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How Interpersonal Motives Clarify the Meaning of Interpersonal Behavior: A Revised Circumplex Model

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Circumplex models have organized interpersonal behavior along 2 orthogonal dimensions—communion (which emphasizes connection between people) and agency (which emphasizes one person's influence over the other). However, many empirical studies have disconfirmed certain predictions from these models. We therefore revised the model in 4 ways that highlight interpersonal motives. In our revision: (a) the negative pole of communion is indifference, not hostility; (b) a given behavior invites (not evokes) a desired reaction from the partner; (c) the complement of a behavior is a reaction that would satisfy the motive behind that behavior; (d) noncomplementary reactions induce negative affect. If the motive is unclear, the meaning of the behavior is ambiguous. This ambiguity helps explain failures in social support, miscommunications in everyday life, and features of most personality disorders. The model emphasizes measurable individual differences: Reactions that are complementary for one person need not be complementary for another.

Interpersonal theories (e.g., Leary, 1957; Sullivan, 1953) began to emerge in the 1940s and 1950s as a way of explaining phenomena associated with the study of personality and social interaction. These theories were typically a reaction against prevailing theories of the time, particularly psychoanalysis and behavioral theories of learning. They were especially appealing because they incorporated new insights about human interaction, but still managed to sidestep controversial assumptions of behaviorism and psychoanalysis.

Over the past 50 years a variety of interpersonal models have evolved from these early efforts (see review by Kiesler, 1996). In Sullivan's (1953) early theory, for example, the "theorem of reciprocal emotion" had emphasized the reciprocity (or complementarity) that is evident when two partners interact. In later models this theorem became the principle of complementarity, which Kiesler (1983) formulated this way: "A person's interpersonal actions tend (with a probability significantly greater than chance) to initiate, invite, or evoke from an interactant complementary responses" (pp. 200–201). A *complementary response* was then defined in terms of a two-dimensional interpersonal space. According to most interpersonal models, the interpersonal space is organized around two orthogonal dimensions that are often called *affiliation* (the horizontal axis, which ranges from hostile to friendly behavior) and *dominance* (the vertical axis, which ranges from submissive to dominating behavior). Typically, a behavior and its complement are said to be (a) similar with respect to affiliation—hostility pulls for hostility, friendliness pulls for friendliness—and (b) reciprocal with respect to control—dominance pulls for submission, submission pulls for dominance (Carson, 1969; Kiesler, 1983, 1996). (For reasons explained later we shall use the older labels *communion* and *agency* in this article instead of *affiliation* and *dominance*.)

A prodigious literature has tested the principle of complementarity, but the results have not been consistent (see, for example, Horowitz, 2004; Kiesler, 1996; Markey, Funder, & Ozer, 2003; Orford, 1986; Sadler & Woody, 2003; Strong et al., 1988; Tiedens & Fragale, 2003; Tracey, 2004). In general, the principle of complementarity has been confirmed reasonably well for behaviors on the friendly side of the interpersonal space ("friendly dominant" behavior of one person leads to "friendly submissive" behavior of the other, and vice versa). But the principle does not seem to hold for behaviors on the hostile side of the interpersonal space.

Orford (1986) critically reviewed the evidence for interpersonal complementarity as described by the the-

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ories of Carson (1969), Kiesler (1983), Leary (1957), and Wiggins (1982). His review demonstrated that people frequently respond to "hostile-dominant acts … with … hostile-dominant behavior" (p. 365), not with the theoretically expected hostile-*submissive* behavior. He also showed that people frequently respond to "hostile-submissive behavior … with friendly-dominance" (p. 365), not with the theoretically expected *hostile*-dominance. Even the landmark study by Strong et al. (1988) showed that complementarity is conspicuously absent when hostile behavior is examined. Tracey (1994, 2004) reexamined the data of Strong et al. (1988)—and provided new data as well—to show that friendly behavior has a relatively high base rate, even when the initiating behavior is hostile. This relatively high frequency of friendly reactions to hostile behavior requires some explanation because it flatly contradicts the principle of complementarity. To date, however, no explanation has been proposed that would explain why complementarity does not seem to hold for hostile behavior. This revision of the model proposes a solution to this theoretical problem.

The revision that we propose will account for other theoretical difficulties as well. To begin with, all contemporary interpersonal models take as a starting point a focus on behavior. The principle of complementarity, as described previously, states that the behavior of one person invites or evokes a complementary reaction in the other person. But the words *invites* and *evokes* are semantically quite different. *Invites* points to a desire or motive within person A to obtain a particular type of reaction from person B, whereas *evokes* points to automatic mechanisms triggered within person B that explain B's reaction.

We propose the following model, in which we use the term *invites* as a way of emphasizing A's motive or goal in initiating the interpersonal interaction. (For simplicity, we sometimes refer to a single motive or goal energizing a particular behavior; but often a given behavior may be energized and directed by multiple motives or goals.) By emphasizing A's motive, we also acknowledge that B (for B's own reasons) may not accept A's invitation. In that case, B would frustrate A's motive, leading to negative affect in A. The frustration of motives and the resulting negative affect are usually not stated explicitly in contemporary interpersonal models.[1]

[1]Some interpersonal theorists have implicitly acknowledged the important role of motives. For example, Kiesler (1996) and his colleagues (e.g., Kiesler, Schmidt, & Wagner, 1997; Wagner, Kiesler, & Schmidt, 1995) divide the action–reaction sequence into four steps: (a) Covert processes in person A lead to (b) person A's overt action, which then leads to (c) covert processes in person B (perceptions, emotional reactions), which lead to (d) person B's overt reaction. Covert processes are said to include various subjective states, including goals. Thus, these authors do acknowledge the role played by goals and motives, but the theory itself primarily emphasizes overt behaviors.

Furthermore, when the motive behind a behavior is unclear, the meaning of that behavior is unclear (McAdams, 1985). When A laughs at B's behavior, A may be laughing with B or laughing at B. The very same behavior may have different meanings, depending on the motive behind it. This kind of ambiguity can have numerous consequences, including disagreements among observers, miscommunications in everyday life, and failed attempts at social support.

We therefore begin with the interpersonal motive as the theoretical starting point that distinguishes our model from other interpersonal models. In the first section we examine the organization of motivational constructs. Then we show how the very same behavior may arise from alternate motives, causing ambiguity in the meaning of that behavior. Then we turn to interpersonal behavior and show how an analysis of behaviors exposes broad motivational themes or dimensions that drive those behaviors. We also reinterpret the principle of complementarity, arguing that one person's behavior invites a desired reaction, which constitutes the complement of that behavior. (A noncomplementary reaction is one that frustrates the desire, leading to negative affect.) Then we apply the model to clarify miscommunications in everyday life, failed attempts at social support, and distinctions important to the study of personality. Finally, we show how the features of many personality disorders may be organized around a characteristic interpersonal motive.

Basic Postulates of the Model

Interpersonal Motives

P1. Interpersonal motives may be organized hierarchically.

Motivational constructs vary in their breadth or level of abstraction. A broad desire, such as a desire for intimacy or a desire for friendships, is of a higher order than a narrow desire, such as a desire to spend time with a romantic partner. That desire, in turn, is of a higher order than a still narrower desire, such as a desire to make a date with a particular person. These levels of abstraction may be conceptualized hierarchically (Emmons, 1989). That is, a desire for intimacy constitutes a superordinate (more abstract) category, which subsumes narrower categories, and those categories each subsume still narrower categories. The term *motive* usually designates a relatively high level of abstraction (e.g., a desire for intimacy or autonomy), whereas the term *goal* usually designates a relatively narrow, more specific category. Intermediate levels of abstraction are sometimes called *personal strivings* or *current concerns*. This way of conceptualizing motivation is common in contemporary psychology (Austin

& Vancouver, 1996; Cantor & Kihlstrom, 1987; Cropanzano, James, & Citera, 1992; Emmons, 1989; Klinger, 1987; Little, 1983; McAdams, 1985).

P2. Interpersonal motives fall into two broad, superordinate categories.

When interpersonal motives are conceptualized this way, we commonly assume that two very broad, abstract categories are at the top of the hierarchy, namely, communion and agency (Bakan, 1966; see also McAdams, 1985; Saucier & Goldberg, 1996). A *communal motive* is a motive for a connection with one or more others; it is a motive to participate in a larger union with other people. An *agentic motive*, on the other hand, emphasizes the self as a distinct unit; it focuses on the person's own individual influence, control, or mastery over the self, other people, and the environment. Bakan (1966) expressed the distinction this way:

> I have adopted the terms "agency" and "communion" to characterize two fundamental modalities in the existence of living forms, agency for the existence of an organism as an individual, and communion for the participation of the individual in some larger organism of which the individual is a part. Agency manifests itself in self-protection, self-assertion, and self-expansion; communion manifests itself in the sense of being at one with other organisms. Agency manifests itself in the formation of separations; communion in the lack of separations. … Agency manifests itself in the urge to master; communion in noncontractual cooperation. (pp. 14–15)

P3. The first expressions of communal and agentic motivation appear early in infancy.

