Relational Schemas as a Source of If–Then Self-Inference Procedures

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It is generally accepted that the sense of self is constructed rather than directly perceived or experienced. The hypothesis is advanced here that people's rules of self-inference derive in large part from if–then expectancies about the contingencies of interpersonal interaction; that is, expectancies about how other people will react to one's behaviors. If so, a central type of cognitive structure contributing to self-construal is the relational schema, representing regularities in interaction. Research examining the cognitive representation of interpersonal expectancies, the activation of those representations, and the effects on self-experience is described.

I occasionally play golf with my older brother. He is a better player than I, but once in a while I hit a spectacular drive—long and to the center of the fairway. As I look at my shot with admiration, growing self-confidence, and a hint of pride, he often says something along the lines of, "Great drive! That's your best shot all day! That may be the best golf shot I've ever seen you hit! Look— you're right up there by me!" I find I tend to gloat less when playing with my brother than when playing with other friends.

It is generally accepted that the sense of self, including self-concepts and self-appraisals, is constructed rather than directly perceived or experienced. Over the past 4 decades, much social–cognitive research on this topic has been conducted, with an emphasis on the knowledge structures and self-evaluative processes that tend to influence people's self-construal. More recently the focus has been turning toward the question of how these cognitive processes are shaped by interpersonal contexts and various social concerns. I review some recent work that has used social–cognitive models and methods to examine the influence of internally represented social information on the sense of self,

and argue that people's self-construal rules may derive in large part from their if–then expectancies about social feedback.

The Construction of a Sense of Self

Some social–cognitive models of self-construal focus on people's declarative knowledge about self, including general propositions about their traits and characteristics (*semantic knowledge*) as well as memories for specific autobiographical events (*episodic knowledge*). The self-concept is portrayed as a collection of self-knowledge, well organized into a self-schema (Markus, 1977). More recently, writers have stressed the malleability of the self, suggesting that from a large pool of episodic and semantic knowledge about the self only a small subset is activated at any given time to produce the working self-concept of the moment (Markus & Kunda, 1986). The *working self-concept* is seen as constructed from "a shifting array of accessible self-knowledge" (Markus & Wurf, 1987, p. 306).

At the same time, other approaches have emphasized the processes by which specific self-knowledge is manipulated and combined to construct a characterization of self—for, as Cantor and Kihlstrom (1987) pointed out, a social–cognitive analysis of self-construal must examine the rules for self-reflection that individuals use, as well as the declarative self-knowledge they possess. The literature on self-perception (Bem, 1972), for example, examines factors that influence the inference of internal dispositions— for example, a fondness for brown bread—on the basis of observations of one's own behavior,

such as, for example, repeated purchase of brown bread. A key element in the self-perception of attitudes and abilities is causal attribution: people feel very differently after a failure, for example, depending on whether they attribute the failure to the difficulty of the task or a weakness in themselves (e.g., McFarland & Ross, 1982). Rules that bias this self-inference process have been studied: Some researchers have examined *overgeneralization*, or the tendency to over-attribute negative characteristics to the self on the basis of single negative outcomes (Beck, 1967; Carver & Ganellen, 1983; Kernis, Brockner, & Frankel, 1989). Others have examined *self-serving biases* (e.g., Miller & Ross, 1975), which involve denying responsibility for negative outcomes. Some researchers have examined the extent to which different individuals tend to attach more importance to their positive or their negative characteristics (Pelham & Swann, 1989).

With regard to *self-appraisal*, much has been written about the process of comparing self to standards or goals and feeling negative emotions to the extent that these standards are not being met (e.g., Carver & Scheier, 1981; James, 1890). James described the procedure for *self-evaluation* as involving calculating a ratio between one's achievements and one's aspirations. Strauman (1996) and Higgins (1987) have identified different types of standards that often are considered in self-appraisal, including both ideals and "oughts" or duties. Festinger's (1954) well-known theory of social comparison is based on the idea that self-evaluation involves a procedure of comparing self with relevant other people: people tend to feel better about themselves if seated next to a poorly dressed slob than if seated next to a well-mannered, highly competent person (Morse & Gergen, 1970).

