The Self in Relation to Others: Cognitive and Motivational Underpinnings

SUSAN M. ANDERSEN, INGA REZNOK, AND SERENA CHEN

Department of Psychology
New York University
New York, New York 10003

Many theories about the self hold that one's sense of who one is, or one's conception of self, emerges in the context of the interpersonal relations experienced in one's family, social networks, and culture. It is often assumed that early relationships with significant persons in one's life may form patterns of responding that provide, to some degree, a framework for future interpersonal relations. Indeed, in a long history of clinical theory, significant others from one's childhood and later years are thought to be central both to self-definition and to interpersonal life (e.g., Bowlby, 1969, 1973, 1980; Freud, 1912/1958; Greenberg & Mitchell, 1983; Guidano & Liotti, 1983; Horney, 1939; Horowitz, 1991; Kelly, 1955; Luborsky & Crits-Christoph, 1990; Ogilvie & Ashmore, 1991; Rogers, 1951; Safran & Segal, 1990; Shaver & Rubenstein, 1980; Sullivan, 1953; WachTEL, 1981). Whether early interpersonal patterns and self-identities are stable over time, or continuously evolving, such patterns are widely considered to reflect how the self is bound up with others in daily living. Indeed, the notion that relations with specific significant others are crucial in self-definition is increasingly discussed in contemporary interpersonal models in social and personality psychology (e.g., Andersen & Glassman, 1996; Baldwin, 1992; Rugental, 1992; Markus & Cross, 1990).

We begin this paper with a brief consideration of our own work, which highlights the notion that the self is intertwined with significant others. In particular, we present our model of transference in everyday social relations that is situated in the general domain of social cognition (for reviews, see Andersen & Chen, in press; Andersen & Glassman, 1996). We then focus on the cognitive underpinnings of the self in relation to others, contending that parts of the self that are most connected with a given significant other

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*Address for correspondence: Susan M. Andersen, Department of Psychology, New York University, 6 Washington Place, 4th Floor, New York, New York 10003.
can be activated along with the representation of the significant other by virtue of linkages stored in memory between knowledge about the significant other and about the self.

Recognizing the potential complexity of the interpersonal self, we then discuss briefly theorizing and research concerned with the different ways in which the self may be connected to others, considering as an example the notion that the self may be related to various societal groupings (based on ethnicity, gender, profession, or other factors, rather than on particular personal relationships). We address this broader social identification even though our work focuses on the self in relation to specific, significant individuals in one's life, so as to acknowledge that the interpersonal self may exist at many levels of analysis, including the group and cultural level.

Having addressed the cognitive underpinnings of the self and the various ways the self may be connected to others, we turn our attention to the motivational underpinnings implied by the notion that the self is defined and experienced in part in relation to others. Specifically, we discuss how what is known about basic human motivations speaks to the interpersonal nature of the self. In so doing, we highlight the basic need to attach to or to feel some sense of personal emotional connection with others as particularly pertinent to the notion of the interpersonal self. Although we recognize that numerous other basic human motivations exist, and even present an abbreviated compendium of them, we contend that the need for human connection is fundamental both to overall development and to the formation of the self in relation to others.

Finally, we describe our most recent research on transference in some detail. In the process, we highlight how our research speaks to basic motivations in self/significant-other relations and to the very nature of the inextricable ties that link the self with particular important others.

**SYNOPSIS OF OUR SOCIAL-COGNITIVE WORK ON TRANSFERENCE WITH ITS IMPLICATIONS FOR THE SELF**

Transference refers to the process whereby past relations and experiences with significant others play out in present relations with new persons (Freud, 1912/1958; see also Sullivan, 1953). In our work, we conceptualize transference in social-cognitive terms, arguing specifically that mental representations of significant others are stored in memory in some form and then activated and applied to newly encountered individuals, so that these new persons are perceived and responded to in "old" ways. Our research on transference addresses the interpersonal nature of the self. Specifically, evidence emerging from this research supports the notion that the self and significant-other representations are linked in memory, influencing each other in bi-directional ways. Thus, our work on transference in everyday social rela-

**MENTAL REPRESENTATIONS OF THE SELF IN RELATION TO TRANSFERENCE**

Although models of self differ widely, they tend to share the notion that knowledge about the self is stored and organized in memory in some form
conceptions may be chronically active, lending stability to the self, while less central self-conceptions may be less chronically accessible, varying contextually and motivationally across situations (Andersen & Chen, in press). The notion of the working self-concept is broadly consistent with both social construct theory in social cognition (Higgins, 1989a; Higgins & King, 1981; Sedikides & Skowronski, 1990, 1991), which focuses on principles of knowledge activation and use, and with connectionist models of knowledge representation and use (e.g., Read, 1984, 1987; Smith, 1995). Indeed, it is also compatible with work on individual-person exemplars (Smith & Zarate, 1990, 1992). Thus, it appears that the idea that a "working" set of ideas and associations can be constructed relatively anew in each stimulus context (or at each new moment), based in part on frequency of prior use and in part on present cues (Andersen et al., 1995; Barsalou, 1993; Higgins & Brendl, 1995), is quite basic.

Our understanding of the working self-concept in transference is based on a network model of knowledge activation. As with various social-cognitive (e.g., Higgins, 1989a, 1996; Sedikides & Skowronski, 1991) and cognitive models of working memory (e.g., Cantor & Engle, 1993, Engle et al., 1992), we assume that activation spreads among related pieces of knowledge stored in long-term memory. Such spreading activation accounts for how it is that when a significant-other representation is activated, self-knowledge that is related to the significant-other representation should also come to reside in working memory, influencing the perceiver's perceptions, inferences, affect, and experience of self.

Self-With-Significant-Other Representations

In our model of transference, we assume the existence of multiple aspects of the self, some linked quite specifically to a particular relationship with a significant other. If some aspects of the self are more tightly linked to others to a specific significant other in memory, then these aspects are likely to be evoked when the representation of this significant other is activated. While it is possible that a given significant other representation is linked to every aspect of the self, it seems more likely that different aspects of the self are especially well linked to particular significant others from one's life (see also Ogilvie & Ashmore, 1991). The representation of the self when with a specific individual can be thought of as a "self-with-other" unit in memory. This self-with-other perspective can be brought into the transference context with the prediction that a "self-with-other" unit will be activated upon significant-other activation, and this is in fact supported by the research to be described later (Hinkley & Andersen, 1996).

Although the implications of different self-with-other models vary, in broad strokes, each supports the existence of linkages in memory between self and significant-other representations. The general notion is readily em
bodied in the concept of relational schemas (Baldwin, 1992; Berscheid, 1994; Bugental, 1992). A relational schema is thought to comprise the self and a significant-other representation, along with an interpersonal script involving an expected pattern of interaction between the self and the other, learned through past experience. It is proposed that these three elements of the schema may even be structurally associated in memory such that activation of one element in the structure spreads to others with special efficiency (Baldwin, 1992). A relational schema approach is thus consistent with our thinking about self-with-significant-other linkages in memory, although both our transference and Baldwin's relational models are essentially silent about the exact internal organization of the self and significant-other representations, that is, about their precise cognitive architecture defined in terms of intra-representation associations (see Andersen & Chen, in press).

Interestingly, research outside of the transference context focused on associations between self and significant-other representations offers persuasive evidence for self-significant-other linkages. Specifically, in this work, significant-other activation—based on a priming manipulation—has been shown to lead to changes in an individual's experience of the self, as assessed in terms of self-evaluative responses. For instance, after participants were primed to think of a parental figure, they reported less enjoyment of sexually charged written passages than they did after being primed to think of a friend. That is, the activation of the representation of a familial significant other versus a friend differentially influenced participants' self-evaluative standards (Baldwin & Holmes, 1987). In a related study, when psychology graduate students were subliminally exposed to the approving face of their program director, they rated their own research ideas more favorably than when subliminally exposed to his disapproving face (Baldwin, Carrell & Lopez, 1990). Similarly, Roman Catholic female participants, who considered themselves religious, evaluated themselves less positively when subliminally exposed to the face of the Pope versus the face of a nonrelevent other.

