

CHAPTER 2

Shared Reality How Social Verification Makes the Subjective Objective

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You accept my verification of one thing. I yours of another. We trade on each other's truths.

—*W. James (1907/1992)*

Once a value is standardized and becomes the common property of a group . . . it acquires objective reality.

—*M. Sherif (1936)*

Human consciousness is not an inchoate flux of colors, sounds, tastes, and odors. Instead, people experience the world as a palpable whole, real and organized, despite all its kaleidoscopic complexity. This fact has puzzled many a student of the human condition—and there are nearly as many explanations for it as there have been theorists to consider it (James, 1890). Although contemporary psychological theory focuses most on individually held and maintained cognitive structures to account for the individual's grasp of reality, we offer a hypothesis congruent with social psychology's renewed emphasis on the social bases of cognition (e.g., Brewer, 1988; Higgins, 1981a, 1992a; Levine, Resnick, & Higgins, 1993; Oakes, Haslam, & Turner, 1994; Ostrom, 1984; Resnick, Levine, & Teasley, 1991; Schwarz, 1994). It is informed by insights of the North American pragmatic tradition, classic social-psychological theory, and empirical findings suggesting that even basic cognitive processes are defined by the social activities in which they are manifested. In particular, we suggest that in the absence of social verification, experience is transitory, random, and ephemeral, like the flicker of a firefly. But once recognized by others and shared in an ongoing, dynamic process of social verification we term "shared reality," experience is no longer subjective; instead, it achieves the phenomenological status of objective reality. That is, experience is established as valid and reliable to the extent that it is shared with others.

The notion that social verification is crucially involved in the construction of individual experience is hardly new, for the social-psychological tradition is replete with theoretical statements and empirical demonstrations that are directly derivative of the assumption (e.g., Asch, 1952; Cooley, 1902; Dewey, 1922/1930; Durkheim, 1897/1951; Festinger, 1950; Heider, 1958; Kelley, 1967; Kelman, 1958; Lewin, 1931; Marx & Engels, 1846/1970; Mead, 1936; Rommetveit, 1974; Schachter, 1959; Sherif, 1936; Weber, 1971). However, despite the distinguished tradition, the idea has maintained an almost ghostly presence, subsisting in the background of the workaday theories that have dominated social psychology, seemingly everywhere and nowhere at the same time.

It is our goal to draw on this tradition and extend it by formulating the hypothesis of shared reality in such a way that it may be meaningfully used to empirically engage significant issues in social psychology. In so doing, it is necessary first to contrast our formulation of shared reality with its most important precursor, the theory of social comparison (Festinger, 1950, 1954). In it, Festinger described the conditions in which people are most dependent upon others for their own understanding. Social comparison theory rests on the assumptions that (1) social comparison processes are initiated when external reality is ambiguous and difficult to grasp; (2) a dualism between physical and social realities exists; and (3) physical reality takes precedence over social reality. As Festinger (1950) summarized, "where the dependence upon physical reality is low, the dependence upon social reality is correspondingly high" (p. 272).

The hypothesis of shared reality represents a crucial extension. Following the pragmatic tradition, shared reality assumes no distinction between "physical" and "social" realities (Dewey, 1929/1958; Mead, 1936; see also Moscovici, 1976; Tajfel, 1972). Instead, we postulate that any experience—ranging from the immediate tactile sensation of a stone to the abstract understanding of a philosophical concept—survives as a reliable, valid, and predictable state of the world to the extent that it is socially verified. Furthermore, although social comparison theory has since been developed most in terms of its self-assessment functions (see Taylor, Buunk, & Aspinwall, 1990), we argue that shared reality's functions extend well beyond self-understanding, and are orthogonal to issues of ego protection. Indeed, we offer evidence that in some circumstances shared reality can function at the expense of self-regard.

In another relevant formulation, Rommetveit (1974) has argued that the goal of even the most common social interaction is to establish a mutually shared social reality or "intersubjectivity" (cf. Schutz, 1962). However, his emphasis is on the great difficulty of calibrating discrepant individual subjectivities. In contrast, we propose that any sustainable individual understanding is itself predicated on shared reality. We suggest throughout the chapter ways in which the hypothesis of shared reality may be employed to understand the dynamics of individual understanding, including its maintenance in the face of newly posed conflicting or otherwise discrepant alternatives.

