crisp* operationalization segments. The octant structure in figure 8.11 is illustrated by depicting the segments where one Wilson style overlaps into the adjacent style in white. The four white-colored octants so denoted can be called the **overlap octants** of the DSM-Personality/Interpersonal/Operationalizations Style (D-PIPOS) circumplex model.

Comparison of the *DSM-IV* personality style descriptions with the octant locations of the categories and their placement relative to the eight personality style poles in the figure yields some interesting interpretational suggestions. The histrionic category appears to be almost perfectly centered on the Emulative personality style pole in the center of the Expressive interpersonal style. The *DSM-IV* description of the normal variant range histrionic personality style was provided in §3.3 earlier. It is a description that very nicely accords with the Wilson characterization of the Expressive interpersonal style. The ***Emulative octant*** is characterized by the Kiesler interpersonal transaction operationalizations Dominant and Assured. The location of the normal variant range antisocial personality style on the antisocial pole in the center of the ***Antisocial octant*** is, of course, by design as this style was used as the reference angle for orienting all the various circumplex models we have examined here. That mathematical definition was based on the relative ease by which the antisocial and central Driver styles are recognized empirically. No other *DSM-IV* categories are as cleanly centered as these two, and these share in common the fact that they are both coordinated on the high-assertive Wilson axis.

In contrast, the schizoid and schizotypal categories both fall at the boundary between the ***Idiosyncratic octant*** and the ***Gregarious octant***. Their combination falls at about 70° on the circumplex, although the range between the Millon and Plutchik-Conte data points ran from 52° to 90° for the schizoid category and 66° to 72° for the schizotypal category. This seems to locate these personality styles in one half of the Analytic quadrant. The other half of the Analytic quadrant is left psychologically "open" or uncharacterized by any recognized *DSM-IV* category until we near the pole of the ***Tectly Processive octant*** at 135°. The *DSM-IV* description of the normal variant range of the schizotypal personality style is [Sperry (2003)]:

- Tend to be tuned into and sustained by their own feelings and belief;
- Keen observation of others and are particularly sensitive to how others react to them;
- Tend to be drawn to abstract and speculative thinking;
- Receptive and interested in the occult, the extrasensory, and the supernatural;
- Tend to be indifferent to social convention, and lead interesting and unusual lifestyles;
- Usually are self-directed and independent, requiring few close relationships.

I would be personally surprised if the characterization regarding "the occult or extrasensory" given here were really applicable to many low-assertive engineers or accountants (although it is hard for me to think that someone willing to spend her entire weekend going through account and spending records to find out why a \$1 million budget is eight cents out of balance *wouldn't* be someone who truly believed in something). *If*, however, this characterization were stated "interest tends to be drawn to the puzzling and mysterious," then I'd be willing to say the characterization fits the style. Historically, and presumably in prehistory, the first hypothesis made about the workings of the natural world was "magic." This is still a central natural history paradigm of the BaMbuti Pygmies [Turnbull (1961)], a number of American religious cults, psychoevolutionary theorists, and Big-Bang physicists.

As for the schizoid personality style, Sperry's description reads:

- Exhibit little need of companionship and are most comfortable alone;
- Tend to be self-contained, not requiring interaction with others in order to enjoy experiences or live their lives;
- Even-tempered, dispassionate, calm, unflappable, and rarely sentimental;
- Tend to be unswayed by either praise or criticism and can confidently come to terms with their own behavior. [*ibid.*]

This characterization fits most of the low-versatility Analytics I have met like a glove. On the whole, however, the Analytic quadrant remains by and large enigmatic in personality psychology.

This is, perhaps, not too surprising in retrospect for these unexpressive and "closed shell" social atoms. *Idiosyncratic octant* for the central Analytic would appear to be a very appropriate term.

Next we turn to the *Individualistic octant* that overlaps the Expressive and Driver styles. Here we find located the narcissistic category at  $-141.5^\circ$ , the Individualistic axis being at  $-135^\circ$ . The Millon-Plutchik-Conte range for this label runs from  $-155^\circ$  to  $-128^\circ$ , which spans roughly two-thirds of the octant. Sperry (2003) provides the following description for this personality style:

- Although emotionally vulnerable to negative assessments and feelings of others, they can handle these with style and grace;
- Shrewd in dealing with others, utilizing the strengths and advantages of others to achieve their own goals;
- Can energetically sell themselves, their ideas, and their projects;
- Tend to be able competitors who love getting to the top and enjoy staying there;
- Can visualize themselves as the best or most accomplished in their field;
- Believe in themselves, their abilities, and their uniqueness but do not demand special treatment or privilege;
- Possess a keen awareness of their thoughts and feelings, and have some awareness of those of others;
- Expect others to treat them well at all times.