According to attachment theorists, the concept of an attachment system involves inherent motivation (Cassidy, 1999, p. 5). Attachment theorists (see Cassidy & Shaver, 1999) have highlighted the two broad categories of motives. The infant's attachment system keeps the child motivated to stay close and connected to the adult, an early manifestation of a communal motive that increases the child's chances of surviving infancy. Then, as children come to feel sufficiently secure about the caretaker's availability at times of need, they seek to separate from the caretaker and autonomously explore the environment (Mahler, Pine, & Bergman, 1975). The motive to separate and explore is thus an early manifestation of an agentic motive. Over time each motive becomes differentiated into subordinate motives. Communion comes to include motives such as intimacy, sociability, and belonging to groups. Agency comes to include motives such as autonomy, achievement, and control.

P4. Generally speaking, interpersonal behaviors are motivated.

When person A initiates an interaction with person B, we assume that A's behavior is purposeful (goal-directed). The person is not necessarily conscious of the goal (or motive), and for any given person, interpersonal goals may range in importance from trivial to vital. When an important goal is satisfied, the person experiences a positive emotion; when it is frustrated, the person experiences a negative emotion (Lazarus, 1991). Furthermore, a particular goal or motive varies in importance from situation to situation and from time to time within a person. For example, a desire to acquire new friends has a higher priority during some periods of life than others (Carstensen, Isaacowitz, & Charles, 1999). On average across time and situations, some goals and motives are more important to one person than to another; they constitute "thematic lines" in the person's life story (McAdams 1985, p. 62). Being admired, for example, might be vitally important to one person but relatively unimportant to another.

P5. A particular behavior may stem from a variety of motives, which lend meaning to that behavior.

A person who enjoys giving advice may do so for more than one reason—displaying competence and knowledge (agentic), influencing others (agentic), connecting with others (communal). Similarly, a person who loves a particular sport may enjoy playing that sport for various reasons—belonging to the team (communal), displaying a skill (agentic), winning competitions (agentic), maintaining a family tradition (communal), and so on. The meaning of a behavior depends on all of the motives behind it. Sometimes, however, it is convenient theoretically to identify and examine the one or two most salient motives that energize and direct the behavior in question.

P6. Coexisting motives may be behaviorally compatible, or they may conflict.

A person who gives advice to another person may be trying to satisfy (a) a motive to influence the other person, as well as (b) a motive to connect with that person. These two motives are behaviorally compatible. Sometimes, however, coexisting motives conflict behaviorally. For example, an agentic motive may conflict with a communal motive: Suppose a woman competed with a good friend for an elective office and won the election. In the process of satisfying her own agentic motive, she may have disappointed and alienated her friend, thereby jeopardizing the friendship. Exline and Lobel (1999) discussed this type of

conflict, showing how strivings for personal mastery and superiority can clash with strivings for communion. For this reason, people sometimes conceal their success or downplay its significance (Brigham, Kelso, Jackson, & Smith, 1997). Similarly, academically gifted students frequently conceal their superior abilities from peers through a variety of "camouflaging" strategies (Arroyo & Zigler, 1995; Cross, Coleman, & Terhaar-Yonders, 1991). The conflict seems especially salient among people with strong communal needs (Santor & Zuroff, 1997).

When motives conflict in this way, an event that satisfies one of the motives may frustrate the other (conflicting) motive. Psychotherapists are frequently presented with dilemmas of this type. Suppose, for example, that a greatly overweight adult client invites a therapist to address him by a mocking or teasing nickname (e.g., "Call me Tiny; everybody does"). Yielding to a request of this type might satisfy one motive (e.g., a desire to feel accepted or loved), but it might simultaneously frustrate a desire to be addressed as a respected adult. In such cases, it is often possible to sidestep the dilemma altogether by systematically investigating the meaning of each alternative and examining the pros and cons of each. It may be more meaningful (and respectful) to the person to have the conflict investigated, discussed, and related to other aspects of the person's life than to have one motive satisfied and the other motive tacitly frustrated.

Conflicts between a communal motive and an agentic motive seem to be common in everyday life. It should be noted, however, that two communal motives may also conflict—e.g., a desire to be part of an admired group may conflict with a desire to remain friends with a nongroup member. Likewise, two agentic motives may conflict—e.g., a desire to hold a managerial position of power may conflict with a desire to express personal opinions freely. Conflicts such as these would follow the same principles as those between communal and agentic motives.

P7. Interpersonal goals and motives can be measured.

Later we describe two self-report measures constructed in recent years for assessing interpersonal goals and demonstrating their stability over time (Grosse Holtforth & Grawe, 2000, 2002; Locke, 2000). They also provide a way of aggregating interpersonal goals into higher order motives.

Ambiguity of Behavior

A behavior can be ambiguous. That is, the very same behavior may arise from different motives. The next two propositions concern that ambiguity.

P8. When the motive or motives behind an interpersonal behavior are unknown or unclear, the behavior is ambiguous.

Suppose we know a man's goal, namely, to call Maria for a date this weekend. Can we infer the higher order motive from which this goal stems? If two men both plan to call Maria for a date this weekend, are they both necessarily trying to satisfy a higher order intimacy motive? Not necessarily. As shown in Figure 1, one may be seeking intimacy (a communal motive), whereas the other may be seeking the respect, admiration, or envy of his friends (an agentic motive). Thus, the goal-directed act itself may be unclear. Only when we can locate the behavior in the person's hierarchy of motives do we understand its meaning.

If someone sitting next to us on an airplane started chatting amiably, we might assume a communal motive (to socialize). However, if the person then asked in all seriousness, "Have you heard the Word of the Lord today?" a listener might revise his or her interpretation of the person's chattiness and perceive an agentic goal (to proselytize or influence). Many behaviors are ambiguous in this way: When A spills something on B, B must judge whether the act was accidental (noninterpersonal) or intentional (interpersonal). When A laughs at B, B must decide whether A's laughter is communal (e.g., laughing with B) or noncommunal (e.g., laughing at B). When A advises B to modify B's behavior, B must decide whether A is being communal (kind, friendly), agentic (controlling, critical), or a combination of both. Inferring another person's intention is an extremely common human activity that is evident from the first year of life (e.g., Tomasello, 1995). Inferences about another person's intentions are also evident in the literature of person perception and impression formation, as evident in the early writings of Asch (1946) and Heider (1944).

Psychiatric symptoms sometimes provide excellent examples of ambiguous behavior (Caspar, 1995, 1997; Grawe, 2003). For example, an individual with anorexia nervosa might aspire to lose weight, but the meaning of the person's behavior (self-starvation) would not be clear until we could locate it in the hierarchy of motives. For one person, self-starvation might

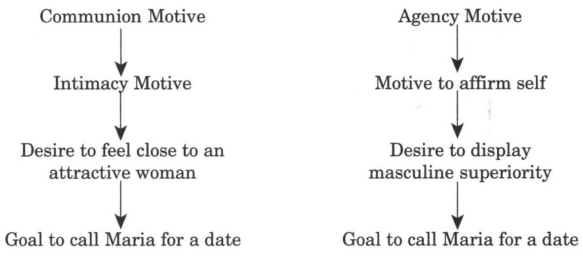

Figure 1. Two possible motive hierarchies for the same goal.

have an agentic meaning: a motive to exercise autonomy → desire to display self-control → desire to refrain from eating → goal to eat nothing but lettuce this weekend. For another person, however, self-starvation might have a communal meaning: a motive to be nurtured by the family → desire to seem small, thin, and frail → desire to lose weight → goal to eat nothing but lettuce this weekend. (A blend of the two is also possible.) Some theories of anorexia nervosa have emphasized a communal motive to maintain family harmony (e.g., Minuchin, Rosman, & Baker, 1978), whereas other theories have emphasized an agentic motive to display self-control and strength (e.g., Bruch, 1973). Although the personal striving to lose weight is similar in both cases, the meaning of *self-starvation* is not clear until we can describe the broader motive from which it arose.

P9. Because ambiguous behavior can be interpreted in different ways, it can lead to a miscommunication between interacting partners.