Overall, then, considerable theory and evidence supports the existence of linkages in memory between the self and significant others—which we argue are fundamental to the cognitive underpinnings of the interpersonal self. We recognize, of course, that the self may be connected to various others—including, but not only, significant others—and in various ways. Thus, before examining the motivational underpinnings of the interpersonal self, we consider several other theoretical perspectives from the broader social-cognitive literature on the interpersonal self.

COLLECTIVITY AND IDIOSYNCRACY IN THE SELF

Although it is obvious that knowledge about the self is likely to be mentally represented in some respects in relation to others, there are numerous ways of conceptualizing the extent to which the self is bound to others, and numerous levels of analysis that are of importance. Thus, we briefly consider some of these in an effort to better locate our research on transference in the general arena of interpersonal models of the self.

Social identities. One level of analysis can be found in social identity theory, that is, in the distinction between an individual's personal identity and his or her social identities (Tajfel & Turner, 1979). Social identity refers to the individual's identification with larger groups or collectives (e.g., Brewer, 1991; Huo, Smith & Tyler, 1996; Markus & Kitayama, 1991; Turner & Oakes, 1989; Tyler & Degoeij, 1995). Thus, social identity theory and related frameworks focus on the interpersonal self in terms of how one's self-categorizations are related to one's membership in various groups and classes of people. From a social-identity standpoint, an individual's self-esteem is thought to be derived, threatened, maintained, and enhanced differentially depending on whether one's personal versus one's social identity is relevant and thus operative in a given context (Crocker & Major, 1989; Steele, 1988). A common theme in the literature on social identity theory, moreover, is that people seek to distinguish themselves from others, and also seek to assimilate into social groups and relationships as well, perhaps to find some optimal balance between personal distinctiveness and group belongingness (Brewer, 1991). A number of recent empirical studies have, in fact, been concerned with the manner in which people identify with particular social groups, and with the role of belonging to particular groups in identity formation and maintenance (e.g., Deaux, 1991, 1993; Turner, 1985).

Overall, considerable theory and research thus suggests that each of us holds a host of social identities, in addition to our own personal or individualized identity. A schematic representation of the distinction between one's personal versus one's social identities appears in Figure 1, adapted from a social-psychological model of the self (Brewer, 1991). As reflected in the figure, the self may comprise the personal self as well as numerous social identities, with the personal self depicted at the center of various concentric circles, expanding outward into identities that are increasingly public. In this way, social identities define the self, even though they clearly extend beyond the individualized self, parts of which may remain entirely distinct from the interpersonal self. This illustration is provocative because it depicts one way in which the self is represented in relation to others, with others defined in terms of social groupings.

Conceptualizations of the interpersonal self increasingly recognize cultural and subcultural differences in psychological structures and processes, such as the degree to which social versus personal identities operate. For example, the distinction between the "independent" versus "interdependent" self has been studied in the social-psychological literature on cross-cultural differences in the self (Markus & Kitayama, 1991). Although both forms of self-construction acknowledge that the self is defined, regulated, and experi-
enced, at least in part, in relation to other persons, the “independent” view, which is relatively Western, holds that the self is autonomous and independent, whereas the relatively non-Western “interdependent” view conceptualizes the self as bound up with specific others. Interestingly, the idea that the self is tightly linked to specific individuals suggests malleability in the self across social contexts as a function of which others are present. We return later to this notion of context-specific selves when we present evidence for just this kind of malleability in the self in the context of transference—that is, when specific significant-other representations are activated and brought to bear on the tasks of perceiving, interpreting, and relating to newly encountered individuals (Hinkley & Andersen, 1996; see also Andersen & Chen, in press). These data suggest that even in a culture that values the “independent” view, such as in the United States, the interdependent processes of transference may nonetheless occur.

Personal identities with significant others. Consistent with the basic proposition that the self is bound to specific individuals in one’s life, our research focuses on the self as it is linked to particular “significant others” who one knows or has known—for example, members of one’s family of origin (parents, siblings, and extended family), one’s spouse or romantic partner, children, or close friends. Returning for a moment to Figure 1, we would argue that significant others exist largely in one or two of the innermost circles of identity and reflect those specific persons most important to the self. As shown in Figure 2, based on our own empirical research, we have argued that the self is linked to multiple significant others in memory (Andersen & Berk, in press). In our view, the self is intimately intertwined with significant others, and with personal relationships, so that the relational dynamics linking the self with these others are also stored in memory (see Sullivan, 1953).

As we described briefly earlier, in our model of significant-other representations and transference, we argue that a mental representation of a significant other can be thought of as a bundle of knowledge stored in memory about the person that can be brought to bear on interpreting new people who somehow resemble a significant other. This notion that past or present relations with significant others may play a role in relations with new people reflects the nearly century-old concept of transference (Freud, 1912/1958). The available evidence suggests that transference is a basic process—not a pathological one—and one that we would argue represents a very intimate way in which significant others are related to the self. When transference occurs, one is likely to perceive this new person in terms of the representation, and respond to him or her as one has responded to the significant other (Anderson et al., 1996). Importantly, our model also argues that because the bundle of knowledge about the significant other is linked to that about
the self, those aspects of the self that are associated with a particular significant other are likely to be elicited when the relevant significant-other representation is activated (Hinkley & Andersen, 1996).

**Significant others as part of the self.** A related line of work that similarly recognizes the relevance of significant-other representations to the self, although it does not focus on transference per se, is also worth considering here. This framework proposes that personal identity may become connected with a particular significant other one loves and to whom one is deeply attached, for example, in the context of a long-term romantic/spousal relationship, so that the significant other comes to be part of the self (Aron, Aron & Smollen, 1992; Aron, Aron, Tudor & Nelson, 1991). This notion is depicted in Figure 3, which shows how another person can become progressively included in the self, such that one’s self identity may include a specific other person. This notion extends well beyond our research on transference because it defines different types of significant-other representations as a function of how much they are incorporated into the self, which we have yet to study in our research. On theoretical grounds, however, we would argue that when a significant-other representation is not highly overlapping with the self, that is, when it is solidly a representation of its own,

![Diagram](image)

**FIGURE 3.** Inclusion of a significant other in the self. (Adapted from Aron, Aron & Smollen, 1992.)

This representation may still be used to interpret new individuals—in transference—in a process akin to the displacement of significant-other-based inferences to a new person (Greenberg & Mitchell, 1983). By contrast, when a self representation is used to interpret a new person, this is more akin to the process of projection (see Catrambone & Markus, 1987), rather than displacement. Indeed, it is interesting that a merging of the self and a significant-other representation may imply that transference involving such a representation would reflect a combination of the two interpretive processes—projection and displacement, in a kind of projective displacement—which is a notion that warrants research attention.

Thus far we have described our model of the cognitive underpinnings of the self, highlighting how the self is related to the significant individuals in one’s life. We have also considered, however, various other theoretical perspectives on how the self may be bound to others in multiple ways and at multiple levels. We now proceed onto the motivational underpinnings of the interpersonal self before detailing our research in the arena of transference—research that we argue directly speaks to both the cognitive and motivational foundations of the interpersonal self.