The Plutchik-Conte-Millon range for the narcissistic personality style was  $-155^\circ$  to  $-128^\circ$ , a span that brackets the centerline of the Individualistic octant but favors the Antisocial side of this octant. The Sperry description clearly shows Driver-like traits for the narcissistic personality but also points to a greater degree of responsiveness (or a lower degree of non-responsiveness) consistent with more Expressive-like traits. This rather clearly seems to raise the suggestion that the Individualistic octant be regarded as a personality style *transition* region from Antisocial to Emulative. It is interesting to note that the personality traits described here, as well as the Kiesler operationalizations aligned with the Individualistic octant (Mistrusting, Competitive), are pretty good descriptions of many college professors/researchers who have achieved a notable degree of recognition or fame in their professional societies. These are people who have been generously showed with honors and accolades, tend to be attended to by an entourage at conferences, and who are typically if clandestinely referred to by the "commoner" members of their professional societies as "the Bigshots."

Let us follow up on this suggestion that the white-colored regions in figure 8.11 are to be regarded as transition zones between four "pure" styles (Idiosyncratic, Antisocial, Emulative, and Social octants). The compulsive personality style (more widely called obsessive-compulsive) is located near the centerline of the *Tectly Processive octant*. The Plutchik-Conte-Millon range was from  $120^\circ$  to  $140^\circ$ , which again spans the centerline of the octant with a slight tilt in the direction of the Analytic interpersonal style. Here I have resurrected the obsolete English word *tectly*, "in a private, secretive or covert way," as an adjectival label for the octant. The adjective *processive*, "going forward," is used in its connotation of "to move, pass, advance, or go on, especially after stopping." The *DSM-IV* description of the personality style, Sperry (2003), is:

- Desire to complete tasks and projects without flaws or errors;
- Take pride in doing all job or tasks well, including the smallest details;
- Tend to want things to be done "just right" and in a specific manner, but have some tolerance for things being done in another way;
- Dedicated to work and working hard; capable of intense, singled-minded effort;
- Carefully consider alternatives and their consequences in making decisions;
- Tend to have strong moral principles and strongly desire to do the right thing;
- No-nonsense individuals who do their work without much emotional expenditure;

- Generally careful, thrifty, and cautious but able to share from their abundance;
- Tend to save and collect objects; reluctant to discard objects that formerly had or someday may have value.

These descriptions apply very well to many Analytics and also in a number of ways to those Drivers who exhibit less extreme degrees of assertiveness. A striving for perfection is very much characteristic of many Analytics, but "some tolerance for things being done another way" is a pragmatic characteristic of a typical Driver (who is, after all, focused on getting the best *result* and is less concerned about *how* that result is secured). "Single-minded" is a description both interpersonal styles markedly share. As for planning ("carefully considering alternatives and their consequences in making decisions"), Analytics and Drivers both tend to be planners, the former tending to focus on tactical planning, the latter on strategic planning. The two associated Kiesler operationalizations (Detached, Inhibited = "Taciturn") also accord well with the compulsive personality style, i.e., "do their work without much emotional expenditure." Again, the empirical observations seem to accord very well with regarding the white-colored octants as transition zones between "purer" expression styles in the circumplex.

The three remaining octants, like the Idiosyncratic octant, have no *DSM-IV*-recognized personality style descriptions near their centerlines. Let us therefore consider the **Social octant** ("pure Amiable") in terms of its "boundary" *DSM-IV* descriptions, the Avoidant personality style and the Dependent personality style. The normal variant range description of the Avoidant style is [Sperry (2003)]:

- Comfortable with habit, repetition, and routine; prefer the known to the unknown;
- Close allegiance with family and/or a few close friends; tend to be homebodies;
- Sensitive and concerned about what others think; tend to be self-conscious;
- Very discrete and deliberate in dealing with others;
- Tend to maintain a reserved, self-restrained demeanor around others;
- Tend to be curious and can focus considerable attention to hobbies and avocations; however, a few engage in counterphobic coping behaviors.

One can see in some of this a sort of "ghost" of Analytic-like characteristics but at the same time a more "interpersonal" and decentered (less Self-centered) perspective in their regard for others. The Plutchik-Conte-Millon range for the Avoidant category is from 0° to 38°, which spans one-half of the total range of the Social octant tilted in the Analytic direction with a significant overlap into the Gregarious octant.

The Dependent category lies at the opposite border of the Social octant with a Plutchik-Conte-Millon range from -2° to -30°, a range that overlaps into about the first adjacent one-sixth of the Catalytic Reactive octant. Sperry (*ibid.*) reports the normal variant range *DSM-IV* description of the personality style as:

- When making decisions, individuals are comfortable seeking out the opinions and advice of others but ultimately make their own decisions;
- Carefully promote harmony with important persons in their life through being polite, agreeable, and tactful;
- Although they respect authority and prefer the role of team member, they can initiate and complete tasks on their own;
- Thoughtful and good at pleasing others; occasionally, they will endure personal discomfort in accomplishing a good deed for the key people in their lives;
- Tend to prefer the company of one or more individuals to being alone;
- Tend to be strongly committed to relationships and work hard to sustain them;
- Can take corrective action in response to criticism.