Examples of miscommunications abound in the literature on social support. Difficulties can arise whenever a listener does not understand the speaker's wishes. A speaker may want communal support (e.g., empathy), but the listener might offer agentic support (e.g., influence through advice). People report dissatisfaction when a listener's reaction does not match their own desired form of support (Horowitz et al., 2001, Study 3). Bereaved people and people with chronic illnesses are often subjected to unwanted advice from well-meaning friends (e.g., Lehman, Ellard, & Wortman, 1986; Lehman & Hemphill, 1990). Telling a parent of a deceased child to "consider yourself lucky that you can still have other children" dismisses the person's profound sense of loss and instead burdens the person with unwanted advice (Lehman & Hemphill, 1990). Ms. A may believe that she is forging intimacy with Ms. B when she says, "Tell me, my dear, have you always had a weight problem?" but Ms. B may interpret her question as a hostile criticism. We analyze this problem more closely in the following section.

Interpersonal Behavior

The next five propositions describe an empirical procedure that reveals the motivational meaning of an interpersonal behavior. This procedure will help us pinpoint the source of the ambiguity that produces miscommunications. It will also highlight ways in which our revised model differs from earlier circumplex models.

P10. Interpersonal behavior bay be represented graphically within two prominent dimensions of meaning that correspond to communion and agency.

Interpersonal behavior includes behaviors that fit the frame "person A [does this to] person B:" "A dominates B," "A blames B," "A ignores B," "A yields to B," and so on. A variety of data-reduction methods (such as principal components analysis) have been used to expose the most salient dimensions of meaning that run through the domain of interpersonal behaviors. Numerous studies have identified two particularly salient dimensions such as those shown in Figure 2 (see summaries by Horowitz, 2004; Kiesler, 1996; Wiggins, 1991, 1996). Most investigators have concluded that these two salient dimensions provide a good first approximation toward explaining variation in the meaning of interpersonal behaviors. The exact amount of variance explained depends on the particular scaling method used, the items selected for study, and the context of the study. Dimensions beyond the first two would certainly add nuance to the meaning of the behaviors, but the first two dimensions seem to provide an adequate first approximation. These two dimensions are therefore used as a heuristic to help us conceptualize the meaning of different interpersonal behaviors.

The first dimension (represented by the *x* axis) has been called connectedness, affiliation, love, warmth, or nurturance; we use the superordinate term *communion* for this axis. The second dimension (represented by the orthogonal *y* axis) has been called influence, control, dominance, power, or status; we use the superordinate term *agency* for that axis. Thus, *communion*, as the horizontal dimension, ranges in meaning from "being disconnected, indifferent, or distant" to "being connected, loving, or close." (Please note that we label the negative pole of communion *disconnected behavior*, not *hostile behavior.* In our view, indifference, rather than hostility, is the polar opposite of love, and in a later section we shall explain why we emphasize this point.) *Agency*, as the vertical dimension, ranges in meaning from "yielding, submitting, or relinquishing control" to "influencing, controlling, or dominating."

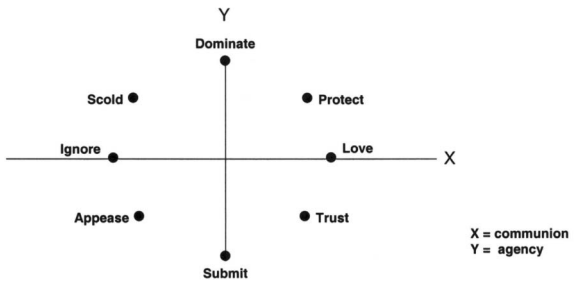

Figure 2. Interpersonal behaviors placed in a two-dimensional space.

Each scaling procedure provides a pair of coordinates for every behavior to describe that behavior's location on each dimension. "A protects B" is positive in communion and positive in agency; "A scolds B" is negative in communion but positive in agency. Behaviors that are geometrically close to one another (similar coordinates on both dimensions) have similar meanings, so they are positively correlated: That is, people who strongly exhibit one behavior also tend to exhibit other nearby behaviors. Behaviors that are diametrically opposite one another have contrasting meanings, so they are negatively correlated. For example, behaviors that typically accompany dominating behavior rarely accompany submissive behavior. Thus, the proximity of two behaviors tells us about their degree of correlation (Gurtman, 1994; Gurtman & Bakarishnan, 1998).

Other interpersonal domains have also been scaled. For example, interpersonal traits (e.g., assertive, friendly) are often regarded as labels for an aggregate of co-occurring behaviors and internal experience, particularly motives and goals (e.g., Alston, 1975; Buss & Craik, 1983). Therefore, the domain of traits (aggregates of behavior) might also be organized in terms of the two underlying classes of interpersonal motives. Wiggins (1979) confirmed this hypothesis. After locating interpersonal traits in a two-dimensional space, he divided the two-dimensional space into eight regions (or octants), as shown schematically in Figure 3. One octant, for example, contained traits that are high in agency but neutral in communion (e.g., assertive, self-confident, forceful). The composite of traits in that octant was called *assured–dominant*, a higher order trait than a one-word trait such as "assertive." Another octant contained traits that are high in communion but neutral in agency (e.g., kind, sympathetic, nurturant). That higher order trait was called *warm–agreeable*. A third octant contained traits that are high on both dimensions (e.g., jovial, enthusiastic, extraverted); it was called *gregarious–extraverted*. In this way, Wiggins created eight separate scales (each located within the two-dimensional interpersonal space) to assess each of the eight higher order trait octants. Therefore, we can use Wiggins's eight scales to rate a person (a) on a narrow trait (such as assertive), (b) on a higher order trait (such as assured–dominant), or (c) on the highest order trait, agentic, by appropriately weighting and combining scores on all scales that assess agency. In this way, we can identify different levels of abstraction for trait constructs, comparable to those portrayed in Figure 1 for motivational constructs.

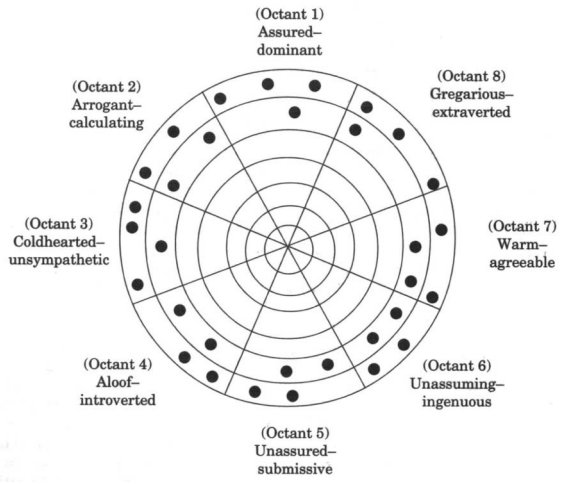

Figure 3. Two-dimensional graph divided into eight octants (to create eight personality scales).

A similar procedure has been used to scale and measure interpersonal goals. Locke (2000) constructed a self-report measure containing 64 items (goals) that are described in two dimensions corresponding to communion and agency. Every item names a particular goal, and the 64 items (goals) are organized into eight scales that assess higher order categories of motivation. The scales also possess reasonably high test–retest reliability, so individual differences seem to be relatively stable across time.

Why are communion and agency so salient as organizing dimensions in all of these domains (behaviors, traits, and goals)? Our model assumes that communal and agentic motives give rise to all three. That is, communion and agency apparently constitute fundamental dimensions of meaning because they reflect two broad tasks in life that every person encounters from childhood on (cf. Angyal, 1941; Erikson, 1963). From an evolutionary perspective, Hogan and Roberts (2000) suggested that they reflect the two principal evolutionary challenges of social adaptation, namely, "getting along" (communion) and "getting ahead" (agency). Other writers have described the two tasks as (a) connecting with other people to form a larger protective community and (b) achieving a reasonably stable and realistic sense of one's own competence and control, which helps facilitate instrumental action (e.g., Blatt, 1990; Horowitz, 2004).

P11. Sometimes an interpersonal behavior cannot be located unambiguously in the interpersonal space.

Earlier interpersonal models have implied that a behavior occupies a unique position in the interpersonal space (e.g., Kiesler, 1996). As we have noted, however, behavior can be ambiguous. When a wife says to her husband, "Let's straighten up before we go out," her goal may be primarily communal (a relatively high *x* coordinate, reflecting a desire for closeness through teamwork) or primarily agentic (a relatively high *y* coordinate, reflecting a desire to influence her husband's behavior). Therefore, the husband and wife may perceive the wife's remark very differently. To say that a behavior is ambiguous means that the coordinates of

the behavior on the graph are unknown because the underlying motives are unclear. When two people interpret the same behavior differently, that difference is a potential basis for misunderstanding.