### THE SELF AND BASIC MOTIVATIONS

Almost any adequate model of the nature of self representations necessarily includes the assumption that motivations of various kinds are pertinent to self-definition. Indeed, most broad-based theories of human personality that have emerged over the course of this century have assumed that particular motivations are central to how the self develops and functions. A small set of basic human motivations has been emphasized in some form or another across these theoretical perspectives. Among these is the fundamental need for human connection, caring, warmth, tenderness, or attachment (see Adler, 1927/1957; Bakan, 1966; Batson, 1990; Baumeister & Leary, 1995; Bowlby, 1969, Deci, 1995; Fairbairn, 1952; Greenberg & Mitchell, 1983; Guisinger & Blatt, 1994; Helgeson, 1994; Horney, 1939, 1945; McAdams, 1985, 1989; Mullhahy, 1970; Rogers, 1951; Safran, 1990; Sullivan, 1940, 1953). We focus on this need for connection and consider its special relevance to the interpersonal self. At the same time, we acknowledge that many other human motivations exist, operating simultaneously with this need. For example, the need to be able to detach from others as well as to attach to them has also been proposed (Guidano & Lio, 1983), as has the need to experience and express psychological autonomy, personal freedom, or self-determination (Deci & Ryan, 1985, 1991). If attachment is to proceed well and if a sense of well-being is to be attained, some capacity to pursue individual aspirations freely is of importance (see Ryan, 1993). Beyond this, considerable research has focused on the need for competence, mastery, or control, showing that it is of great relevance to effective human.

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functioning (e.g., Abramson, Seligman & Teasdale, 1978; Bakan, 1966; Bandura, 1977, 1986; Dweck & Lichten, 1980; White, 1959), a notion echoed in numerous theories of personality and behavior (e.g., Hornby, 1939; Jung, 1933; Sullivan, 1953). On another level, there also appears to be an overall need to experience a sense of meaning in one’s activities—and even to be able to perceive one’s life as a whole as meaningful. In theoretical terms, meaning needs have long been considered quite basic (Frankl, 1959; Jung, 1933), and this notion has received some research support (Janoff-Bulman, 1992; Silver & Wortman, 1980). Finally, there is the need for security and safety (Horney, 1939; Sullivan, 1953)—the need to feel comfortable with the self, and to believe that one is and will be all right. Security needs may play out in many ways, for example, in the tendency to see the self in a positive light (e.g., Epstein, 1973; Greenwald, 1980; Taylor & Brown, 1988). Indeed, security may well be an overarching motivation that is relevant to all the others, as reflected in its special role in attachment, as well as in later functioning, notions we elaborate upon below. Together, this set of motivations, noted in Figure 4, provides a context for the interpersonal self—constituting the internal moorings that exist alongside connection needs.

Human Connection

The need to feel connected with other human beings, the longing to be close, and the desire to experience tenderness, caring, and warmth from others and to be able to provide it in return may be a fundamental human motivation (see Stern, 1985). This basic need for connection has received considerable empirical support beginning, for example, with the postwar studies on institutionalized children (Appell & Roudinesco, 1951; Robertson, 1953; Spitz, 1945). Human infants separated from their mothers exhibited deep depression and failed to thrive in large anonymous institutions—apparently not because of malnutrition but because of a lack of tender physical care. In fact, even in non-human primates, warmth appears to outweigh physical sustenance in that baby monkeys prefer a cuddly terry-cloth “mother” to one made of wire who dispenses milk (as reflected in time spent with the “mother,” Harlow & Harlow, 1969). Both of these historic lines of work suggest that the need for connection, as reflected in proximity seeking and the pursuit of tender interactions with a caretaker, may be basic to growth in infancy (see also Sullivan, 1953).

Attachment process. Attachment theory holds that infants are inherently motivated to attach to their caregivers—for survival and for protection from danger—and to elicit complementary responses from caregivers (e.g., Bowlby, 1958). However, it is not only proximity seeking that is relevant, but also “felt security” based on a caregiver’s responsiveness or “sensitivity” to the infant (Sroufe & Waters, 1977; Sroufe, 1996). The caregiver is the center of the infant’s social and emotional life; in fact, it is the emotional connection with the caregiver that is crucial, and can be seen in the emotional mimicry and turn-taking that occurs in caretaker-infant interactions, processes that are part of effective attachment (e.g., Stern, 1985). Research on attachment in infancy has shown that secure attachment tends to co-occur with parental expressions of sensitivity to the infant (Ainsworth, 1989; Bowlby, 1969, 1973, 1980)—defined in terms of the degree of sensitive, shared activity with the infant, activity geared toward the infant’s developing capabilities and within the range of these capabilities. Sensitivity is also thought to involve both provision of an effective set of environmental contingencies that enhance development, as well as relational responsiveness to the infant, shown to be crucial to secure attachment (for a review, see Thompson, in press). Such sensitivity is reflected in the caregiver’s attention to the infant’s signals, accurate interpretation of their meaning, and an appropriate and prompt response to them (Ainsworth et al., 1974). It is reflected in an empathic and sympathetic orientation to the child (Dix, 1991), and generally, in responsive parenting that shows the adult’s ability and willingness to protect and provide for the child (Bowlby, 1969). Overall, it has been shown that mothers who respond positively, consistently, and warmly to the child’s signals seem to have securely attached children (Isabella, 1995), suggesting that the basic need for connection and tenderness is clearly important in early development—in the context of attachment. In addition, some research suggests that it is not only the caretaker’s actual sensitivity that fosters secure attachment, but also the infant’s subjective appraisal of this sensitivity. Indeed, constantly intervening with the infant’s ongoing actions and efforts, even if in a warm way, may be intrusive or controlling, potentially leading to an avoidant style of attachment. A lack of intervention, however, is also problematic, as unresponsive maternal behavior can lead to a resistant attachment style (Belsky & Cassidy, 1994). Hence, it appears that close and tender interactions that are neither too stimulating and controlling nor too minimal and distant are the most predictive of secure attachment.

Secure attachment. Secure attachment makes it possible for the infant to explore the external world with relatively little conflict or fear by using the
caretaker as a "secure base" to explore elsewhere, allowing him or her to play with his or her own developing capacities. In this sense, secure attachment facilitates a positive, mutually responsive parent-child relationship that helps children to better regulate their affect (Grossman, Grossman & Schwan, 1986), and may help them later in childhood (Stroufe, Schork, Motti, Lawroski & LaFreniere, 1984), as well as in adulthood in terms of forming successful relationships (Hazan & Shaver, 1987, 1990). On the other hand, the absence or lack of a comfortable, secure attachment, shown, for example, in infants' inability to soothe themselves, in inexpressible crying, in manifestations of anxiety and rage, and in unresponsiveness to caregivers, may correspond, in later relationships, to less self-confidence, self-efficacy, social competence, and capacity to regulate negative affect (Carnelley, Pietromonaco & Jaffe, 1994; Collins & Read, 1990; Dutton, Saunders, Starzomski & Bartholomew, 1994; Shaver, Collins & Clark, 1996; Wolk, Oster & Candelia, 1996; for a review, see Thompson, in press).

The harmonious coming together of the child and caretaker, so relevant to attachment, is captured in the concept of "dovetailing", which reflects the interpersonal interplay of child and adult and fosters skill development and, in fact, learning (Kaye, 1984). A child's actions can be considered fully realized or "complete" when linked to reactions from the caretaker and family members, specifically, when the child's actions elicit preferred reactions from caregivers. Hence, the self is intertwined with others at the onset. Such dovetailing provides scaffolding for the child's growth and development, with the child as the apprentice in particular developmental tasks with the caretaker. As the child's representational capacities mature, he or she assumes an increasingly active role in shared activities with significant others and the full nature of the apprentice relation gradually diminishes. The dovetailing concept underscores how the child's behaviors are interlaced with those of caretakers in social-emotional development, grounding the interpersonal self in this interplay. Relatedly, "social referencing" in infancy is linked to dovetailing in that the child actively searches for clarifying information from the caretakers' emotional reactions to his or her behavior (Campbell & Sternberg, 1981; Klinnert, Campos, Scoce, Emde & Swejda, 1983), and in this communication process, a shared, socially constructed meaning or reality emerges for the child (see also Hardin & Higgins, 1996; Sullivan, 1953).