Perhaps it is no writer's accident that Sperry describes this label in terms that are impressively accurate descriptions of Amiable interpersonal style. Despite what the label might suggest, a typical Amiable does **not** "love everyone." Most of this description definitively fits the Wilson characterization of the Amiable. So, too, does the Avoidant label description. This depicts a people-oriented person who is *not* an altruistic individual and who is discriminating and selective of the people with whom he associates himself. The interpersonal style *is* dedicated and loyal to that *select* group. A less-people-oriented individual (a Driver or an Analytic) might be inclined to call the description above "being herd-like" or "being a member of a pack or a pride."

Note, too, that selectivity at the same time implies *exclusion* – non-association with those who do not pass the person's test of "who is important in my life." This is a frequent behavioral characteristic one finds exhibited by those who have been classified by the Wilson evaluation as Amiable. It is not unusual for an Amiable to "forget" to invite the boss to join the company softball team he is helping to organize or to neglect to invite him to a party being given that weekend (especially if the boss is a Driver). In the same way that some actions of the saints are "un-saintly," some actions of an Amiable are "un-amiable." Amiables are *affable*, not *gullible*.

This pairing up of a deep affiliation with some people accompanied by the exclusion of other people is for most practical purposes the defining trait of the word *society* in its context of "any organized group of people joined together because of some interest in common." One of Wilson's Amiables could not be called "the friend of all mankind," although getting one of them to come out and flatly admit it is, shall we say, usually a daunting undertaking. Amiables do not peremptorily exclude anyone they have just *met* as a possible good companion. They *do* tend to form and prejudicially exclude *stereotypes* – which are nothing more than cartoon descriptions applied to people associated with particular actions, deeds or circumstances of which the Amiable disapproves. Disapproval of a stereotype is a de-personifying behavior not unlike the attitude of a fighter pilot who "shoots down enemy planes" instead of "the men flying those planes."

The blending of these two personality styles, Avoidant and Dependent, also accords very well with the associated Kiesler operationalizations (Warm = {Gentle, Pardoning}, Friendly = Cooperative/Helpful). It seems, then, very appropriate to use these behavioral characterizations as the nominal definition (empirical description) of "Social" and as the marks of the Social octant in the D-PIPOS circumplex.

Next let us turn to the **Catalytic Reactive octant**. Again, there is no *DSM-IV* category located near its center. It is instead bordered on one side by the Dependent category just described and on the other by the Borderline category. The Plutchik-Conte-Millon range for the Borderline label spans the arc from  $-52^\circ$  to  $-70^\circ$ , which spans almost the entire Expressive half of the octant with overlap into the Emulative octant. The normal variant range description for the Borderline personality style is (*ibid.*):

- Tend to experience passionate, focused attachments in all relationships; nothing in the relationship is taken lightly;
- Emotionally active and reactive; they show their feelings and put their hearts into everything;
- Tend to be uninhibited, spontaneous, fun-loving, and undaunted by risk;
- Tend to be creative, lively, busy, and engaging individuals; they show initiative and can stir others to activity;
- Imaginative and curious, they are willing to experience and experiment with other cultures and value systems.

This is a picture in rather marked contrast with the quiet, dependable Amiable of the Social octant. It is, at the same time, Expressive-like but not quite the same "star of the show" style



characteristic of Emulative pole. If this octant is regarded as a transition zone, we see the Borderline category describing the Expressive-oriented half of it. To use a biochemistry metaphor, this is a region of enzyme activity – an enzyme being a protein catalyst responsible for high reaction rate and specificity in a biochemical reaction. In the absence of other people with who they can form attachments (regardless of how temporarily), the normal variant range Borderline personality finds himself in more or less a void. Locking him up in solitary confinement may be the worst torture to which anyone could subject him. These aspects of personality style are what led me to choose "Catalytic Reactive" as the name of the pole for this octant.

Yet on the other side of this axis we encounter the significantly overlapping characteristics of the Dependent personality style. Note how much more "passive" in comparison with the Borderline characteristics the description of the Dependent style is. This contrast seems to suggest very strongly the notion of a transition from one central style (Social) to another (Emulative). The associated Kiesler operationalizations (Sociable = Outgoing = {involved, extraverted}, Exhibitionist = Spontaneous/Demonstrative), are likewise very congruent with this notion of a transition region in the D-PIPOS circumplex. We have now seen that three out of the four white-colored octants in figure 8.11 have this character of being a style transition zone.