These and other models of self-construal all can be seen as describing the general inference procedures people use to form images of self based on specific knowledge about behaviors and outcomes. The parallels are clearest if the elements of the various models are expressed in a common form: a particularly useful one is that used to describe *procedural knowledge*, which consists of if–then decision rules for processing information (e.g., Smith, 1984). For example, research in the impression-formation literature that looks at how people infer other people's

general traits or attitudes from their specific behaviors has supported the notion that people develop trait-inference rules such as "If a person hits someone else, then the person is unfriendly" (Smith & Branscombe, 1987; Smith, Stewart, & Buttram, 1992). In a similar manner, rules for self-construal can be expressed in an if–then format: A self-perception rule, for example, might be "If I choose to eat brown bread all the time, then I must like it." An overgeneralization rule might be "If I do poorly on a test, then I am a total failure." A social comparison rule would be "If I am better than my peers, then I am doing well." Virtually any self-inference rule can be expressed in this format, allowing it to be compared and integrated with other rules that focus on different information or different processes of drawing conclusions.

Social and Internalization Processes in Self-Construal

As the preceding discussion illustrates, much research in social psychology has examined how the sense of self is constructed through the application of self-inference rules to currently accessible self-knowledge. Less research has been conducted, however, to examine the source of these self-inference rules, or the manner in which they are represented in cognitive structure. We might benefit from considering Allport's (1968) definition of *social psychology* as "an attempt to understand and explain how the thought, feeling, and behavior of individuals are influenced by the actual, imagined, or implied presence of others" (p. 3).

Consistent with this definition, many psychologists—from symbolic interactionists to psychodynamic theorists to social constructionists—would maintain that a primary influence on all human cognition is the person's interpersonal and communicative context. The general notion of cognitive tuning (Zajonc, 1960), for example, holds that the information one attends to and remembers about some experience is often shaped by anticipated communications. People preferentially notice information that is particularly relevant to or consistent with the opinions of someone they will be conversing with later (e.g., Higgins & Rholes, 1978; Zimmerman & Bauer, 1956; see Levine, Bogart, & Zdaniuk, 1996, for a review). The effect is not

limited to only anticipated communications: When they do converse, people try to develop together a common evaluative and narrative construction of events in order to produce a shared reality (Hardin & Higgins, 1996; Newcomb, 1953).

It is thought that self-experience is particularly susceptible to cognitive tuning effects, as people's self-views are strongly influenced by how they would be perceived, evaluated, and responded to by others (Mead, 1934). When people describe themselves, for example, the categories and characteristics they select from their pool of self-relevant information tend to be those that are accessible as a result of a recent conversation, even if that conversation was with a recent acquaintance (Deutsch & Mackesy, 1985). Self-presentation research (e.g., Snyder & Higgins, 1988; see also Hilton, 1990) has shown that the information and memories one focuses on and the attributions one makes when thinking and talking about oneself are susceptible to audience effects; in this view, causal attributions are portrayed as primarily accounts or excuses prepared for some listener, rather than strictly as explanations constructed to be veridically representative of reality. Thus, the story one tells about oneself depends on the person one is presenting to and the kind of self-image one can negotiate with that person (Gergen, 1984; Hermans, 1996).

The assumption of most theories is that the impact of audiences is not merely short-term and limited to public displays, but rather that over time audience effects in self-construal can have a lasting impact on the private self, as habits of communication become habits of thought (Vygotsky, 1978). This process of internalization is not well understood, however, perhaps because many models of internalization do not lend themselves to the generation of researchable hypotheses. One line of research in social cognition that is attempting to redress this situation focuses on *relational schemas*, or cognitive structures representing regularities in patterns of interpersonal relatedness (Baldwin, 1992).

Relational schemas are seen as comprising a schema for self, a schema for other, and an interpersonal script (Abelson, 1981) for a pattern of interaction that routinely occurs between self and other. As one gets to know someone else, one learns to anticipate how the

person will act in certain situations and how he or she will react to one's own behaviors. The interpersonal script component of a relational schema is theorized to be composed of knowledge about likely sequences of action, represented as if–then contingencies. A woman might learn in her interactions with her husband that "If I get angry, then he will treat me with respect." A man might develop a relational schema for interactions with his boss, to the effect that "If I work late in the evening, then my boss will smile at me and call me a good worker." A graduate student might learn an interpersonal pattern that "If I do not speak clearly and firmly, then my advisor will dismiss me as incompetent." A golfer might learn that "If I gloat about my achievements, then my brother will put me in my place." Scripts such as these can represent interaction patterns anticipated in relationships in general, or in specific relationships or contexts.