Empathy and attachment. Attachment to parenting figures is importantly associated not only with the need for tenderness and connection, but also with the basic need for social competence. One component of such social competence worth considering here is empathy because empathy enables the individual to better relate to others by conveying to others an ability to understand their emotional states and situational predicaments, to grasp what they are experiencing (Ickes, 1997). Indeed, children show elementary forms of empathy at an early age (Eisenberg & Mussen, 1989; Hoffman, 1981), a finding that supports the notion that basic empathic abilities may emerge in part because of the basic need to be connected with others. Hence, as a function of how basic connection needs are or are not allowed to play out, the capacity for empathy may be facilitated or inhibited, respectively (Batson, 1991). Indeed, individual differences in empathic abilities have been shown to be associated with secure attachment (Kestenberg, Faber & Stroufe, 1989), suggesting that both empathy and attachment may reflect the same underlying need for connection.

The importance of empathy as an element of the basic need to connect with others is further revealed by the fact that empathic feelings appear to mediate altruistic behavior, among both adults and children (Coke, Batson & McDavis, 1978; Dovidio, Allen & Schroeder, 1990; Eisenberg & Miller, 1987), and to inhibit aggression (Miller & Eisenberg, 1988; Richardson, Hennig, Smith, Gardner & Signo, 1994). Such evidence is of societal significance in that it suggests that experiencing another's joys and sorrows not only is of social value, but also that it emerges fairly naturally in development. Interestingly, because other human needs are highly relevant to empathy (such as the need for security) it is only when these other needs are simultaneously met that empathic feelings of compassion can occur and facilitate altruism, because people need to be able to regulate the intensity with which they feel another's pain (Eisenberg et al., 1996; Sotland, 1969). Empathetic distress in response to another person can lead more to self-protection than to compassion and altruism (Hoffman, 1988); hence, it is only when empathy develops in a balanced way that it can evoke compassion and sympathy rather than distress, thus facilitating altruism (Batson, 1991; Eisenberg, 1992; Ickes, 1997).

Mental models and attachment. In attachment theory, on the basis of interpersonal interactions with the caretaker, mental models of the self and other are thought to form, containing the child's view of whether or not the attachment figure responds positively or negatively to his or her bids for emotional support (see also Higgins, 1989a). Contingencies of this kind in relationships with caregivers are reflected in the child's expectations about how the significant other will respond, with the emphasis on the caretaker's acceptance or rejection of the child (see also Andersen & Glassman, 1996), that is, on whether or not he or she will show interest in the child (Thompson, in press). Expressed nurturance and responsiveness to the child's own agency are especially valuable not only in the development of the child's relational skills, but also in the development of his or her overall competence. Ultimately, people form mental models of the other and of the self (Bartholomew & Horowitz, 1991), portraying the self as someone worthy or unworthy and the other as trustworthy or untrustworthy. The motivations and expectations experienced toward the significant other are thus thought to be an inherent part of mental models. Such mental models are thus thought to represent both attachment successes and failures in relation to the caretaker such that the caretaker's responsiveness or rejection is rep-
represented in the model—especially in the connections between the self and the significant other (Baldwin, 1992; Berscheid, 1994; Bugental, 1992). Once formed, such models influence information processing and are used to interpret new relationships in that they are thought to contain “implicit decision rules for relating to others” (Thompson, in press; see also Markus & Cross, 1990). Indeed, it has been argued that mental models are organized representations based on past experience that exert a selective impact on the entire continuum of information processing—“influencing attention, encoding, storage, retrieval, inference, and planning and anticipation” (Markus & Cross, 1990, p. 583).

Although the attachment literature suggests that both child and adult attachment are mediated by internal models reflecting the self in relation to the primary caretaker, little research has explicitly examined this proposition directly or the nature of such models in a mental representational sense in either children or adults. Hence, it is not known whether or not mental models exist and mediate people’s responses to new persons in interpersonal relations. Traditionally, research on the attachment process in child development has focused on the “strange situation” and has examined how children handle separation from the parent in the experimental context, classifying attachment-relevant behaviors into trait-like attachment styles (e.g., Ainsworth, Blehar, Waters & Wall, 1978). Examination of these traits also forms the basis of the adult attachment literature, which has focused on romantic, spousal, and work relationships (e.g., Collins & Read, 1990; Hazan & Shaver, 1987, 1990; Pietromonaco, 1985; Shaver & Rubenstein, 1980; Simpson, 1990). Work on attachment in adulthood has thus tended to focus not on mental models per se, but rather on trait-like attachment styles—although there are some clear exceptions in the recent literature (Baldwin, Fehr, Keedhan, Seidel & Thompson, 1993; Baldwin, Keelhan, Fehr, Enns & Koh-Rangarajoo, 1996; Collins, 1996; Shaver, Collins & Clark, 1996; Miller & Read, 1991; Zeifman & Hazan, in press).

As described earlier in our work, we conceptualize the self as linked to specific significant others in memory and we examine mental representations of significant others as they play out in transference. Hence, our work is pertinent to attachment theory, and specifically, to theorizing about mental models of significant others stored in relation to the self. In fact, our research is among the first to examine such models directly by focusing on how representations of significant others are represented in memory and activated in relation to new persons, as well as on how these representations are linked to the self. From our point of view, the basic motivation to attach to a caretaker is likely to be stored with the representation of a significant other in memory, so that it is played out with any new person if the significant-other representation is activated and applied to him or her. The basic motivation to bond with this significant other, to feel connected, and to be near, which is so apparent in infants and young children, should thus play out in transference as it occurs in adult encounters and relationships.

Self-regulation and attachment. As implied, attachment not only involves warmth and nurturance, but also safety and security, such as the safety felt or not felt upon separation. Considering attachment processes from a somewhat different perspective, recent research on self-regulatory systems also suggests that these two motivations—namely, nurturance and security—are of crucial importance (Higgins, 1996a, b). In this work, the self-regulatory systems of individuals striving to satisfy their nurturance needs are focused on maximizing the presence of positive outcomes with others, and on preventing the absence of them. The absence of positive outcomes, that is, the withdrawal of nurturance and love, is thought to be associated with depression (Beck & Greenberg, 1974). In comparison, the self-regulatory system that is linked to security concerns focuses on preventing the occurrence of negative outcomes and on making sure of their absence. Anticipating negative outcomes is thought to involve fear and anxiety (see also Lazarus & Averill, 1972). From this view, then, a caregiver may be emotionally important because of the nurturance and security that are or are not experienced with him or her. As an example, individuals whose parents withdraw love when contingencies are not met are more likely to expect emotional abandonment and experience mistrust of and resentment toward others (Moretti & Higgins, in press). The detrimental nature of love withdrawal has been underscored in other research as well, showing that this parenting strategy is associated with low self-esteem, social avoidance, and heightened anxiety in children (Maccoby & Martin, 1983). Overall, a caregiver may foster one or both of the above self-regulatory systems in a child, in similar or differing degrees, by responding to him or her in ways that are receptive to his or her needs for nurturance and security. Recent work on self-regulation thus provides yet another perspective on the role of the motivation for connection with others in the development of the self.