A difference in perspective frequently arises in troubled marriages (Fincham & Beach, 1999): A husband returns home late from work, and his wife argues that "he thinks only about himself and his needs." Such conflict-promoting attributions impair problem solving, increase negative affect, and lower marital satisfaction (Bradbury & Fincham, 1992; Fincham & Bradbury, 1992; Karney & Bradbury, 1997). Fincham and Beach (1999) commented that marital conflict is usually conceptualized in terms of each partner's goals, yet "research … has paid little attention to the goal construct" (p. 61).

In brief, then, two people may have different interpretations of the same interpersonal interaction. When A and B interact, the behavior of each may be described differently by A, by B, and by an outside observer.

P12. The "complement" of a behavior is the reaction that would satisfy the motive behind it.

When we know the motive behind a behavior, we can locate the behavior graphically. Then we can specify the person's desired reaction (see Figure 4). When person A unambiguously dominates person B, A wants B to yield. When A makes an unambiguous bid for intimacy, A wants B to reciprocate closeness. An unambiguous interpersonal behavior invites a desired class of reactions (which the partner may or may not provide), and those desired reactions constitute the complement. This interpretation of a behavior's complement differs from that of other circumplex models, which primarily focus on pairs of behaviors that uniquely evoke each other. An ambiguous behavior, however, has different possible complements, depending on the motive behind it.

What is the formal relation between an unambiguous interpersonal behavior and its complement? Like earlier circumplex models, we say that an unambiguous interpersonal behavior and its complement are similar with respect to the horizontal axis (connection invites connection, detachment invites detachment) and reciprocal with respect to the vertical axis (influence invites deference, and deference invites influence). Therefore, when person A gives friendly advice (warm influence) to person B, A desires warm acceptance of the advice, as shown in Figure 4. When A tells B to "leave me alone" (detached influence), A would like B to comply by withdrawing (detached deference). When A tells B that he feels "stuck" over a problem (warm deference), A is inviting B to come to A's rescue (warm influence).

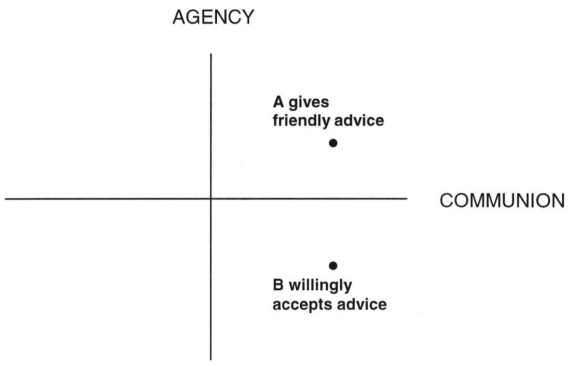

Figure 4. A pair of complementary behaviors.

Now we can explain why we label the negative pole of the *x* dimension *disconnected* or *indifferent,* rather than *hostile*. Whereas disconnectedness seems to invite disconnectedness, hostile behavior does not seem to invite hostile behavior. Hostile behavior, in our view, reflects anger; and anger (negative affect), according to our model, indicates that an important motive has been frustrated. A person who wants to be left alone might become angry if a partner kept offering love (Moskowitz & Coté, 1995), and a person who wants intimacy might become angry if a partner kept being unresponsive. Thus, the assumption of earlier models—that is, that hostile behavior "leads to" hostile behavior—would seem to hold only when both partners frustrate each other's motives.

An interesting case arises when B reacts to A's dominance with dominance (or to A's deference with deference), thereby frustrating A's desire. If two people keep trying to influence each other (and neither yields), they may become stuck in a power struggle in which neither satisfies the goal of the other. Two people may also become frustrated (and irritated) if each keeps deferring to the other (e.g., "After you, my dear Alphonse." "No, dear sir, after you!" "No, no, I'll follow you.").

P13. An interpersonal interaction is affected by each person's expectations of the other's motives.

Holmes (2002) astutely emphasized the importance of each person's expectations of the other when they interact. In Holmes' view, expectations are the building blocks of social cognitions. One class of expectations is given special prominence, namely, expectations about a partner's motives. The role of motivational expectations in our revised model becomes evident when we examine the self and self-protective motives that arise to protect the person from a vulnerable sense of self.

P14. A partner may interpret a person's motive correctly, but choose to respond with a noncomplement.

Now we can explain why empirical research has so often failed to support the principle of complementarity. To begin with, recent data have generally confirmed the principle of complementarity in cooperative interactions (e.g., Sadler & Woody, 2003). Using structural equation modeling, these authors showed that one person's dominating behavior tends to be followed by yielding behavior in the other partner, and vice versa. They also showed that the behavior of one person tends to match the behavior of the other along the dimension of friendliness (connectedness).

Similarly, Tiedens and Fragale (2003) provided clear evidence for complementarity in a simple cooperative interaction. They studied people's nonverbal behavior and confirmed complementarity along the agentic dimension. In their experiment, each participant worked with a partner–confederate who adopted one of three physical postures during the task—an "expansive" (domineering) posture, a neutral posture, or a "constricted" (yielding) posture. Expansive confederates draped one arm over the back of an adjacent chair and rested their right foot on their left thigh, making their right knee protrude. Constricted confederates sat slightly slouched, with their legs together and their hands in their laps. Each participant's "expansiveness" was then measured (with a ruler) from the videotape. Participants working with an expansive confederate became increasingly constricted during the session, whereas those with a constricted confederate became increasingly expansive. In a second experiment, participants believed that their skin conductance was being measured, and the apparatus required them to assume a particular posture. Their posture and the confederate's posture were manipulated experimentally to be expansive or constricted. Participants indicated that they liked the confederate better and felt more comfortable when the confederate's posture complemented their own.

However, many studies reviewed by Orford (1986) have disconfirmed the principle of complementarity, especially when the initiating behavior was not communal. Consider the study by Strong et al. (1988) as an example. That study confirmed complementarity in some experimental conditions but not in others. The investigators divided the interpersonal space into eight octants and trained female confederates or actresses to enact behavior in one of the octants. Eighty female students each interacted with one of the confederates, creating a story together using pictures selected from the Thematic Apperception Test (Murray, 1938). During the interaction each confederate enacted a preassigned role, and every interaction was videotaped and transcribed. When the confederate's behavior was friendly (friendly-dominant or friendly-yielding), the participant's behavior was most often complementary. However, when the confederate's behavior was not friendly, the partner's behavior was often not complementary. To cite one example, when the confederate bragged (detached-controlling behavior), the participant often reacted with a connecting behavior—as though the participant were trying to transform a cool disengagement into a warmer interaction. In brief, people do not react automatically to disengaged control with disengaged compliance.

How shall we explain this noncomplementarity? In our view, partners may have their own salient interpersonal goals that lead them to refuse a person's invitation. Tracey (1994; also see Tracey, 2004) showed that participants express connected (warm) reactions considerably more often than disconnected reactions—even when the initiating behavior invites a disconnected reaction. Our model suggests that partners with strong communal goals would be especially disinclined to provide a complementary reaction. Thus, our revised model does not predict inevitable complementarity. In some situations, an invited reaction would conflict with other salient motives, and a noncomplementary reaction might even be the modal reaction.

When a reaction is noncomplementary, it should frustrate the person's interpersonal goal. And if that goal is important to the person, it should lead to negative affect. Shechtman (2002) tested this hypothesis. She noted that assertive people describe themselves using traits that suggest a strong agentic motive. Self-descriptive traits such as dominant, forceful, firm, and controlling suggest a strong motive to influence others. Therefore, any partner who tried to dominate an assertive person would frustrate the person's agentic motive, and that frustration should induce anger.

In Shechtman's (2002) study, unacquainted participants were introduced and told that they would work together on a problem-solving task. They sat in adjacent rooms, each at a computer, and they were told that they would communicate by computer. Their task, the Desert Survival Problem, required them to imagine themselves to be copilots of an airplane that had crash-landed in the desert. They were to rank order 12 objects for survival value in the desert (e.g., a flashlight, a quart of water). Each participant was to exchange initial rankings with the partner and discuss each object. Half of the participants were assertive (they had high scores on a test of assertiveness), and the others were nonassertive (they had lower scores).

In actual fact, the communications that each participant received came, not from each other, but from a computerized script. These communications recommended changes in the participant's rankings—for example, that the participant's fourth-ranked object be moved up to Rank 1. The preprogrammed script also provided reasons for recommending each change. The language of the message was manipulated experimentally. In one condition, the partner's words seemed dominating (e.g., "The flashlight is the only reliable night-signaling device. Put it higher."). In the other

condition, the partner did not seem dominating (e.g., "Do you think the flashlight should maybe be rated higher? It may be a reliable night-signaling device."). Thus, an assertive or nonassertive participant worked with an apparently dominating or nondominating partner, producing four experimental conditions. From the transcript of each participant's statements during the session, every hostile (angry) comment was identified. On average, assertive participants working with a dominating partner produced more than 6 times the amount of hostility produced by participants in any other condition. Apparently, the assertive person's self-affirming motive to influence the partner was frustrated by the dominating partner.