These if–then expectancies for interaction may prove to be the critical link between interpersonal experiences and self-construal. As the above examples illustrate, scripts include expectancies for social feedback, which embody procedures for how one's behavior and outcomes tend to be interpreted in the context of a certain relationship. A person might learn to anticipate, for example, that task performances tend to lead to criticism and rejection by significant others. Smith et al. (1992) gave the example of a child whose achievements have been evaluated and criticized repeatedly by perfectionistic parents. They suggested that these experiences might lead the child to learn an inference procedure in which a specific behavior (e.g., "I did not get an A on a test") automatically activates a trait (e.g., "failure"). On the basis of this overlearned expectancy, the child might monitor his or her task performances, mentally simulating others' likely reactions to determine whether others would perceive any signs of failure. This high degree of accountability (Tetlock, 1992) might lead the child to develop a degree of performance anxiety and to avoid difficult tasks. The child might also learn a communicative script that "If I admit to my failures, then they won't criticize me." Scripts such as these would shape the types of self-characterizations people are willing to entertain.

In the same vein, Vallacher, Wegner, and Hoine (1980) wrote

> Betty, for example, may have learned to discount all positive feedback from Mom and Dad ("You're such a nice little girl") because it was invariably followed by a negative "punchline" ("What'd you say your name was again?"). In effect, she developed a rule for processing parental feedback that could cause problems later should she try to process all self-relevant information in this way. Marriage proposals might lead her to anticipate divorce proceedings (pp. 253–254).

The suggestion is that people's if–then rules of self-construal (e.g., "If I make a mistake then I am incompetent and unworthy") derive in large part from if–then expectancies about interpersonal interaction (e.g., "If I make a mistake then others will criticize and reject me"); thus, a central type of cognitive structure contributing to self-construal is the relational schema. An advantage of formulating the hypothesis in this way is that various known characteristics of cognitive structures—such as accessibility, spreading activation, and so on— can be hypothesized to factor into the self-construal process and research models and methodology can be used to explore this process in depth. I describe some of my own research into issues of representation and activation of relational schemas.

Cognitive Representation

One way to examine the if–then interpersonal expectations people hold is simply to ask them. Recent research into people's working models of attachment, for example, suggests that insecure self-esteem is rooted in the sense that others are unloving and unresponsive to one's needs. In one study (Baldwin, Fehr, Keedian, Seidel, & Thomson, 1993), my colleagues and I asked people of different chronic attachment orientations to report how they thought a romantic partner would react to them if they were dependent or sought increased closeness. Insecurely attached individuals were more likely than securely attached individuals to report, "If I try to get closer to my partner, then he/she will reject me."

Self-report studies have some well-known limitations because people may not be able (or willing, perhaps) to report on their implicitly held interpersonal expectations. Many of the self-report findings, however, have been sup-

ported by reaction-time research (e.g., Baldwin et al., 1993, Study 2) based on the notion of spreading activation. In the lexical decision task commonly used in cognitive psychology, the participant reads a prime word (e.g., *doctor*) on a computer screen and then seconds later has to identify whether a target letter string that follows (e.g., *nurse*) is a word or nonword. Quicker reaction times are interpreted as revealing an associative link between the concepts, such that when one is primed the activation automatically spreads to the other. Recently Baldwin and Sinclair (1996) used the lexical decision paradigm to study the if–then interpersonal expectations held by people with chronic low self-esteem. Many models of self-esteem hold that chronically low self-esteem is derived from the expectation that interpersonal approval is largely contingent on one's successes and failures: If one succeeds, people will be friendly and affectionate, but if one fails, people will be critical and rejecting. Congruent with the theory, low self-esteem individuals were particularly likely to automatically associate failure with social rejection, as evidenced by quicker reaction times to identify target words such as *dislike* or *contempt* after having been exposed to prime words such as *failure*.

This finding implies that one cognitive mechanism leading to negative self-esteem is the automatic spread of activation from thoughts of failure to feelings of being unlikeable or contemptible. This activation likely occurs implicitly, without explicit awareness of the relational assumptions underlying the affective reaction. Indeed, as shall become apparent, the self-evaluative impact is often strongest when explicit awareness is kept to a minimum.

Construct Accessibility

As mentioned earlier, people's sense of self tends to show a degree of malleability (Markus & Kunda, 1986), as both declarative and procedural knowledge can vary in their cognitive accessibility (Higgins & Chaires, 1980; Sedikides & Skowronski, 1991). The notion that self-construal procedures are rooted in relational schemas leads to interesting hypotheses about variability in the sense of self. As James observed, a person "has as many different social selves as there are distinct groups of persons about whose opinions he cares" (James, 1890, p.