Beyond Human Connection

Autonomy needs. As indicated, there are a number of other basic motivations that research has substantiated. In particular, there is an “opposing” need relative to the motivation for connection, namely, the need for detachment from others in the form of individual autonomy and personal freedom (Deci, 1995; Deci & Ryan, 1985, 1991; Ryan, 1993). The need for autonomy, or self-determination, refers to the need to experience one’s choices, thoughts, and actions as freely chosen, that is, as emanating from the true or authentic self, a locus of causality that is not only distinguishable from an external locus, but also, importantly, from internal loci that reflect the mere adoption of external forces. Thus, connection and autonomy needs may at times oppose each other insofar as the satisfaction of autonomy needs requires determining one’s actions on the basis of one’s own personal beliefs, values, standards, and wishes, even if others may disagree; in such cases, the price may be lack of “closeness,” if closeness is contingent upon particular
acts (Ryan, 1993; see also Higgins, 1989a). The notion that autonomy motives co-exist with the need for connection suggests that the self is not entirely an interpersonal phenomenon, but has an intrapersonal element as well (see Andersen, 1984; Andersen & Ross, 1984; Andersen & Williams, 1985). Moreover, the evidence suggests that there are multiple human needs that play a role in how the need for connection is expressed. In fact, it has long been argued that optimal satisfaction of either autonomy or connection needs may require that both are pursued and satisfied simultaneously. That is, true connection and true autonomy cannot be experienced in the absence of each other (Ryan, 1993). Similarly, the attachment literature suggests that successful adaptation involves a mixture of attachment and detachment, in a secure balance that gives on the ability to tolerate the absence of others and to trust that they will return (Guidano & Liotti, 1983).

Mastery needs. Beyond the need for autonomy, there is also the basic need for a sense of personal mastery, competence, or control. The need to feel that one is developing and using one’s own skills and talents and bringing them to fruition has been defined in terms of efficacy motivation (White, 1959), self-efficacy (Bandura, 1986), and feelings of competence and control (Dweck, 1975; Dweck & Leggett, 1988; see also Burger, 1985). The conception of this need is reflected in a long-standing theoretical literature (e.g., Adler, 1927/1957; Horney, 1939), and when construed in terms of achievement motivation, it constitutes one of the most widely researched human motivations (e.g. Atkinson, 1957; Dweck & Licht, 1980; McClelland, Atkinson, Clark, & Lowell, 1953).

Interestingly, there has been a recent resurgence in work on human agency, defined in terms of control and mastery, that has focused on its duality with human belongingness needs (Bakan, 1966; Baumeister & Leary, 1995; Blatt, 1990; Helgesen, 1994; McAdams & Constantine, 1983; Moskowitz, Suh & Desaulniers, 1994; Wiggins, 1992). Compelling as this work is, however, it does not always distinguish mastery needs from autonomy or self-determination needs (discussed above), even though these conceptions are distinguishable. That is, one can experience mastery or competence in a particular activity, and nonetheless feel controlled by others, rather than autonomous and free to choose (Bandura, 1989; Deci, 1995; Deci & Ryan, 1991).

Meaning needs. On yet another level, various theories of personality have long made the assumption that there is a basic need for something similar to mastery, but far broader conceptually, namely, a sense of meaning. A basic need for meaning reflects the motivation to comprehend life, to have some kind of discernment on the basis of this understanding (Frankl, 1959; Jung, 1993; see also Becker, 1971, 1973). Such a need appears to operate across cultures. Finding meaning in life involves constructing a broader comprehension and acceptance of life events, and placing life events in perspective (Janoff-Bulman, 1992; Silver & Wortman, 1980). It also provides a frame-works for action (Klinger, 1977) and identity (McAdams, 1996). In this sense, the narratives people construct to make sense of their existence may be one way in which they are able to imbue life with meaning (Baumeister, 1991, 1996).

From an existential point of view, constructing meaning and finding a way to lead a meaningful life involves living "authentically" by exercising choice, responsibility, consciousness, self-examination (Heidegger, 1962; May, Angel & Ellenberger, 1958; Yalom, 1980; see also Charme, 1984). But the need for meaning can be conceptualized at other levels of analysis as well. For instance, on a rather specific level, the meaning systems people construct have been implicated in reducing threat-related responses to the social world, in that people appear to have a need to defend their world views (Greenberg, Pyszczynski & Solomon, 1986; Greenberg, Pyszczynski, Solomon & Chatal, 1992), a tendency that appears to be useful in overall well-being (Silver & Wortman, 1980, Pennebaker, 1988, in press), specifically, in increasing self-liking. Hence, meaning needs are widely considered fundamental (Bruner, 1990; Glendin, 1962), and a growing body of work supports this claim.

To further define meaning needs, some have argued that experiencing meaning includes simply gaining a sense of predictability. There are clearly theories of personality, therefore, that highlight meaning needs somewhat indirectly in terms of the predictability that any coherent cognition provides, and hence, in terms of the uncertainty reduction that may be part and parcel of the cognition (Beck, 1976; Kelly, 1955; Guidano Y Liotti, 1983). In cognitive psychology, in fact, information theory suggests that the definition of information is that which further reduces uncertainty (e.g., Attneave, 1959), and yet is worth noting here that information is not likely to be synonymous with meaning because the sheer amount of information does not specify the content, value, history, or purpose of the information (Krieter & Krieter, 1976). Nonetheless, meaning is largely bestowed by mental processes, and this renders cognition a primary mechanism for making meaning (see also Cummins, 1989; Csikszentmihalyi & Rochberg-Halton, 1981; Nelson, 1985).

Security needs. Beyond the need for meaning, there is also the fundamental need to feel safe and secure. As indicated, this motivation for security is reflected in attachment processes, and may emerge in relation to other basic needs as well. Overall, in adulthood, people appear to have a basic need to feel adequate, or even far better than adequate, even inflated (Taylor, 1991). The motivation for security, then, to believe that one is and will be all right, and to experience positive feelings, is clearly reflected in self-serving biases and self-inflation (e.g., Arkin, 1981; Baumgardner & Arkin, 1988; Brown & Gallagher, 1992; Campbell & Fehr, 1990; Greenwald, 1980; Kunda, 1987, 1990; Showers, 1992; Taylor & Brown, 1988). Indeed, such self-bolstering processes are more likely to emerge as a coping mechanism in re-
response to threatening experiences (Greenberg & Pyszczynski, 1985). And it is of great interest that "normal" individuals, relative to depressives, tend to show an "illusory glow" of optimism rather than any special accuracy in their self perceptions (Alloy & Abramson, 1979; Lewinsohn, Mischel, Chaplin & Barton, 1980; Sackeim, 1983; Sackeim & Gur, 1979; Sackeim & Wagner, 1986; Taylor & Brown, 1988), suggesting that nondepressives favor pleasant perceptions over painful ones. Diverse research on related phenomena concurs with this basic assumption, including findings in the areas of self-esteem maintenance (Tesser, 1988, 1992), automatic egotism (Paulhus & LeVitt, 1987), ego-defensive attributions (Bradley, 1978; Miller & Ross, 1975), and terror-management (Greenberg, Pyszczynski & Solomon, 1986; Greenberg, Pyszczynski, Solomon & Chatel, 1992). Put simply, people are poised to defend their self-esteem where needed and to bolster their sense of adequacy or security by seeing themselves in a highly positive light especially under threat.

Although we do not wish to argue that this list of basic human motivations is the list, we believe the literature makes clear that multiple motivations are operative in human behavior, and we believe this is likely to be relevant to the interpersonal nature of the self.