Would assertive participants make hostile comments if they believed that their "dominating" partner was not a human being? In the four conditions described previously, the participants believed that they were interacting with a person. The same four experimental conditions were therefore repeated with one simple change of detail. In these conditions the participants were told that they were interacting with a computer program that was continually updating its internal norms in search of an optimal solution to the problem. The participants rarely produced hostile comments in these conditions, even when an assertive participant was working with a dominating computer partner. Apparently, an interpersonal motive gets aroused by a human being, not by a computer. Naturally, computers can frustrate other task-related motives (e.g., completing the task), thereby inducing negative affect; but computers do not seem to frustrate the interpersonal motive that is implied by the trait "assertive."

P15. A bid for social support is often ambiguous.

The principles described previously also help clarify issues of social support. When a speaker describes a problem to a listener, we assume that the speaker wants something from the listener (advice, compassion, help regulating an emotion). A genuinely supportive reaction is one that satisfies that desire. Therefore, a listener has to determine what the problem teller wants and react in a way that satisfies that want. Stressful problematic situations may be classified broadly into two categories that correspond to communion and agency (O'Brien & DeLongis, 1996). Some situations leave people feeling rejected, abandoned, ostracized, or isolated, and in those cases the person may want to feel securely reconnected, understood, or loved. Other situations leave people feeling like a failure (inept, powerless, inferior), and in those cases the person may want to feel more empowered (able to perform, achieve, or do). When a person's sense of competence is at stake, the person may want tactful advice to help restore a sense of control or efficacy (P. Brown & Levinson, 1987; Goldsmith, 1994). According to O'Brien and DeLongis (1996), communal problems involve "strivings for love, intimacy, friendship, affiliation, emotional relatedness, belongingness, mutuality, group cohesion, communality, and relation maintenance," whereas agentic problems involve "strivings for mastery, power, achievement, work performance, and instrumental task completion" (p. 80). Some problems, of course, reflect a combination of both.

Typical reactions to a reported problem also fall into two broad categories. Cobb (1976), writing about social support, differentiated between "emotional support," which provides connection, affiliation, or warmth, and "esteem support," which provides greater efficacy or agency. Cutrona and Suhr (1992, 1994) also distinguished "emotionally supportive" forms of social support from "action facilitating" forms. Trobst (1999; Wiggins & Trobst, 1997) scaled a sample of supportive reactions and empirically derived the familiar two-dimensional structure organized around communion and agency. Thus, communal problems seem to call for communal support, whereas agentic problems seem to call for agentic support (Horowitz et al., 2001). To help a person overcome a sense of isolation and feel connected, a listener might show compassion or display understanding. To help a person feel more empowered, a listener might suggest, demonstrate, or help the person discover an effective solution to the problem. Jefferson and Lee (1992) tape-recorded dyadic conversations among coworkers in the workplace and identified two types of conversations. In one, a speaker described an agentic problem (e.g., "I can't get this equipment to work"). In reporting a problem of this type, the speaker would seem to want an agentic reaction (advice). In the other case, a speaker described a communal problem (e.g., "I behaved badly—people must despise me"). In reporting that kind of problem, the speaker would seem to want an empathic response that might undo the sense of rejection or ostracism. According to Jefferson and Lee (1992), difficulties can arise whenever a speaker and listener do not understand each other (i.e., when the speaker's wishes are ambiguous). The speaker may want one kind of support, but the listener may misinterpret the speaker's behavior. In an experimental study, Horowitz et al. (2001, Study 3) showed that people report more dissatisfaction when a listener's reaction does not match their desired reaction.

The Self and Self-Protective Interpersonal Motives

A number of interpersonal motives seem to arise as a way of defending the self from feelings of vulnerability that are associated with relational schemas (Baldwin, 1992). Early writers (e.g., Adler, 1927; Horney, 1945; Sullivan, 1953) have described this sense of vulnerability and strategies that people use to reassure themselves that they possess desired commu-

nal (e.g., likeable) and agentic (e.g., competent) self-qualities. More recent investigators (J. D. Brown, 1998; Tafarodi & Milne, 2002) have even developed ways to separately assess communal and agentic forms of vulnerability.

Attachment theory has been particularly helpful in clarifying the nature of this vulnerability. Attachment marks the first appearance of a communal motive in an infant's life, revealing a powerful motive for the infant to connect with an available adult (Ainsworth, 1982; Bowlby, 1969, 1973). Numerous attachment theorists have described the vicissitudes of the motive and their consequences for a person's subsequent development (see Cassidy & Shaver, 1999). One particularly important aspect of the theory concerns the development of a person's images of the self and others (e.g., Bartholomew & Horowitz, 1991; Crowell, Fraley, & Shaver, 1999; Feeney, 1999; Shaver & Hazan, 1988). For example, a view of oneself as inadequate and of other people as potentially disapproving, rejecting, or humiliating can give rise to intense expectations of being hurt and intense motives to protect oneself from potential distress.

Our model needs to explain how these self-protective, interpersonal motives acquire strength. The following propositions relate interpersonal motives to the self.

P16. Self- and other schemas are acquired, in part, through interpersonal interactions.

According to Bowlby (1973) and later attachment theorists (e.g., Bretherton & Munholland, 1999), infants begin to form images ("internal working models") of other people and the self early in life. Biological predispositions undoubtedly interact with experience to shape these schemas. For example, children differ biologically in their susceptibility to anxiety (e.g., Kagan, 1994; Kagan, Reznick, & Snidman, 1988), and an anxiety-prone child would probably perceive danger in situations that placid children take in stride. If an anxiety-prone child were terrified repeatedly by unpredictable interpersonal loss or abandonment, that child might acquire vivid schemas and expectations about (a) other people as potentially unreliable, (b) the self as potentially abandoned and helpless, and (c) situations that portend danger. The resulting schemas and expectations might then sensitize a child to abandonment, giving rise to a self-protective motive to prevent future abandonment. In this way, heredity and environment would interact to intensify expectations of threat in particular interpersonal situations.

We can illustrate the Heredity × Environment interaction with experimental data concerning the development of an insecure attachment. Van den Boom (1989, 1994) assessed the temperament of infants at 10 days of age to identify and study a group of distress-prone infants. Then, in one experiment, mothers either received or did not receive special training in caring for their distress-prone child. Mothers who received no training frequently came to ignore the child except when the child was in distress. When those children were tested in Ainsworth's (Ainsworth & Bell, 1970; Ainsworth, Blehar, Waters, & Wall, 1978) Strange Situation at 1 year of age, the majority were insecurely attached to the mother. However, mothers who did receive training learned ways to deal with a distress-prone child and were highly responsive to the child's needs. When those infants were later tested in the Strange Situation, they were usually securely attached to the mother. Thus, a child's heredity can shape that child's environment, and the resulting combination of heredity and environment would shape schemas of the self, of other people, and of the environment. Similar mechanisms are discussed by Buss (1987).

P17. Images of the self and others are often described by fuzzy concepts.

Concepts that are used to describe the self in early childhood are usually well defined (see Harter, 1999), but later concepts are not. For example, an early self-descriptor such as "I am a boy" has a clear, well-defined referent. However, later concepts such as *nerd*, *stud*, *sissy*, and *wimp* do not. A concept such as *sissy* is said to have a fuzzy definition because we cannot state the necessary and sufficient criteria. Many possible criteria come to mind—effeminate, unaggressive, frail, timid, eager to please, cowardly—but none is absolutely essential. Some sissies have one subset of characteristics; others have a different subset of characteristics. The best we can do in defining "sissy" is to identify the most prototypic characteristics that people think of when they describe a sissy and judge how well a given person's characteristics match that prototype (Horowitz, Post, French, Wallis, & Siegelman, 1981; Horowitz, Wright, Lowenstein, & Parad, 1981). The better the match, the higher the probability that the person is called a sissy.

Some writers have therefore proposed that the self-image be viewed as a theory about the self, a set of hypotheses that keep getting tested and supported or refuted (Brim, 1976; Epstein, 1973). If a boy compared himself to the prototype of a sissy and observed many of its characteristics, he might have to classify himself as a sissy. Of course, behaviors vary from time to time, and by performing a very aggressive or bold act, a boy with marginal characteristics could show himself and the world that he does not fit the category. Later, however, if the boy were publicly praised for being "a very good boy who never causes trouble," the sissy hypothesis might again become a threat, requiring behavioral disconfirmation. Therefore, a child who thought he marginally fit the cate-

gory might have to protect his self-esteem by behaving in ways that refuted the undesirable hypothesis (e.g., by being aggressive or bold).