282). Similarly, Zimmerman and Bauer (1956) suggested that "the group which a person 'carries around in his head' as a potential prospective audience may be a significant factor in the way in which he perceives, organizes, and uses new information" (p. 239). Thus, any particular self-construal rule may be influential only to the extent that the underlying relational schema is cognitively accessible, and the significant other is activated as an imaginary or "private audience" in the back of the person's mind (Baldwin & Holmes, 1987). The unfortunate child described by Smith et al. (1992) might be particularly likely to be upset by not getting an A on a test if recently reminded of his or her hypercritical parents, for example.

It follows that the standards used in self-evaluation should derive from an activated relational schema. The following study (Baldwin & Holmes, 1987, Study 1) supports this: Undergraduate women were asked to visualize either their parents or their campus friends, and 10 minutes later, in a different context, were asked to rate the enjoyableness of a sexually permissive story. Their self-regulatory behavior did reflect a concern with the standards associated with the activated relationship—they were much less enthusiastic about the sexual passage if they had recently been reminded of their (presumably relatively conservative) parents.

It is not likely that priming effects such as these can be interpreted as merely reflecting some sort of consciously selected communicative strategy. To date, three studies have shown that self-evaluations can be influenced even by interpersonal primes that are presented subliminally. Baldwin, Carrell, and Lopez (1990, Study 2), for example, found that practicing Catholic women who had read a sexual passage rated themselves more negatively after a tachistoscopic presentation of a scowling picture of the Pope. Similarly, graduate students rated their own research ideas more critically after a subliminal presentation of a scowling picture of their department chair (Baldwin et al., 1990, Study 1; see also Baldwin, 1994; Pierce & Lydon, 1997).

Similar priming effects also have been observed in reaction-time paradigms. In a follow up to the lexical decision studies described earlier, Baldwin and Sinclair (1996, Study 3) found that people in general— irrespective of their chronic level of self-

esteem—showed more evidence of if–then, failure–rejection contingencies when tested shortly after visualizing a significant other who tended to be highly critical. Thus, the types of primes that typically produce negative self-evaluations do indeed activate if–then scripts of interpersonal evaluation.

Construct Application: Assimilation Versus Contrast Effects

Priming research typically has shown assimilation effects: that is, activated structures tend to facilitate the processing of consistent information, leading to judgments that are similar to the prime. A person primed with a critical significant other, for example, will tend to focus on negative information and be more self-critical during subsequent tasks. The assumption here is that the if–then interpersonal expectation functions implicitly, outside of awareness, to shape the person's attention and inferences in certain ways.

This effect has proven fairly reliable as long as the prime is kept unobtrusive, subtle, or subliminal. In social–cognitive work on contrast effects, however, Martin (1986) proposed that if people are aware that a recent prime might be affecting their thoughts and feelings about some attitude object, they often will attribute their current state to the prime and adjust their perceptions accordingly. In other words, they will cease to use their affective responses as a tool for interpreting the target stimulus (Jacoby & Kelley, 1987). In the impression formation literature, for example, Strack, Schwarz, Bless, Kubler, and Wanke (1993) found that if people are primed with a trait name (e.g., hostility), their impressions of an ambiguous target person are consistent with the prime (e.g., they see the person as hostile) unless they have been reminded of the priming event—in which case their ratings show a contrast effect (i.e., they see the person as nonhostile).

Indeed, research (e.g, Baldwin, 1994; Baldwin & Holmes, 1987) has shown that some people some of the time—particularly those with high self-esteem in situations when they can focus their attention on a critical other, and attribute negative evaluative reactions to something about the person's judgmental personality—are able to defend against the impact of critical others, even showing reports of height-

ened self-esteem. In other conditions, however, when their attention is not focused explicitly on the primed interpersonal context, people seem much more likely to use the self-inference rules embodied in that context.