In the remainder of this paper, we describe our research on transference, and consider its implications for how best to conceptualize the interpersonal self. Because this work deals with long-standing clinical theory, we first consider the clinical literature on transference. We then present empirical evidence which speaks not only to the general operation of significant-other representations in transference, but also more specifically, to the role and consequences of stored linkages between self and significant-other representations in the process. Although we highlight the cognitive underpinnings of the self in relation to significant others in the sections that follow, we aim to make clear the relevance of the motivational foundations of the interpersonal self—in particular, the basic needs for connection and security—to understanding its cognitive representation. That connection and security are fundamental human needs and that stored linkages between self and significant-other representations exist in memory converge in implying that the self is defined and experienced at least in part in relation to the important individuals in one’s life, that is, that the self is interpersonal.

SIGNIFICANT OTHER REPRESENTATIONS AND TRANSFERENCE

Psychodynamic Models

The clinical concept of transference (e.g., Elmsneich, 1989; Greenon, 1965; Luborsky & Chris-Christoph, 1990) has received scant empirical ex-amination in psychology, even though the notion that people superimpose old feelings, expectations, and patterns of behavior learned with a past significant other onto new persons in their life, especially a new therapist, is the cornerstone of psychodynamic therapy (e.g., Horney, 1939, 1945; Sullivan, 1940, 1953; Freud, 1912/1958; Greenberg & Mitchell, 1983). The concept of transference has largely been a theoretical one, discussed among clinicians in terms of its manifestations and use in psychotherapy. According to Freud (1912/1958), transference occurs when the "patient" superimposes his or her childhood fantasies and conflicts about a parent onto an "analytic" in the context of psychoanalysis, by weaving "the figure of the physician into one of the series already constructed in his mind" (Freud, 1912/1965, p. 107; see Andersen & Glassman, 1996).

Although transference is a clinical concept considered essential to psychoanalysis, it is also thought to have profound implications for everyday social life and its vicissitudes, and not to be experienced only in therapy. Although the psychosexual drive-structure model proposed by Freud is not compatible with our information-processing formulation (see Greenberg & Mitchell, 1983), Freud’s relatively simple assertion that people hold mental representations of significant others or imagos that influence their relations with new individuals, both in therapy and in life (Freud, 1912/1958; Luborsky & Chris-Christoph, 1990; Schimek, 1983), is largely compatible with our framework, in which we assume that transference can be interpreted in terms of mental representations of significant others, and as such, can be examined in controlled experiments. Although our research is silent about whether the occurrence of transference in therapy is essential in treating psychopathology and suffering, our research does suggest that the phenomenon is ubiquitous.

Our conceptualization of transference is based largely on the model of transference proposed by Harry Stack Sullivan (1953), who argued that children construct "personifications" of self and other. In our view, personifications can be conceptualized as mental representations that are linked together in memory (although Sullivan preferred energy-transformation metaphors to mental structures), and the "dynamisms" that reflect the dynamics characterizing the relationship between self and other can also be construed in cognitive terms. Sullivan characterized the transference process as parataxic distortion, and emphasized that the formation of personifications and dynamisms is based on simple interpersonal learning in the context of basic motivations and needs. For example, Sullivan argued that needs for security and satisfaction in expressing one’s perceptions and emotions, and exercising one’s capacities are best addressed in “integrative” encounters. Ideally, one is able to exercise one’s own capacities and talents, and to express one’s emotions, while remaining close to and "tender" with the other. This enables satisfaction and a sense of security. These needs as experienced in relation to the particular significant other, then, form the basis for the development of idiosyncratic personifications and dynamisms, which
then serve as the basis for parataxic distortion or transference. Transference is thus defined as an illusory two-person situation that emerges with a new person, so that what was learned in relation to the significant other is experienced with the new person (although perhaps not as a simple repetition, Wachtel, 1981).

**Social-Cognitive Model**

In our experimental research on transference, we have adopted, as indicated, a social-cognitive approach (for related conceptual approaches, see Singer, 1985, 1988; Wachtel, 1981; Westen, 1988). We suggest that the basic process of transference involves the activation and application of mental representations of significant others to new people in everyday social relations (Andersen & Glassman, 1996). As part of the process, an activated significant-other representation guides inferences about a new individual, who is perceived in terms of the representation, leading to predictable information-processing consequences, as well as to consequences for affect, evaluation, interpersonal closeness motivation, expectancies concerning acceptance or rejection, and self-experiences. The processes underlying the use of significant-other representations are similar to those governing the activation and use of any social construct (Higgins, 1989a; Higgins & King, 1981; see also Andersen & Klatzky, 1987; Andersen, Klatzky & Murray, 1990), such as those designating other individual-person exemplars or various types of social categories (Smith & Zarate, 1992). We argue, however, that significant-other representations are particularly powerful in that they are chronically ready to be used and are of high importance to the person (Andersen et al., 1995).

Thus far, our research on transference has shown that people use significant-other representations to make inferences about a new person who somehow resembles a significant other—inferring qualities not actually learned but consistent with the significant-other representation (Andersen & Baum, 1994; Andersen & Cole, 1990; Andersen et al., 1995, 1996; Hinkley & Andersen, 1996; for a review, see Andersen & Glassman, 1996). That is, perceivers show a chronic and pronounced tendency to "go beyond the information given" (Bruner, 1957) about new people on the basis of an activated significant-other representation, apparently treating what they inferred when learning about the new person as information learned (for related work, see Johnson, Hastrup & Lindsay, 1993; Johnson & Raye, 1981). Beyond inferential and memory effects, transference is also reflected in representation-consistent evaluation, motivation, expectancies, and affect stored with the significant-other representation (Andersen et al., 1996), as indicated, and this research is described here in detail because such effects implicate the self in transference by implying the activation of stored linkages between the self and the significant other when the significant-other representation is activated. The emergence of expectancies for acceptance or rejection and of motivations to be emotionally close or distant in transference points to the powerful relation between the significant other and the self. Still more direct evidence for this relation also exists, showing that changes in self-definition may occur based on significant-other activation by virtue of linkages between the bundle of knowledge representing the significant other and the ways in which aspects of the self that are particularly related to this other (Hinkley & Andersen, 1996), see also Baldwin, 1992). When the significant-other representation is triggered, its activation spreads to related aspects of the self, so that from the entire pool of self-information stored in memory, the subset reflecting how the self is defined, regulated, and experienced when with the significant other is what comes to mind. It is in these ways that this research on transference speaks to the self/significant-other relation.

We turn now to the empirical evidence that we argue supports the existence and operation of stored self/significant-other linkages—linkages that not only are basic to the cognitive underpinnings of the interpersonal self, but also that reflect some of the fundamental motivational underpinnings of the self in relation to significant others.

**TRANSFERENCE INFLUENCES EXPECTANCIES, MOTIVATION, AND AFFECT**

The first study we describe speaks to the self in relation to significant others by extending prior work demonstrating schema-triggered evaluation in transference (Andersen & Baum, 1994)—that is, liking or disliking of a new person who resembles a significant other as the significant other is liked or disliked. We extend this research into the motivational domain, focusing in particular on the need for connection (Andersen et al., 1996). We conceptualize this as the desire to emotionally approach or distance from the new person, and our assumption is that this motivation should be experienced with the new other in transference as it is experienced with the significant other. Such a transfer of motivation should occur by means of the basic process of schema-triggered affect (Fiske, 1982; Fiske & Pavelchak, 1986), though this prediction reaches beyond the theory of schema-triggered affect, which was designed to explain how liking and disliking of a new other may emerge from an evaluatively toned representation (typically a stereotype). We assume that it is the emotionally laden nature of significant-other representations that enables their activation to have motivational consequences. In addition, beyond examining closeness and connectedness motivation, we also examined interpersonal expectancies for acceptance or rejection, which are likely to be of relevance to the desire to approach or avoid the other. Finally, we also assessed immediate emotional responses in terms of facially expressed emotion at the moment of encountering (encoding)
each piece of information about the new person in transference. Emotions too can be powerful motivators in their own right.