P18. Interpersonal tests are performed to affirm or validate a desired self-image.

People sometimes create interpersonal interactions that confirm (or disconfirm) a particular hypothesis (Weiss & Sampson, 1986). For example, people take steps to correct a partner's perception of them when it contradicts their own self-perception—even when the partner's perception is more favorable than their own (Swann, 1996). Such steps help "prove" that their own self-perception is valid. That is, people instigate interactions that confirm a desirable hypothesis: Bullies seem to challenge people who are easy marks as a way of "proving" that they are tough and strong. Narcissistic people seem to solicit admiration as a way of "proving" that they are admirable. Obsessive–compulsive people seem to strive for perfection as a way of "proving" that they are beyond reproach. Histrionic people seem to draw attention to themselves as a way of "proving" that they are connected to others. In this way, particular interpersonal motives get strengthened as a way of affirming desired qualities of the self in relation to others.

P19. Feelings of vulnerability arise from characteristic expectations in particular situations.

Clarifying an interpersonal situation frequently helps explain a Person × Situation interaction. Holmes (2002) stressed the significance of a person's idiosyncratic expectations about a given partner's motives. This point helps clarify the results of Shoda, Mischel, and Wright (1994), who showed that children at a summer camp differed in the profile of situations in which they displayed verbal aggression. For example, some children displayed aggression when praised by an adult, whereas other (perhaps equally aggressive) children did not. As Holmes noted, the meaning of an interpersonal situation (an adult praising the child) may or may not lead to verbal aggression because children differ in their expectations about the adult's motives. Some children expect mean-spirited manipulation from a praising adult, frustrating the child's self-protective motive and inducing negative affect (anger).

Frustrated Interpersonal Motives (Interpersonal Problems)

When important goals and motives are chronically frustrated, the person suffers negative affect. We now ask why interpersonal motives get frustrated.

P20. A chronically frustrated goal or motive constitutes an interpersonal problem for pne or both members of a dyad.

Most people seem to be reasonably successful in finding ways to attain desired levels of intimacy, friendship, autonomy, influence, self-efficacy, and so on. Some people, however, are not successful and report interpersonal problems. A very shy person, for example, might yearn for intimacy but avoid social contact to protect the self from rejection. By withdrawing from others, the person unwittingly invites others to withdraw. In this way, the person's self-protective strategy frustrates the motive for intimacy.

When important interpersonal motives are chronically frustrated, the person reports interpersonal problems, such as "It is hard for me to make friends" or "I find myself alone too much." Complaints of this kind may be assessed using the Inventory of Interpersonal Problems (Horowitz, Alden, Wiggins, & Pincus, 2000), a self-report measure that contains 64 items (problems) organized in two dimensions that correspond to communion and agency. Every item states a common interpersonal problem, and the 64 items are organized into eight scales (eight items per octant).

P21. Why do interpersonal motives get frustrated, causing interpersonal problems?

Suppose a person has a strong desire to affirm the self through assertive behavior (an agentic motive), but the person generally finds it hard to be assertive (an interpersonal problem). How is this interpersonal problem to be understood? Among the possible answers, two are particularly evident from our model.

Motives conflict. Psychodynamic writers (e.g., Luborsky & Crits-Christoph, 1998; Strupp & Binder, 1984; Strupp, Schact, & Henry, 1988) have emphasized the adverse effect of motivational conflict on a person's well-being. When two or more motives conflict within a person, the person has to sacrifice one to satisfy another. For example, a person with a strong desire to behave assertively may forsake that motive to safeguard a communal motive (preserving harmony in relationships). Numerous laboratory studies have shown that people often camouflage or forfeit a desired agentic goal (e.g., successful competitive behavior with friends) to preserve a friendship (e.g., Arroyo & Zigler, 1995; Brigham, Kelso, Jackson, & Smith, 1997; Cross, Coleman, & Terhaar-Yonkers, 1991; Exline & Lobel, 1999; Santor & Zuroff, 1997). In addition, Emmons (1986; Emmons & King, 1988) assessed the amount of conflict people reported among their top-rated "personal strivings" (goals). Participants listed up to 15 goals and rated, for each pair of goals, the extent to which the goals conflicted. The goal "to

appear more intelligent than I am," for example, was judged to conflict with the goal "to present myself in an honest light." The more conflict participants reported, the greater their level of negative affect, depression, visits to a health center, psychosomatic complaints, and physical illness. Riediger and Freund (2004) also showed that conflicting goals interfere with a person's subjective well-being.

Ambiguous behavior is misinterpreted. A second reason that motives get frustrated is that behavior is misinterpreted. A person who tries to be firm or assertive may come across as unreasonable or disagreeable. Other people, misinterpreting the behavior, may then react in ways that frustrate the person's motive. When Allport (1937) introduced the trait as a unit of personality, he regarded the trait as a summary of frequent acts and motives, as well as values, likes, and interests. Following Allport (pp. 319–324), we would say that a sociable person wants company, an assertive person wants to have influence, a theatrical person wants attention, a dependent person wants to be cared for, a timid person wants safety, and a narcissistic person wants admiration. Observers, however, may misinterpret the behavior and frustrate the person's motive.

In brief, important interpersonal motives may be chronically frustrated in adulthood, creating interpersonal problems. When the frustration is severe enough to produce significant distress or impairment, we speak of a personality disorder.

We now apply our model to help clarify the definition of most personality disorders.

Personality Disorders and Frustrated Interpersonal Motives

This section applies our model to personality disorders. In our view, the personality disorders fall on a continuum with normative personality traits and are best explained by the constructs and methodology of personality and social psychology. Progress in understanding these phenomena would seem to require a sensible theory that could direct future research.

According to *Diagnostic and Statistical Manual of Mental Disorders* (*DSM–IV–TR*; American Psychiatric Association [APA], 2000), a *personality disorder* is defined in terms of enduring personality traits that seem to have evolved gradually over the childhood years and become well established by early adulthood. The term also implies that the traits have come to be maladaptive over time, leading to subjective distress or impaired functioning or both. For example, perfectionism may have been adaptive at one time in helping the person protect the self from criticism, but later in life that perfectionism may impair the person's functioning: A rigid perfectionist may now be unable to complete important tasks at work.

Every personality disorder is defined as a fuzzy set: The features (or criteria) of each disorder consist of a list of *n* characteristics. To receive the diagnosis, the person must exhibit any *m* of those *n* characteristics. No single feature or subset of features constitutes a necessary and sufficient condition for the diagnosis. The features themselves are heterogeneous, describing motives, current concerns, behaviors, affects, and cognitions. Because every feature is weighted equally, no one feature serves to integrate or organize the others. In brief, there is no overarching conception that integrates the features, clarifies the person's problem, or explains why some personality disorders co-occur more often than others. The study of personality disorders is said to contain "a conceptual and theoretical void" (Marinangeli et al., 2000, p. 74).

We propose that the features of most (but not all) personality disorders contain a single salient interpersonal motive that organizes the other features. This interpersonal motive helps us conceptualize the disorder in a way that (a) formulates it in interpersonal terms, (b) emphasizes its continuity with "normal" mechanisms, (c) explains why most personality disorders require a fuzzy definition, and (d) clarifies the relation of the personality disorders to one another.

The features of most personality disorders may be classified into one of four types. The first includes those criteria that explicitly describe a self-protective interpersonal motive or current concern. The clearest examples appear in the dependent, avoidant, borderline, narcissistic, histrionic, and paranoid personality disorders (Horowitz, 2004; Horowitz & Wilson, 2004). The other three types of criteria describe consequences of that motive—(a) strategies that the person uses to satisfy the motive, (b) negative affect that occurs when the strategies fail and the motive is frustrated, and (c) characteristic ways in which the person tries to reduce the resulting negative affect. We begin by examining the interpersonal motives that integrate the other three kinds of criteria.

> P22. The features of 6 of the 10 personality disorders specifically mention a self-protective interpersonal motive.

Interpersonal motives that are mentioned among the criteria of a personality disorder describe a motive to attain a desired state ("an approach goal") or a motive to avoid an aversive state ("an avoidance goal"). A criterion of the histrionic personality disorder describes a desire to be the center of attention. A criterion of the narcissistic personality disorder describes an excessive need for respect and admiration. Criteria of the paranoid personality disorder describe a motive to protect the self from malice, humiliation, and exploitation by

others. Criteria of the avoidant personality disorder emphasize an intense feeling of inadequacy that gives rise to a motive to avoid rejection, disapproval, criticism, ridicule, and shame. Criteria of the dependent personality disorder emphasize an intense feeling of inadequacy that gives rise to a motive to have others take charge. A criterion of the borderline personality disorder describes a motive to avoid being abandoned.