More specifically, some research has shown that interpersonal primes tend to have particularly strong self-evaluative effects when the person is highly self-focused. Dozens of experiments in the self-awareness literature have shown that people are more likely to evaluate themselves carefully when their attention is somehow focused on themselves, for example, by being seated in front of a small mirror (see, e.g., Duval & Wicklund, 1972). Studies have examined people's use of self-evaluative standards, showing that self-aware individuals are particularly likely to seek out and use relevant standards in assessing their performance (Carver & Scheier, 1981). In one study that combined self-awareness with interpersonal primes, Baldwin and Holmes (1987, Study 2) had participants perform a guided visualization exercise in which they imagined being with either someone who accepted them unconditionally or else someone whose liking for them was highly conditional on success and achievement. Later, participants who failed at a task tended to evaluate themselves according to how they would be appraised in the recently activated relationship. If they had recently been reminded of a judgmental, conditional relationship, for example, they showed more negative self-evaluations. Importantly, though, in both this and other similar studies (Baldwin, 1994, Study 2; Baldwin & Holmes, 1987, Study 1), the self-evaluative effects of activated interpersonal contexts were either stronger or only evident for participants whose level of self-awareness had been raised. People who had failed a task, for example, only evaluated themselves according to the procedures of a primed relationship if they also were seated in front of a mirror. Low-self-aware control participants were less likely to be influenced, occasionally even showing a pattern of responses opposite to the self-aware subjects. I have argued elsewhere (Baldwin, 1994) that it is particularly when people's attention is focused on themselves that their expectations of interpersonal feedback recede into the "back of their mind," and are then used implicitly as tools for thinking about the self. Conversely, becoming explicitly aware of the prime can allow them

to discount or compensate for the effects of the primed relational schema (cf. Jacoby & Kelley, 1987).

This study is particularly relevant to the current discussion, as the dependent measures were designed to assess rather directly the various self-inference procedures that might underlie participants' self-evaluations. After they completed the extraordinarily difficult memory task, self-aware participants were asked how they thought "other people" would perform on the task. Those who had been primed with a noncontingent, accepting relationship tended to estimate that others would also do rather poorly, thereby establishing a social comparison standard that would let them feel they had done acceptably well. Similarly, these same participants attributed their own poor performance to "something about the situation" rather than to "something about me." These patterns of inference seem clearly derived from the primed interpersonal structures, thus reflecting the kind of responses a noncontingently accepting person might make in such a situation. Conversely, those participants who had visualized a contingently accepting person were particularly likely to overgeneralize, drawing general conclusions about themselves on the basis of single negative outcomes—not unlike the way chronically self-critical and depressed individuals evaluate themselves (Beck, 1967), and, as it happens, not unlike the way depressed individuals' spouses evaluate them (Hooley & Teasdale, 1989).

Learned Associations and Cued Activation

Daily life may occasionally include priming events similar to those in the research cited: One might receive a telephone call from one's mother or see one's clergyperson on the street. It is likely that interpersonal structures become activated in a number of other ways as well. For example, as the notion of transference suggests, a single salient aspect of a new person or relationship might trigger an entire relational schema that shares that aspect. Lewicki (1986) had experimental participants interact with an unpleasant, insulting confederate who had short hair and thick glasses. Some time later, the participant walked into an office with two receptionists, one of whom had short hair and thick glasses and thus resembled the obnoxious

confederate from the earlier encounter. Participants were far more likely (than controls who had had no earlier interaction) to walk toward the long-haired, glasses-free receptionist. The activation of person schemas and interpersonal expectancies on the basis of such resemblances has continued to receive research attention, support, and clarification (e.g., Andersen & Cole, 1990; Andersen & Glassman, 1996; White & Shapiro, 1987).

Recent research projects have been based on a related idea that interpersonal structures may be triggered by contextual and incidental cues in the environment, such as a whiff of a familiar perfume or the ring of a school bell. One set of three studies involved attempting to create new associations using simple classical conditioning paradigms (Baldwin, Granzberg, & Pippus, 1997). In the first phase of the study, the participant was exposed to pictures of accepting or rejecting faces, which were signalled each time by neutral stimuli such as doorbell sounds generated by a computer. Later, he or she performed a difficult task while one of the conditioned sounds or a novel tone sequence was played in the background. The results have shown an impact of the conditioned stimuli: Participants with chronic low self-esteem showed heightened anxiety and performance deficits when the tone they heard had been paired with an experience of disapproval, which is consistent with what would be predicted based on previous research. As in other priming studies, participants with chronic high self-esteem showed the opposite, defensive, response: The "disapproval" tone actually led to greater effort and concentration, and more positive self-evaluations.

Discussion

I have sought to make the case that if–then rules for self-inference not only derive from, but may remain embedded in cognitive structures representing if–then expectancies of interpersonal interaction. Elements of this hypothesis have received fairly clear support in research employing a range of methods. Spreading activation paradigms, for example, have revealed the automatic if–then expectations people have about significant others' responses, and have shown a link between such feedback expectancies and people's chronic level of

self-esteem. Priming studies have shown that these relational schemas, when activated, can shape the way a person thinks about the self, for example with regard to the standards (e.g., content, demandingness) and style (e.g., attributional style, degree of overgeneralization) of self-evaluation. Consistent with the general social psychological literature on construct priming, self-evaluations in priming studies tend to be consistent with the activated structure except under conditions when the individual can explicitly focus on the prime and attribute his or her feelings to the nature of the prime rather than to the self. Finally, recent research has examined different types of cues that can trigger specific relational schemas, giving rise to a degree of variability in the sense of self.