This leaves us only to consider the *Gregarious octant*. This octant is bounded on the Analytic side by the Schizoid/Schizotypal category and on the Amiable side by the Avoidant category (which, you will recall, overlaps significantly into the Amiable half of the Gregarious octant). Let us compare these categories. The Avoidant style suggests passiveness, a limited but nonetheless significant tendency for attachment, highly habituated activities, sensitivity, discretion, and self-restraint. The Schizoid/Schizotypal category, in its turn, likewise suggests a somewhat lonelier kind of self-containment but also sensitivity to how others react to them. It implicates lack of an affective *need* for companionship but this does *not* implicate a lack of *willingness* to experiment with socialized association. To use another chemistry metaphor, the contrast in personality styles seems to be suggestive of a transition from ionic bonding (which is, chemically, the weakest form of molecular bonding) towards, but not fully arriving at, covalent bonding (where electrons are *shared* between the bonded atoms), which is both a much stronger form of chemical bond but is at the same time a bonding characterized by a degree of rigidity and stability the word "habitual" behaviorally implicates.

The Kiesler operationalizations (Trusting = {unguarded, innocent, forgiving}, Deferent = Respectful/Content) are congruent with this picture as well. One can say that the Gregarious Analytic displays these qualities (particularly Deferent) because overall the social bond is simply less central to him, whereas the Gregarious Amiable does so for the sake of harmony, being a good team member, and for fellowship's sake. In a group of Gregarious octant individuals, it can indeed be very challenging to say who is primarily an Analytic and who is primarily an Amiable. Let us remind ourselves of the nominal definition of the word gregarious: living in herds or flocks in the sense of being fond of the *company* of others. A better human description might be *tribal*.

I propose, then, that the notion of regarding the four middle octants (Gregarious, Catalytic Reactive, Individualistic, and Tectly Processive) is strongly enough supported by empirical studies to be raised to the level of a social postulate. These octants provide *affinity* in a continuum of the spectrum of observable human behaviors that are most notable in the other four octants. The overall societal *structure* that results meets up with the Logical/Critical requirements of the composition of continuity – namely that we make no leaps (*in mundo non datur saltus*) and leave no gaps (*in mundo non datur hiatus*) in the natural model. The operationalization behaviors, interpersonal style characteristics, and personality style expressions form the basis for the empirical nominal explanations of the meanings we are to associate with the eight poles depicted in the D-PIPOS circumplex. At the same time, having an empirical postulate is not the same thing as having a scientific principle – an objectively valid law with *causal explanatory power*.

## § 5. The Phenomenon of Versatility

It is this last issue to which we now turn our attention. Chapter 9 will turn to more detailed mental physics of this, but this chapter will conclude with a brief segue discussion into that topic.

A lengthy discussion of categories, such as we have just concluded, has a psychological tendency to fixate one's thinking about the overall topic on crisply discrete and juxtaposed terms. But recall that very near the beginning of this chapter I made the observation that interpersonal styles are known to be *social setting dependent*. How a person behaves at home in the company of his immediate and close family *can be* very, very different from how this same person behaves at work, in school, on an athletic team, etc. When I was a boy in high school, one of my school mates was a charming, respectful, polite, gentle and very popular lad – someone everyone liked, admired, looked up to, and regarded as a friend – who also happened to be the fullback on our football team. On the football field, this same gentle, considerate boy would hit you hard enough to jar bones, draw blood, or dislocate joints – something I can attest to from personal experience. If he happened to lay you out on a play, he'd help you back to your feet after the play was over, apologize in teenage-boy-fashion for being so rough on you – and hit you again just as hard on the next play. In the "society of football players on the field," this was entirely in accord with expected norms of behavior and something we all admired him for. It is utterly meaningless to ask, "which of these two kinds of behaviors demonstrates who he really is?" They both did.

This little personal anecdote about my old boyhood chum is merely one instance of a common phenomenon long noted in psychology. Leary wrote,

We are dealing here with an entirely new and different type of data – the relationships among the levels of personality. We designate this as the variability dimension of personality. This is a most important aspect of behavior. Variability has classically been the stumbling block in the development of personality theory. Every systematic treatment of human nature has had to labor with the perverse inconsistency of behavior. It has never been difficult for theorists to invent typologies and variables of emotions. The trouble has always come when the elusive human subject begins to demonstrate his protean complexity. . . .

In considering the variability factor it is useful to make the following distinctions between structural, temporal, and situational variability.

*Structural variability* refers to differences among the levels of personality. It is well known that drastic discrepancies and inconsistencies develop when we compare the conscious self-description with behavioral or symbolic expressions. The subject who presents himself as a warm-hearted, tender soul may produce dreams or fantasies which are bitterly murderous. Social interactions, as observed by others, may be quite different from the subject's own view of them.

*Temporal variability* refers to inconsistencies in the same level of behavior over a time span. Time inevitably brings changes, great or small. Many subjects show marked cyclical swings of moods or action. The interpersonal behavior of an individual generally mutates as he moves from age 13 to 31. The temporal changes we study in psychiatric patients are called spontaneous remissions, therapeutic recoveries, psychotic episodes, and the like.