P23. Other features of the disorder may be organized around the motive (or frustrated motive).

Once a self-protective interpersonal motive has been identified, it helps clarify the other features. As noted previously, they fall into three categories.

Strategies for Satisfying the Motive

Motives may be satisfied in alternate ways. According to *DSM–IV–TR* (APA, 2000), a person with a histrionic personality disorder is apt to draw attention to the self by using physical appearance or exaggerated displays of emotion or both. A person with a narcissistic personality disorder is apt to affirm a feeling of self-worth by exploiting other people or acting like someone who is special, important, and entitled, or by doing both. A person with an avoidant personality disorder is apt to avoid rejection by minimizing social contact, intimacy, and new relationships. A person with a dependent personality disorder is apt to avoid feelings of helplessness by pleasing others and getting them to take charge. A person with a paranoid personality disorder is apt to avoid humiliation by guarding against possible malice, disloyalty, and abuse.

Negative Affect When the Motive is Frustrated

When these strategies fail and the motive is frustrated, negative affect follows. Some features describe this negative affect. According to *DSM–IV–TR* (APA, 2000), a person with a dependent personality disorder is apt to become uncomfortable, anxious, or helpless when alone. A person with a borderline personality disorder is apt to shift abruptly to a state of depression or anger or both. A person with a narcissistic personality disorder is apt to become envious. A person with a paranoid personality disorder is apt to become enraged at perceived signs of malice.

Ways of Coping with Negative Affect

The remaining criteria describe how the person copes with negative affect. People with a borderline personality disorder, trying to feel better, are apt to act out on the self or others through impulsive or suicidal behavior. Kemperman, Russ, and Shearin (1997) showed that people who mutilate themselves (e.g., by cutting their wrists) often do so in an effort to feel better. Likewise, people with a paranoid personality disorder are apt to counterattack. People with a dependent personality disorder are apt to seek another relationship urgently when a close relationship has ended. People with a narcissistic personality disorder are apt to become arrogant and haughty.

P24. At least two personality disorders in *DSM–IV–TR* cannot be organized around an integrating motive.

The features of the schizotypal personality disorder in *DSM–IV–TR* (APA, 2000) resemble mild symptoms of schizophrenic disorders—e.g., "odd thinking and speech," "ideas of reference," "odd beliefs or magical thinking" (p. 701). These criteria do not name (or imply) any integrating motive. Likewise, criteria of the antisocial personality disorder are organized around a deficit (Killingmo, 1989) rather than a frustrated interpersonal motive: a lack of guilt or remorse plus antisocial behaviors that result from the deficit. Therefore, the schizotypal and antisocial personality disorders may be categorically different from other personality disorders (McWilliams, 1998).

P25. Personality disorders are said to reflect a maladaptive interpersonal pattern.

Early discussions of personality disorders emphasized maladaptive interpersonal patterns (e.g., Carson, 1969; Horney, 1945; Kiesler, 1983, 1996; Leary, 1957; McLemore & Brokaw, 1987; Pincus & Wiggins, 1990; Strupp & Binder, 1984; Sullivan, 1953). According to one common explanation, the adult person's current behavior reflects outdated patterns that once served an important motive in childhood (Benjamin, 1996). For example, excessive compliance may have been adaptive at one time, leading to praise, affection, and goodwill from adults; but now in adulthood, excessive compliance may lead to disrespect, impatience, or unwanted advice from others.

Our model broadens the description by focusing on details of current behavior. For example, a woman with a histrionic personality disorder, trying repeatedly to establish communal connections, might seem to others to be manipulative or self-centered. A man with an avoidant personality disorder, trying repeatedly to protect himself from rejection, might seem uninterested in connecting. As the person's efforts to satisfy the motive backfire, they frustrate the very motive that they were meant to satisfy. As a result, the person experiences subjective distress, which the person tries to alleviate in maladaptive ways (e.g., self-isolation). Each aspect of the formulation contributes to our understanding of the person—the interpersonal motive, the

person's strategies, the reason the strategies fail, the negative affect that results, and the person's (at times) self-defeating ways of coping with negative affect (also see Piper, Joyce, McCallum, Azim, & Ogrodniczuk, 2001).

People frequently qualify for two or more personality disorders (e.g., Marinangeli et al., 2000). In that case, the person's disorder would be formulated in terms of two or more organizing motives. For example, the very same person might crave attention (a histrionic motive) and also strive to avoid abandonment (a borderline motive); both involve communal motives. Indeed, the histrionic and borderline personality disorders do frequently co-occur (e.g., Davila, 2001; Watson & Sinha, 1998). Likewise, a person might crave attention (a histrionic motive) and also crave admiration (a narcissistic motive): One is largely communal, the other primarily agentic; but both reflect a strong desire to influence other people.

P26. A pressing motive may induce (and be reinforced by) a cognitive bias that sustains the maladaptive pattern.

The paranoid personality disorder illustrates the effect of motives on cognitions: In an effort to protect the self from malice, the person has become wary of other people, and that suspiciousness seems to lower the person's objectivity in testing hypotheses about others (Millon & Davis, 2000). That is, the person has apparently acquired an extremely salient interpersonal agenda, namely, to avoid humiliation by detecting early hints of cheating, deception, exploitation, and betrayal. The person conducts a vigilant (but biased) search for evidence supporting that concern. When a paranoid man applies an interpersonal test and detects signs of possible malice, he becomes convinced that his suspicion has been confirmed, and this "discovery" reinforces his original need for vigilance (Millon & Davis, 2000). Evidence to the contrary is simply ignored. In this way an intense self-protective motive can affect cognitions.

To some extent, a cognitive bias may be associated with every personality disorder that is organized around an intense motive to protect the self (Beck & Freeman, 1990): The borderline person may be biased toward perceiving signs of abandonment; the avoidant person, signs of rejection; the histrionic person, signs of indifference; the narcissistic person, signs of disrespect. False alarms then provide the "confirming evidence" that increases the sense of frustrated motive, inducing negative affect.

P27. Personality disorders may be organized graphically in two dimensions that correspond to communion and agency.

If interpersonal motives are basic to personality disorders, then each personality disorder should occupy the same position in a circumplex of personality disorders that the corresponding motive occupies in a circumplex of motives. That is, if most personality disorders can be organized around a salient motive, we should be able to demonstrate empirically that they can be located graphically in a two-dimensional space defined by communion and agency. For example, the histrionic motive—"to connect with other people by getting their attention"—implies a desire to influence other people to connect. That disorder should therefore occupy the upper right-hand quadrant of a two-dimensional space (see Figure 5). The dependent motive—"to connect with other people and get them to take charge"—implies that the dependent personality disorder should occupy the lower right-hand quadrant. Two disorders that are located very close to one another should thus reflect similar organizing motives, and those disorders should co-occur particularly often.

Numerous studies have scaled and graphed the personality disorders. For example, Pincus and Wiggins (1990) administered questionnaires to a large sample of undergraduate students to identify the interpersonal problems (frustrated motives) associated with different personality disorders. A principal components analysis showed that the personality disorders can be organized within two primary dimensions. Other authors have obtained similar results using samples of students and samples of psychiatric patients (Blackburn, 1998; DeJong, van den Brink, Jansen, & Schippers, 1989; Matano & Locke, 1995; Morey, 1985; Overholser, 1996; Sim & Romney, 1990; Soldz, Budman, Demby, & Merry, 1993; Trull, Useda, Conforti, & Doan, 1997).

Wagner, Riley, Schmidt, McCormick, and Butler (1999) summarized the various results this way: As shown in Figure 5, people with a narcissistic personality disorder are high in agency and neutral in commu-

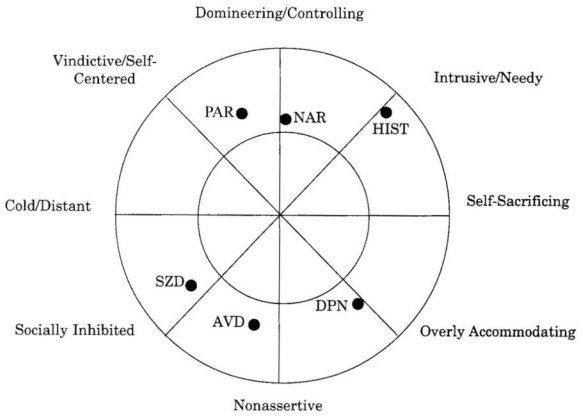

Figure 5. Location of personality disorders in the two-dimensional interpersonal space. AVD = avoidant; DPN = dependent; HIST = histrionic; NAR = narcissistic; PAR = paranoid; SZD = schizoid.

nion (in our terms, they want respect and admiration). Those with a paranoid personality disorder are high in agency and low in communion (they want to influence others to "leave me alone"). Those with an avoidant personality disorder are low in both (they want to protect the self by remaining passive and disconnected). Those with a dependent personality disorder are low in agency and high in communion (they want connected others to take charge). Those with a histrionic personality disorder are high in both (they want to influence others to become connected). The borderline personality disorder, with its many instabilities, does not seem to occupy a consistent graphical location.