In this research, we used the same between-participants design used in prior work (Andersen & Baum, 1994). Participants in the experimental condition of this design learned about a new person, allegedly seated next door, who resembled their own positively or negatively toned significant other, and participants in the control condition learned about a new person resembling some other participant's positive or negative significant other. In order to control for content differences in features presented about the new person and to draw meaningful conclusions about the effects of significant other resemblance, each participant in the control condition was systematically paired—that is, yoked—with another participant in the experimental condition (randomly selected without replacement). Such perfect one-to-one yoking across the transference and the non-transference conditions meant that participants in both of these conditions were exposed to exactly the same features, ensuring that any differences observed were not content-driven or derived from evaluative differences (see also Andersen & Baum, 1994). All participants completed sentences to describe their significant other's two weeks before the actual experiment. More specifically, in the initial session, participants were asked to provide an equal number of positive and negative sentences to describe both their positively and negatively toned significant others, which allowed us to describe the new person using an equal number of positive and negative descriptors in both conditions, diminishing the obviousness of the overall tone of the representation. Importantly, while participants read each descriptive feature about the new person, their ongoing facial expressions were covertly videotaped. Hence, nonverbal facial affect at encoding, that is, during the precise moment that the participant learned each feature about the new person, was assessed. Our index of facial affect was derived from naive judges' ratings of the pleasantness in participants' facial expressions. After participants learned about the new person, their motivation to emotionally approach or avoid this new other was assessed—that is, their motivation for connection with the other. Participants' expectancies as to whether the new other would be accepting or rejecting of them were also assessed, as was representation-consistent liking of, and memory about, the new person, as in prior work.

Schema-Triggered Motivation to be Close

We view motivational material vis-à-vis significant others as stored in the linkages between the self and the significant other, and hence as material that may be activated and applied to a new other when a significant-other representation is activated. As indicated, in this study, we defined motivation in terms of the longing for interpersonal closeness, operationalizing this basic motivation for connection in terms of participants' self-reported moti-
be fundamental to our relations with significant others (e.g., Bandura, 1986; Higgins, 1989b, 1991). Moreover, if such contingencies are activated in transference, it is of importance for theoretical conceptualizations of the interpersonal self because it implies a bi-directional influence in self/significant-other linkages. That is, feelings may run from the self to the significant other, for example, in the form of representation-consistent evaluations of a new other who resembles a significant other, as well as from the significant other to the self, in this case, in the form of representation-consistent expectancies regarding whether a new other will be accepting or rejecting of the self. Overall, these data provide another indication that the need for connection helps define what is stored about the significant other in memory and hence what emerges in transference.

Schema-Triggered Facial Affect

In expanding the notion of schema-triggered affect, we also examined emotional responding, testing the hypothesis that the emotional concomitants of transference may be found in momentary facial expressions upon encountering a new person who resembles a significant other. Such momentary facial expressions have important implications in that emotional responses are thought to last only a few seconds (Ekman, 1992), and facial changes are thought to reflect emotion. To the extent that the overall tone of a significant-other representation is expressed affectively when a person is learning a relevant feature about a new person who bears some resemblance to a significant other, facial affect at this moment should reflect the overall tone of the representation rather than the valence of the feature itself. Two trained judges in this research, blind to the participants' condition, rated participants' facial expressions for pleasant versus unpleasant feeling, one feature at a time, and these ratings were examined as our index of transient affect.

As predicted, participants responded with more pleasant facial affect while learning about a new person who resembled their own positively versus negatively toned significant other, a pattern that did not emerge when the new person resembled a yoked participant's significant other. Importantly, the overall tone of the representation was expressed facially regardless of whether the feature itself was positive or negative in valence. Using this virtually instantaneous measure of transient affect, then, the data showed that learning about a new person who resembled a significant other results in representation-consistent facial affect. Indeed, because self-reported transient mood effects were not observed in this study (although see Andersen & Baum, 1994), facial affect in transference appears to occur fleetingly. Nonetheless, the data clearly demonstrate schema-triggered transient facial affect in transference, extending our prior work into the domain of emotional responses. It may be that it is difficult to observe relatively less transient affect, for example, transient mood, because assessing such affect may be complicated by factors such as participants' desire to protect positive mood states and repair negative ones (e.g., Clark & Isen, 1982), or to increase their self-esteem (e.g., Greenberg & Pyszczynski, 1985; Greenwald, 1980; see also Hinkley & Andersen, 1996). Generally, these findings extend prior work by showing that the overall tone of a significant-other representation predicts facial expressions of affect at encoding in transference, showing the power of the emotional resonance of the experience. Coupled with the closeness motivation and expectancy findings, these data provide strong evidence for the pertinence of the need for connection in understanding transference and its implications for self and personality.

Transference Influences One's Sense of Self

As indicated, central to our social-cognitive model of transference is the notion that significant-other representations are linked with self-representations in memory. Because significant-other representations are, by definition, of relevance to the self, and have been demonstrated to have important affective and motivational consequences for the self, it is crucial to understand the precise nature of the linkages between self and significant-other representations, and the role of these linkages in transference. We argued above that self/significant-other linkages imply that aspects of the self will be activated when a significant-other representation is activated in transference. A recent study, to be described shortly, directly examined this hypothesis (Hinkley & Andersen, 1996).

When a significant-other representation is activated and applied in the context of significant-other resemblance in a new person, relevant changes in the working self-concept should occur—that is, changes in what is currently active in working memory about the self. Specifically, we argue that the activation of a significant-other representation should bring those aspects of the self that reflect the self when with the particular significant other (Ogilvie & Ashmore, 1991) into working memory. That is, encountering a new person who bears some resemblance to a significant other should lead a perceiver to experience the self as he or she is when with the significant other by virtue of the infusion into the working self-concept of those aspects of self-information that specifically pertain to the self when with this significant other. Moreover, because the overall tone of a significant-other representation should be linked to feelings about the self when with the significant other, corresponding changes in self-evaluation should also occur.

This study made use of the same experimental design as the one used in the study described above in which participants learned about a new person who resembled either their own or a yoked participant's positively or negatively toned significant other. In each condition, participants learned an
equal number of positive and negative features about the new person. Again, participants were yoked across the own-significant-other and control conditions on a one-to-one basis so that the exact content of features presented about the new person was identical across these conditions. In the experiment, after learning about the new person, participants were asked to describe themselves “as they are now” (as an index of their working self-concept). They did this by generating sentences to describe themselves, and afterward, classified each of the self-descriptive sentences that they listed as positive or negative (as an index of self-evaluation). Following this, participants completed our standard recognition-memory test about the new person, used to assess representation-consistent memory and inference.

The above procedures were rendered meaningful by the fact that we collected information about the self from the participants during a pretest session held two weeks prior to the experiment. In this pretest session, before identifying any significant other, participants provided a series of descriptors to characterize the self by completing various sentences to describe themselves “as they are now”—this set of self-descriptors served as a measure of each participant’s pretest working self-concept. Afterward, participants classified each self-descriptor they had provided as either positive or negative. Next, participants identified a positively and a negatively toned significant other, and completed an equal number of positive and negative sentences to describe each. Finally, they were asked to generate descriptors to characterize the self when with each significant other, by listing descriptive sentences about the self when with each of these others. Together, these pretest- session procedures provided the necessary ingredients for testing our hypotheses.