*Situational variability* refers to differences in cultural and environmental factors. The man who is a lion at home may be a lamb in the office. Reactions often vary according to the sex, age, and cultural status of the "other one" with whom the subject is dealing. [Leary (1957), pp. 242-243]

My boyhood friend was an example of a person said to exhibit *high versatility*. Contrariwise, there are people who exhibit extreme rigidity of behavior in interpersonal style, personality style

or both in practically all social settings. Such a person is said to exhibit *low versatility*.

"Versatility" is not a standard technical term recognized in psychology. Wilson *et al.* tell us,

Versatility is your willingness and ability to make temporary adjustments in your assertiveness and responsiveness styles. The extent to which you are versatile is a critical factor in your ability to begin, build and sustain relationships. [Wilson (2011), pg. 34]

They go on to say that versatility comes into play when a person:

- recognizes that the differences between his and other people's social styles are causing problems in their communication and relationships; and,
- decides he wants to behave differently to make his communication and relationships better. [*ibid.*]

Kiesler was forthright in stating that the complementarity theory he presented pertained to single transactions in single, specific situations. He warned that the variability/versatility problem remained largely uncharacterized and unexplained by the theory he had presented. Wilson *et al.* more or less presuppose that the interpersonal styles described by their circumplex are traits – that, in effect, once a Driver always a Driver, once an Amiable always an Amiable, etc. This is an ungrounded presupposition, however well it might seem to hold in a particular *situational* setting such as "at the office." They are correct in postulating that the great majority of exhibitions of interpersonal style are products of *habit* rather than of forethought. They merely discount the role situational factors play in *provoking* the expression of a habitual behavior.

Every non-autonomic motoregulatory expression of human behavior<sup>19</sup> is regulated by the specific structure of the individual's practical manifold of rules. Likewise, every act of ratio-expression in thinking and reasoning is likewise regulated by the manifold of rules and is given cognitive specificity by the manifold of concepts. Thinking and reasoning follow schemes that tend to often be every bit as habitual as how a person mows his lawn or drives his car. The role of habit is why, for example, the Wilson Learning Corporation is able to offer useful and effective management training products to their clients. It is how law schools turn out graduates "who come out thinking like a lawyer" or engineering schools turn out graduates "who come out thinking like engineers." ***Learning experiences alter behavior.*** When Charles Darwin first set foot on the *H.M.S. Beagle* in 1831 to begin his epic five-year voyage, he was an unknown and little-regarded naturalist noted primarily for collecting beetles, and whose father was worried that his son would never amount to much. Five years later when he stepped ashore in England once more, he appeared to be such a different man that his father is reported to have exclaimed, "Why, the shape of his head is quite altered!" William James wrote,

Habit is thus the enormous flywheel of society, its most precious conservative agent. It alone is what keeps us all within the bounds of ordinance and saves the children of fortune from the envious uprisings of the poor. It alone prevents the hardest and most repulsive walks of life from being deserted by those brought up to tread therein. . . . It dooms us all to fight out the battle of life upon the lines of our nurture or our early choice, and to make the best of a pursuit that disagrees because there is no other for which we are fitted and it is too late to begin again. . . . Already at the age of twenty-five you see the professional mannerisms settling down on the young commercial traveler, on the young doctor, on the

---

<sup>19</sup> Autonomic motoregulatory expressions are impulsive determinations of reflective judgment that have not been brought under regulation by maxims in the manifold of rules. This raises the intriguing question of whether or not a particular apparently-autonomic response is in fact capable of being brought under rational control. Psychological experiments involving what is called "biofeedback" have revealed that at least some motoregulatory expressions once thought to be fully autonomic are capable of being consciously regulated.

young minister, on the young counselor-at-law. You see the little lines of cleavage running through the character, the tricks of thought, the prejudices, the ways of the 'shop,' in a word, from which the man can by-and-by no more escape than his coat-sleeve can suddenly fall into a new set of folds. . . .

If the period between twenty and thirty is the critical one in the formation of intellectual and professional habits, the period below twenty is more important still for the fixing of *personal* habits, properly so-called . . . The great thing, then, in all education is to *make our nervous system our ally instead of our enemy*. It is to fund and capitalize our acquisitions, and live at ease upon the interest of the fund. *For this we must make automatic and habitual, as early as possible, as many useful actions as we can*, and guard against the growing into ways that are likely to be disadvantageous to us, as we should guard against the plague. The more of the details of our daily life we can hand over to the effortless custody of automatism, the more our highest powers of mind will be set free for their own proper work. There is no more miserable human being than one in whom nothing is habitual but indecision . . . Full half the time of such a man goes to the deciding, or regretting, of matters which ought to be so ingrained in him as practically not to exist for his consciousness at all. If there be such daily duties not yet engrained in any one of my readers, let him begin this very hour to set the matter right. [James (1890), vol. 1, pp. 121-122]