Personality disorders frequently co-occur, but some more often than others (Marinangeli et al., 2000). The graphical arrangement in Figure 5 should help us predict which are most apt to co-occur. Those that are near one another should often co-occur (they reflect similar motives); Watson and Sinha (1998) found, for example, that the histrionic and narcissistic personality disorders had a comorbidity of 30.4%. However, disorders that are diametrically apart should co-occur less often; in the same data the histrionic and avoidant personality disorders had a comorbidity of 0%.

Concluding Remarks

We have proposed a revision in the circumplex models that have evolved from Leary's (1957) seminal contribution. Our revision has postulated four new assumptions: (a) The negative pole of communion is taken to be indifference, not hostility. (b) A given behavior invites (rather than evokes) a particular reaction, which the partner may choose not to satisfy. (c) The complement of a behavior is the reaction that would satisfy the motive behind it. (e) Noncomplementary reactions induce negative affect. By changing the emphasis to motives, the model highlights ambiguity about the motive behind a behavior, leading to miscommunications. The model also calls attention to individual differences in motives. A reaction, such as self-disclosure, that satisfies one person's motive may induce anger in another person. The model also helps clarify personality disorders and places them on a continuum with "normal" behavior. We conclude the article with comments about future research based on the model.

New Measures Now Exist for Assessing Interpersonal Goals

Classical studies of games have compared cooperative (communal) and competitive (agentic) motives during interpersonal interactions—for example, the Prisoner's Dilemma (e.g., Axelrod, 1980; Colman, 2003; Kelley & Stahelski, 1970). In general, however, empirical studies have focused more on the "situation" than the "person" because, until recently, we have lacked objective measures of individual differences in interpersonal goals. However, two measures now exist that provide a representative sample of interpersonal goals.

Locke's (2000) measure contains both approach goals ("It is important to me that other people understand me") and avoidance goals ("It is important to me that I not make a social blunder"), organized along two dimensions corresponding to communion and agency. Each of the eight subscales contains a broad but coherent group of goals that lie within an octant (a higher order motive). By weighting responses appropriately, one can sum the *x* and *y* component of each response to obtain two overall scores that assess the relative strength of communion and agency.

Grosse Holtforth (2002) also developed a 94-item measure from the statements of people in treatment. Everyday goals, such as avoiding criticism and seeking the admiration of others, are grouped into avoidance and approach motives. Grosse Holtforth (2005) demonstrated an important relation between the strength of avoidance motives and distress from interpersonal problems.

These Measures Can Now Be Used to Test the Model Experimentally

Participants can now be selected to be high or low in a particular motive, and variables can be manipulated experimentally to evaluate hypothesized cognitions, affect, or behavior. Here are three examples:

1. Suppose a participant interacts with a confederate in a "getting acquainted" task, and the confederate's behavior fails to satisfy the participant's goals. For example, a participant with strong communal goals might interact with a taciturn, unresponsive confederate. Or a participant with weak communal goals might interact with an open, self-disclosing confederate. According to the model, participants in both of these conditions should be relatively dissatisfied. In both cases, participants should also exhibit noncomplementary behavior that invites the confederate to alter his or her behavior in a direction that satisfies the participant's goals.
2. Interpersonal behavior is often ambiguous, so the way a participant interprets an actor's behavior should depend on the participant's own salient motives. If a videotaped scene depicted an actor teasing a partner, participants might disagree about the amount of friendliness or warmth present in the teasing. If we knew each participant's own interpersonal goals (hence, the person's cognitive biases), we should be able to predict the participant's interpretation of the actor's behavior.
3. We might also construct tasks to evaluate a participant's ability to provide the kind of social support a

problem teller would like. Suppose target people were asked to tell a partner about a recent problem situation in which they (a) "wanted the other person to give advice" or (b) "wanted the other person simply to listen and show compassionate understanding." Each target person's description of the problem might be videotaped and shown to other naive participants, who might then be asked to respond to the videotaped target person. "Accuracy" in social support would then be defined by a responder's success in matching each target person's desired reaction. A responder's response bias across videotapes could also be assessed and related to that person's own most salient interpersonal motives.

A comprehensive measure of interpersonal goals could also be used to evaluate our view of personality disorders. People randomly sampled from the general population might complete two self-report measures—one assessing interpersonal goals, the other assessing the degree to which the person endorses traits resembling those of a particular personality disorder. People who report the traits corresponding to a particular personality disorder should also report the characteristic motive that is associated with those traits. For example, people who report traits resembling those of a histrionic personality disorder should report a strong desire to feel connected with others. Locke (2000, Study 3) has already shown a relation between characteristic traits and hypothesized interpersonal goals among college students. Once identified, we might then examine, from the person's own perspective, strategies used to satisfy that motive, emotional reactions that typically occur when those strategies fail, and ways of coping with the resulting negative affect. A measure of interpersonal goals could also help clarify the meaning of abstract motives such as a motive to be loved. Our model assumes that a motive is a superordinate construct that subsumes narrower interpersonal goals. Superordinate constructs, however, are themselves poorly defined (fuzzy) concepts. Fehr (1988, 2004) described a procedure for operationalizing fuzzy interpersonal concepts, such as intimacy and love. In applying Fehr's procedure, individuals first generate features of the construct, and other individuals then rate the prototypicality of each generated feature. The total set of features constitutes the prototype for love. Examples of highly prototypic criteria for love generated by this method include "a desire to be with the other person," "feelings of caring," "a sense of freedom to talk about anything," and many others.

If a person has a strong motive to be loved, then that person should endorse a number of interpersonal goals that exist in the prototype—for example, wanting the other person to "care about me, desire to be with me, feel free to talk about anything with me," and so on. However, two individuals may differ as to which elements of the group-generated prototype of love they personally consider important. We are never surprised when a man in a distressed marriage declares that he loves his wife, and his wife challenges his claim by insisting, "If you really loved me, you would be more open with me." The wife's concept of love apparently includes "openness" as a feature, whereas the husband's concept apparently does not. Systematic research is needed to better understand miscommunications of this type that arise from differing interpersonal goals within the same higher order construct.

The Interpersonal Approach Has Unique Advantages

Of all the theoretical approaches to personality and social psychology, the interpersonal approach is probably the one that is most compatible with the others: (a) Like the biological approach, it assumes that innate temperamental differences play an important role in shaping an individual's personality and interpersonal interactions (Horowitz, 2004). According to the interpersonal approach, a child's temperament affects the caretaker's (and other people's) reactions to a child, thereby shaping the child's environment. (b) Like the cognitive-behavioral approach, the interpersonal approach emphasizes the important role of cognitions (e.g., schemas and cognitive biases) in shaping a person's expectancies and interpretations of otherwise ambiguous behavior. As noted previously, these cognitions themselves can strengthen a person's interpersonal motives and subsequent interactions. (c) Like the humanistic approach to personality, the interpersonal approach emphasizes the self, dyadic relations, communication, and social support—all topics addressed in this article. (d) Like the psychodynamic approach, the interpersonal approach emphasizes motives, ascribing important psychological consequences to frustration that arises from unsolvable motivational conflict.

Because the interpersonal approach harmonizes so well with all of these theoretical approaches, it is integrative: It draws from the wisdom of all major approaches to systematize our understanding of interpersonal phenomena (see also Pincus & Ansell, 2003). Although it is integrative, however, it is also unique, posing characteristic questions of its own. It asks, for example, what a person is seeking in a particular dyadic interaction. Does the person want to connect with others for care, comfort, intimacy, or friendship? Or does the person want to be autonomous, demonstrate competence, display superiority, or confirm a desired identity? What motivates a particular person to avoid interactions, tell lies without apparent reason, threaten suicide, maintain a program of self-starvation, have temper tantrums, or disagree "for the sake of disagreeing"? In all of these cases, the person may be seeking autonomy or control or

both, or the person may be seeking nurturance or some other form of connection. Finally, if an interpersonal motive is chronically frustrated, what is the reason for the chronic frustration?

These, and many other questions that we have posed, help define the interpersonal approach to personality and social psychology. We have tried to articulate the major propositions of the model and organize them into a relatively simple theoretical framework. Using this framework, it should be possible to study social interactions with all of the conceptual and methodological tools of social psychology, personality, communications, psycholinguistics, and child development.

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