Changes in the Working Self-Concept

By measuring participants’ working self-concepts at two points in time—during the pretest session and after experiencing the experimental manipulation—we could assess changes in the featural content of the working self-concept as a function of significant-other resemblance and transference. In particular, the degree of featural overlap between the “working” self-concept and the self when with the significant other was assessed (a measure adapted from Prentice, 1990, and coded by independent judges) so as to index the extent to which each participant’s working self-concept reflected his or her previously assessed self-with-significant-other description. This overlap was calculated at pretest and in the experiment, with the prediction being that the “working” self-concept would change more in the direction of the self when with the significant other, controlling for the same overlap calculated entirely at pretest, when the new person resembled the participant’s own significant other rather than a yoked participant’s significant other. That is, the number of overlapping items between participants’ working self-concept and their sense of self when with the significant other in the experiment—covarying out pretest overlap—was our primary dependent measure.

As predicted, the working self-concept as freely described by participants in the experiment came to overlap more with their when with significant-other description—when the new person resembled this particular significant other rather than a yoked participant’s significant other. Hence, under the condition of significant-other resemblance and transference, changes in the working self-concept occurred. This effect held, in fact, whether the new person resembled a positively or a negatively toned significant other, and was specific to the relevant significant other, that is, the effect was not simply general across all significant-other representations stored in a given participant’s memory.

Changes in Self-Evaluation Based on the Working Self-Concept

To measure changes in the evaluative tone of the working self-concept in transference, participants’ positive and negative classifications of their working self-concept descriptors were examined (in both the pretest and experimental sessions). When the new person resembled the participant’s own significant other, the newly overlapping aspects of the working self-concept, that is, those that changed in the direction of the self when with the significant other, were expected to reflect the overall tone of the relevant significant-other representation. The main analyses of self-evaluative changes in the working self-concept were conducted using these newly overlapping items. Indeed, participants perceived these newly overlapping working self-concept features as more positive when the new person resembled their own positively versus negatively toned significant other, an effect that did not occur in the control condition. These data clearly demonstrate that representation-consistent shifts in the working self-concept that occur during transference have self-evaluative implications that are consistent with the overall tone of the significant-other representation.

Interestingly, however, the self-evaluation reflected in the aspects of the working self-concept that did not change in the direction of the self when with the significant other, changed in exactly the opposite way. That is, for these non-overlapping features, which were, in fact, the majority of the working self-concept features that participants listed, self-evaluation became more positive when the new person resembled the participant’s own negatively versus positively toned significant other, an effect that did not hold when the new person resembled a yoked participant’s significant other. Hence, the valence of the items not involved in the overlap with the self-with-significant-other representation became most positive when the new person resembled the participant’s own negatively toned significant other. Given that this occurred only in the context of significant-other resemblance in the new person, positive aspects of self-knowledge appear to have
been marshaled in the context of a negative transference encounter, enabling the self to be experienced and perceived more positively overall in spite of the influx of some negative self-evaluation.

This bolstering of self-evaluation in the overall working self-concept in the negative transference condition enhances the self in the face of threat, in a reversal of our predicted effect—for the non-overlapping features of the self concept versus those that overlapped with participants' self-when-with-the-significant-other descriptions. The fact that this occurred in the negative transference context suggests that some changes in self-evaluation in this kind of transference context may reflect a compensatory response. Such compensatory responses appear to be common in various domains (Greenberg & Pyszczynski, 1985; Steele, 1988; Taylor & Brown, 1988; Taylor & Lobel, 1989; Tesser, 1988), and this may well be operative when negative changes in the working self-concept occur in transference. The "shoring up" of positive self-conceptions in the working self-concept as a whole presumably counteracts the negative self-evaluation when with the negatively toned significant other that we observed in the negative transference condition in this research.

These data are interesting because the tendency to see oneself in positive light can readily be construed in terms of the basic need for security—the desire to have positive regard for the self. From this standpoint, this evidence is important in part because it suggests yet another way that basic human motivations may be pertinent to what is stored in memory in relation to significant others and what emerges in transference. That is, these data suggest that the basic motivation for security plays a role in transference by implying that the ways in which self-evaluation is experienced and regulated, based in part on the operation of security needs in the context of one’s relationship with a significant other, may be experienced in the transference process.

Transference as Representation-Consistent Memory

Consistent with prior research, the basic transference effect was found in this particular study in the form of representation-consistent memory (Andersen & Baum, 1994; Andersen et al., 1995, 1996; Andersen & Cole, 1990). That is, participants showed more representation-consistent memory confidence about the new person who resembled their own significant other. This memory effect held regardless of the overall evaluative tone of the significant-other representation from which the new person’s features were derived. Hence, significant-other activation and application clearly occurred when we expected it would—under conditions of significant-other resemblance—showing that the observed changes in the working self-concept occurred in the context of transference.

Taken together, these data support the hypothesis that shifts in the working self-concept occur in the context of transference and indicate that they have complex implications for self-definition and self-evaluation. These data are in fact the first in this line of work to demonstrate unequivocally that self and significant-other representations, along with the linkages between them, are activated in the context of transference. In our view, self/significant-other linkages constitute the cognitive underpinnings of the interpersonal self, as it exists in relation to the significant others in one’s life. Upon encountering a new person who in some way resembles a significant other, individuals appear to define and experience themselves as they are when with the relevant significant other. In addition, self-evaluation comes to reflect the tone of the significant-other representation. However, when the self-aspects that are brought to mind upon encountering a new person who resembles a significant other are negative, a compensatory or defensive self-enhancement appears to occur as well. Hence, we argue that the basic need to feel secure, in this case, to feel positively about the self in the face of negative content entering the working self-concept, appears to be relevant in transference. This is important because it suggests yet another linkage between the transference processes and basic needs, a crucial step if transference is to be considered reflective of the interpersonal nature of the self.

CONCLUDING COMMENTS

To summarize, we have argued for a conceptualization of self that is fundamentally interpersonal in nature, focusing in particular on how the self is defined by the specific significant relationships in one’s life. Although we do not mean to imply that there is nothing else to the self beyond interpersonal material, we do regard significant relationships as basic to self-definition and experience. Hence, we have discussed basic human needs, arguing that the need for connection with other human beings is primary in personality and behavior, and considered various ways in which the self may be defined in relation both to groups (generalized others) and to specific individuals. We also presented our conceptualization of the cognitive underpinnings of the interpersonal self—that is, how the self may be linked to various significant others in memory—in the context of our social-cognitive conceptualization of transference in everyday social relations. Finally, we offered findings emerging from our experimental social-cognitive research on transference, rooted in our assumptions regarding the cognitive foundations of the self in relation to significant others. In the process, we sought to make clear the relevance of the motivational elements of the interplay between self and significant-other representations in memory, as well as the cognitive underpinnings, to their activation and the consequences they lead to in transference.

Overall, the research we presented demonstrates the phenomenon of transference—the re-experiencing of ideas, motivation, and affect in relation to a new person derived from a relationship with a significant other. Empiri-
cal support for the interpersonal nature of the self has been found in this research, most notably in the form of data demonstrating schema-triggered closeness motivations and schema-triggered expectancies for acceptance versus rejection in transference, which imply that such material is stored with the significant other in relation to the self (Andersen et al., 1996). Our research also indicates that the way one views oneself appears to change in the context of transference, such that one becomes more like the self one is when with the significant other in this context. Taken as a whole, our findings support an interpersonal model of the self by implying that the need for human connection, so pivotal in development of the self, appears to emerge in transference, as does the need for a sense of security in the form of a bolstering of the self under threatening transference circumstances. The other basic motivations we have considered—autonomy, competence, and meaning—have not yet been directly examined in the transference context, and warrant future empirical attention since they are also likely to be stored with significant-other representations. Although our model cannot account for all of the variance in self-definition or in contextual changes in an individual's self-concept and self-experience, the model does involve an interpersonal model of the self and postulates a complex web of multiple representations of self linked with multiple representations of significant others that can account both for continuity and malleability in the self, as it exists and operates in relation to others.

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