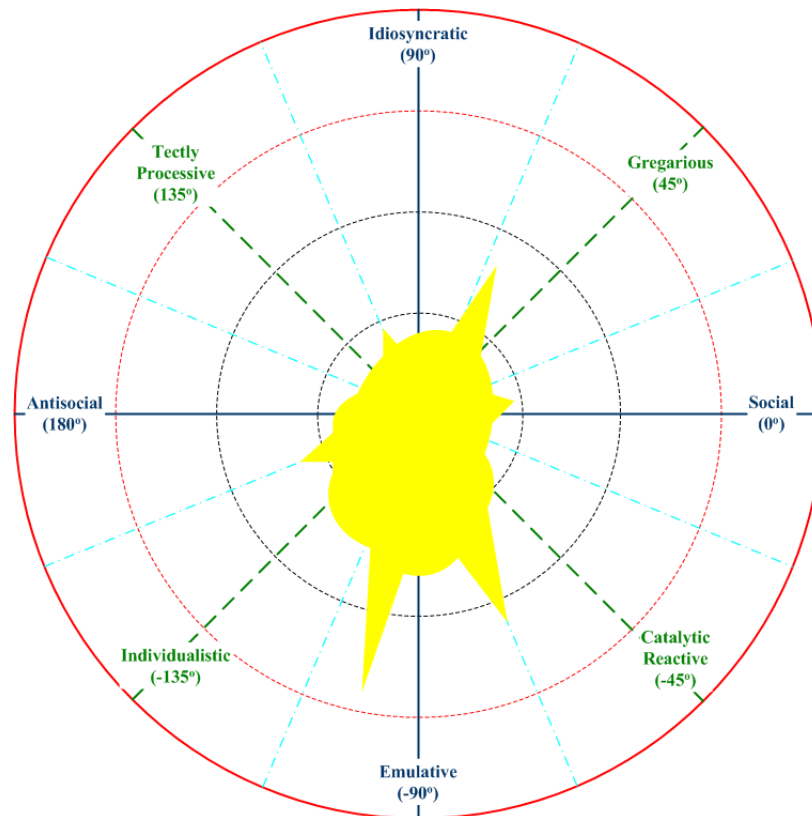
James tended to be of the "you can't teach an old dog new tricks" school of thought. This is not true, although mental physics tells us that changing old habits or acquiring new ones becomes increasingly more difficult as the manifold of rules and the manifold of concepts develop. If, for example, a person does not develop the habit of being courageous when he is young, he is not too likely to develop courage in old age<sup>20</sup>. The processes of practical judgment and of determining judgment are structure-conserving processes, and accommodation of the manifold always conserves the prior ability to assimilate old aliments. It generally takes some major de-equilibrating event – some major trauma – to provoke a major adaptation in the manifold of rules (one affecting the highest tenets and especially the hypothetical imperatives of practical Reason). This is why habits are said to be "set" and a person to become "set in his ways."

The structure of the individual's manifold of rules and manifold of concepts is the current result of a lifelong process of learned experience that begins on the natal day. James was entirely correct to stress the importance of education, but not for the biophysical reasons to which he attributed this importance. The more tightly coupled and action-localized the structure of the manifold of rules is made, and the more restricted and tightly coupled the structure of the manifold of concepts is made, the lower the versatility of the individual will be. It is generally not true that any individual will build a manifold structure so completely localized that his personality can truthfully be characterized by just one of the neat little categories typical of all circumplex models. The manifold of rules tends toward a divers construction initially and become integrated as the person ages and acquires more experiences. This is readily observable in children below the age of about six years, and psychology calls it *personality integration*.

It is also true, however, that within the structure of the manifold there occurs logical forms of connection that Critical Logic calls "disjunctive Relations." Motivation is the accommodation of perceptions and motoregulatory expression is its assimilation. Slight differences in situation, reflected in differences in affective perceptions, can and often do produce large differences in behavioral expressions if these differences in the representation of desiration provoke different higher-order maxims and tenets in the manifold of rules.

---

<sup>20</sup> Contrary to popular opinion, courage is a *learned* behavior. So is cowardice. So are honesty and dishonesty. These words are labels for developed action schemes put into practice in the cycle of judgmentation.



**Figure 8.12:** An illustration of the personality style circumplex as it is to be regarded using set membership theoretic mathematical modeling. The colored regions in the circumplex denote complexes of developed schemes structured into the individual's manifold of practical rules. The schemes regulate expression of specific externally-observable behaviors under specific circumstances. This is called emotivity.

Figure 8.12 illustrates the result of this. Qualitatively different expressions of assertiveness and responsiveness, qualitatively different expressions of personality style, and qualitatively different interpersonal transaction operationalizations can and do result from provocation of different substructures, either distinguished by logical Relations of disjunction or else not yet connected ("integrated") with other substructures in the manifold. *The logical structuring of the manifold of rules, abetted by the logical structuring of the manifold of concepts, is the root cause of the empirical phenomena of variability and versatility in individual human actions.* Emotive appearances of personality style, habits of interpersonal relationship, and the phenomenon of complementarity are all grounded in this mental-physical property of the individual's experience-driven Self-construction of his manifolds of rules and of concepts.