Although it is clear that relational schemas influence self-construal, still more focused experimental research is called for to elucidate how specific procedures of self-construal derive from specific if–then interpersonal structures. For example, might it be possible to prime, in a similar fashion, procedures for self-attribution, social comparison, or self-perception? Would reminding a person of a significant other who tends to make dispositional attributions from single behaviors lead the individual to make similar inferential leaps in perceiving self, such as inferring a deep love for brown bread from a single choice at the grocery store? The research reviewed here suggests that any number of inference procedures might be represented in relational schemas, and so should be subject to the basic social cognitive principles of knowledge representation, activation, and so on.

The various priming studies reviewed add to the literature on the malleability of the working self-concept (Markus & Kunda, 1986), showing that the sense of self can vary as a function of what relational schema is currently activated. At the same time, the findings also suggest reasons for the degree of stability that does exist in people's sense of self. One could hypothesize that stability in the working self-concept derives from a self-schema, that is, a well-organized network of declarative knowledge about characteristics of the self (e.g., male, professor, likes tennis), but some research has questioned the validity of this assumption (e.g., Higgins & Bargh, 1987; Higgins, Van Hook, & Dorfman, 1988). Instead, it may be that stability in the working self-concept more accurately reflects

stability in the procedures that are used in self-construal (see Strauman, 1996; Turner, Oakes, Haslam, & McGarty, 1994, for similar views). In the depression literature, for example, there is evidence that depressed individuals have negative views of self, and that such views seem to be organized in such a way as to produce self-schematic effects on memory (e.g., Kuiper, MacDonald, & Derry, 1983). In addition, though, others have stressed the use by depressed individuals of dysfunctional procedures for construing self and others. Kovacs and Beck (1978), for instance, review the impact of maladaptive thought processes in which experiences of failure are taken as evidence of blameworthiness, or negative events are magnified in importance. Kuiper and Olinger (1986) note that the dysfunctional attitudes that seem to covary with depression can be expressed as if–then contingencies, for example "If I do not perform as well as others, it means that I am an inferior human being" (Beck, 1967; Teasdale, Taylor, Cooper, Hayhurst, & Paykel, 1995). In another domain of psychopathology, Vitousek and Hollon (1990) suggest that the cognitive structure contributing to eating disorders may not be declarative propositions such as "I am too fat," but rather may be conditional statements of the form, "If I am thin, then I can. . . ; If I am fat, then I cannot. . . ." These and other arguments led Markus (1990) to conclude that "Conditional statements like this may be at the heart of all self-schemas" (p. 245).

If conditional statements are at the heart of self-construal, understanding stability in self-experience requires an understanding of stability in construal procedures, which, in turn, may derive from stability in the activation and application of relational knowledge. Someone who chronically adopts an overgeneralizing self-evaluative style, for example, is hypothesized to be repeatedly activating a relational schema—with its associated episodic, semantic, and procedural knowledge—representing hypercritical relationships. If so, therapeutic approaches should be most successful to the extent that they modify the individual's interpersonal knowledge structures. That is, changing a person's dysfunctional attributional style or self-evaluative standards would require changing the person's private audience—the relational schemas that tend to be activated and the self-inference procedures that are embedded in those interpersonal structures. Some excellent theoretical work (e.g., Andrews, 1989; Brewin, 1989; Nasby & Kihlstrom, 1986; Strauman, 1996; Turner, et al., 1994) has identified interpersonal and intrapsychic factors contributing to rigidity in relational schemas, and has pointed the way toward principles of modifying activation patterns or creating new private audiences that can be adopted as alternative "inner voices" (H. J. M. Hermans, personal communication, January 17, 1997). Martin and Sugarman (1997) have examined this process in the therapeutic context; much more work remains to be done in the experimental laboratory to further identify the representational and procedural mechanisms of schema change. Research on cued activation and assimilation-contrast effects, for example, might elucidate how people can change or control the way relational schemas are activated and applied when they think about themselves. I know of one golfer, for example, who would like to be able to play with self-confidence—even after something reminds him of his brother.

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