This is also responsible for the phenomenon of "moral re-staging" discussed here in an earlier chapter. Accommodations made to the manifolds are driven by *impatient* practical Reason and are always *satisficing* solutions. This means *the structure of the manifold is conserved as much as is possible while still achieving reequilibration* after a disturbing event. Re-staging is properly seen as the consequence of a newer substructure, within a more extensive practical scheme structure, being *too specialized* to assimilate new situations under differing circumstances. The result is the provocation of prior, higher-level maxims which then evoke older (less recent) schemes of ratio-expression. Because these prior schemes were left unaccommodated by more recent experiences, they reproduce the older behaviors characteristic of past emotive expressions. If we are to develop a social-natural theory of the "social chemistry" of human intercourse, we must begin from this foundation in the mental physics of human Nature.

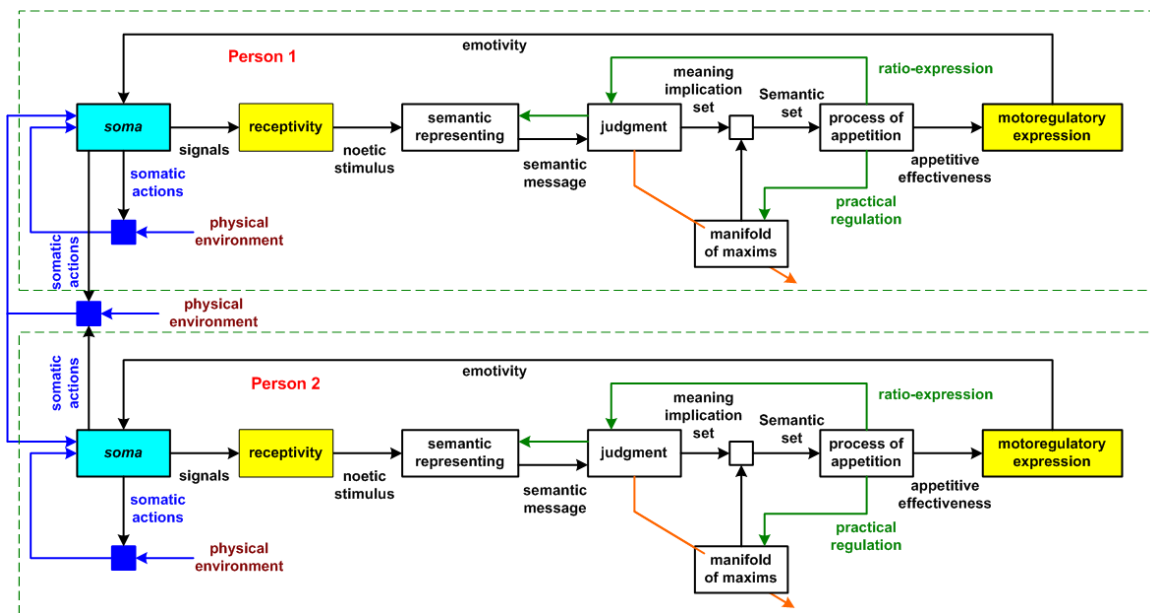


Figure 8.13: Weaver's model of two-person interaction.

It is here where the Weaver's model of interpersonal interaction connects with the circumplex theory developed in this chapter. Figure 8.13 re-presents the Weaver's model of two-person interaction. How one individual *interprets* the operationalization behaviors of the other, and combines this with previously-formulated concepts in his manifold of concepts, determines the *semantic message* he "receives" from the other person and the *meaning implication set* he produces in the first phase of an interpersonal transaction. Again, all meanings are at root *practical* and reference the provocation of emotive behaviors as well as non-externalized acts of ratio-expression. The idea of an empirical "social-natural chemistry" presented earlier in this treatise begins from this synthesis of the mental physics of Weaver's-model "inner actions" and externalized personality style characteristics [Wells (2011a, b)].

## § 6. References

- Allport, G.W. (1960), *Personality and Social Encounter*, Berkeley, CA: Beacon Press.
- American Psychiatric Association (2000), *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., Text Revision (DSM-IV-TR), Washington, DC: American Psychiatric Association.
- Bernard, Claude (1865), *An Introduction to the Study of Experimental Medicine*, NY: Dover Publications, 1957.
- Combettes, Patrick L. (1993), "The foundations of set theoretic estimation," *Proceedings of the IEEE*, vol. 81, no. 2, pp. 182-208.
- Freedman, M.B., T. Leary, A.G. Ossorio, & H.F. Coffey (1951), "The interpersonal dimension of personality," *Journal of Personality*, 20, 143-161.
- Horowitz, M.J. & C.H. Stinson (1995), "Defenses as aspects of person schemas and control processes," in *Ego Defenses: Theory and measurement*, H.R. Conte & R. Plutchik (Eds.), pp. 79-97, NY: Wiley.
- James, William (1890), *The Principles of Psychology*, in two volumes, NY: Dover Publications,

1950.

- Kant, Immanuel (c. 1790-91), *Metaphysik L<sub>2</sub>*, in *Kant's gesammelte Schriften, Band XXVIII*, pp. 531-610, Berlin: Walter de Gruyter & Co., 1970.
- Kiesler, Donald J. (1983), "The 1982 interpersonal circle: A taxonomy for complementarity in human transactions," *Psychological Review*, vol. 90, no. 3, pp. 185-214.
- Kiesler, Donald J. (1985), *The 1982 Interpersonal Circle*, unpublished manuscript available from the Virginia Commonwealth University, [http://www.vcu.edu/sitar/1985 Interpersonal Circle Acts Version.pdf](http://www.vcu.edu/sitar/1985%20Interpersonal%20Circle%20Acts%20Version.pdf).
- Kiesler, Donald J. (1986), "The 1982 interpersonal circle: An analysis of *DSM-III* personality disorders," in *Contemporary Directions in Psychopathology: Toward DSM-IV*, Theodore Millon and G. Klerman (Eds.), pp. 571-597, NY: Guilford Press.
- Kiesler, Donald J., James A. Schmidt, and Christopher C. Wagner (1997), "A circumplex inventory of impact messages: An operational bridge between emotion and interpersonal behavior," in *Circumplex Models of Personality and Emotions*, Robert Plutchik and Hope R. Conte (eds.), pp. 221-244, Washington, DC: American Psychological Association.
- Leary, Timothy (1957), *Interpersonal Diagnosis of Personality: A Functional Theory and Methodology for Personality Evaluation*, Eugene, OR, Resource Publications, 2004; originally published by John Wiley & Sons, 1957.
- Maccoby, Michael (1976), *The Gamesman*, NY: Simon & Schuster.
- Millon, Theodore (1987), *Manual for the MCMI-II* (2nd ed.), Minneapolis, MN: National Computer Systems.
- Millon, Theodore and Roger Davis (2000), *Personality Disorders in Modern Life*, NY: John Wiley & Sons.
- Plutchik, Robert (1958), "Outlines of a new theory of emotions," *Transactions of the New York Academy of Sciences*, 20, 394-403.
- Plutchik, Robert (1962), *The Emotions: Facts, theories, and a new model*, NY: Random House.
- Plutchik, Robert (1980), *Emotion: A Psychoevolutionary Synthesis*, NY: Harper & Row.
- Plutchik, Robert (1997), "The circumplex as a general model of the structure of emotions and personality," in *Circumplex Models of Personality and Emotions*, Robert Plutchik and Hope R. Conte (eds.), pp. 17-45, Washington, DC: American Psychological Association.
- Plutchik, Robert and Hope R. Conte (1994), "The circumplex structure of personality disorders: An empirical study," Annual Meeting of the Society for Psychotherapy Research, June, York: England.
- Reber, Arthur S. and Emily S. Reber (2001), *Dictionary of Psychology*, 3rd ed., London: Penguin Books.
- Ruch, Floyd L. and Philip G. Zimbardo (1971), *Psychology and Life*, brief 8th ed., Glenview, IL: Scott, Foresman and Company.
- Russell, James (1989), "Measures of emotion," in *Emotion: Theory, research and experience (Vol. 4)*, R. Plutchik & H. Kellerman (Eds.), pp. 83-112, NY: Academic Press.
- Russell, James (1997), "How shall an emotion be called?" in *Circumplex Models of Personality and Emotions*, Robert Plutchik and Hope R. Conte (eds.), pp. 205-220, Washington, DC: American Psychological Association.

Sperry, Len. (2003), *Handbook of Diagnosis and Treatment of the DSM-IV-TR Personality Disorders*, 2nd ed., NY: Routledge.

Sullivan, Harry Stack (1953), *The Interpersonal Theory of Psychiatry*, NY: Norton.

Turnbull, Colin M. (1961), "Some observations regarding the experiences and behavior of BaMbuti Pygmies," *American Journal of Psychology*, **74**, 304-308.

*Webster's New Twentieth Century Dictionary of the English Language*, Unabridged (1962), 2nd ed., Jean L. McKechnie (ed. in chief), Cleveland and NY: The World Publishing Co.

Wells, Richard B. (2009), *The Principles of Mental Physics*, available free of charge from the author's web site.

Wells, Richard B. (2010), *Leadership*, available free of charge from the author's web site.

Wells, Richard B. (2011a), "Weaver's model of communication and its implications," June 2, available free of charge from the author's web site.

Wells, Richard B. (2011b), "On Critical representation in brain theory, part II: General schema of knowledge representation," June 30, available free of charge from the author's web site.

Wilson Learning® (2011), *The Social Styles Handbook*, Astoria, OR: Nova Vista Publishing.