In sum, we argue that the hypothesis of shared reality can function as a generative hypothesis that engages a broad array of social-psychological issues—

by complementing existing theory, as well as by generating unique and compelling empirical predictions. We develop the hypothesis of shared reality by examining classic research and theory in social psychology as well as more recent research, especially that which has been motivated by an appreciation for the role of communication processes in social cognition. We review several extant literatures which lend support to the hypothesis that shared reality creates meaning for the individual by delineating the form and function of the external world, and suggest several implications of the hypothesis for a variety of topics, including stereotyping, the self, language, attitudes, and persuasion. In addition, we present new evidence from our own experiments that elucidates the role of shared reality in social judgment as well as the experience and regulation of the self. Our review suggests that (1) experience of reality or meaning is created and maintained for the individual when it is mutually shared with others; (2) social interaction is predicated upon and regulated by the establishment of shared reality; and (3) the shared reality that is achieved in social interaction in turn functions to regulate the self, closing the self-society circle.

FUNCTIONS OF SHARED REALITY

It is individuals with this particular capacity to turn toward one another who in concrete action validate and consolidate in each a *mutually shared field*, one that includes both the surroundings and one another's psychological properties as the objective sphere of action.

—S. Asch (1952)

An opinion, a belief, an attitude is "correct," "valid," and "proper" to the extent that it is anchored in a group of people with similar beliefs, opinions, and attitudes.

—L. Festinger (1954)

In a discussion of hermits, castaways, and other social isolates, Cooley (1902) concluded that the individual completely divorced from social contact quickly loses its human grasp of the world, understanding no more than an "intelligent animal," with the capacity to respond to little but immediate situational contingencies. Skinner (1957) punctuated a similar discussion by relating this anecdote: "An experiment appears to have been tried by Frederick the Great in which children were reared in isolation with the object of discovering whether they would naturally speak Hebrew. The experiment failed when all the subjects died" (p. 462).

We share the belief that social verification processes are crucial—perhaps even necessary—to establish and maintain individual understanding, and illustrations of shared reality in everyday life are numerous and familiar. Children's development is dominated by the establishment of consensus about the ways, whats, and whys of the world, as any parent can testify. The achievement of the

basic vocabulary through naming is a ubiquitous example, in which parents and children collaboratively establish agreement about "how a thing shall be called" (Brown, 1958). The process is hardly one-way, for serendipitous utterances by children (e.g., "nana" for "nanny" or "munchkey" for "monkey") are often selected and subsequently used by parents and friends, and hence become meaningful realities for the group. The process of shared reality also may be seen in children's interactions with one another. For example, one of us recently observed his young daughter participate in a lengthy discussion with her friend about whether a toy animal was a porcupine or a skunk. Although each began the interaction with a different opinion about the name of the animal, they were unwilling to proceed with their play until they reached consensus about what they were playing with. Instructively, their negotiation appeared to have little to do with persuasion on the basis of accuracy, truth, or power; rather, it was dominated by heartfelt entreaties for consensus, apparently for its own sake. As one said to the other, "Agree with me, please!"

Shared reality is also illustrated by "consciousness raising," which suggests that even the experience of one's own oppression is qualitatively changed when it is shared with others. For example, until the experience is socially recognized and shared, women understand their own discomfort with sexual harassment, including rape, as a subjective quirk about themselves rather than as a problem that exists with objective reality for themselves and others. As Mackinnon (1989) summarized, the consciousness-raising process

redefines women's feelings of discontent as indigenous to their situation rather than to themselves as crazy, maladjusted, hormonally imbalanced, bitchy, or ungrateful. . . . Consciousness raising, through socializing women's knowing, transforms it, creating a shared reality that "clears a space in the world" within which women can begin to move. (pp. 100-101)

Consciousness raising not only functions within tightly knit groups of people, but can also take place with remarkable rapidity and coherence at the cultural level, as illustrated by the recent establishment of "sexual harassment" in the national consciousness in the widely discussed confirmation hearings of U.S. Supreme Court Justice Clarence Thomas. For many who previously "just didn't get it," the discourse newly established sexual harassment as a set of particular behaviors that had once been unknown, unacknowledged, or (for many) understood in terms of a quite different reality—that is, an inherent and acceptable part of romantic courtship.

Interestingly, the very etiology of the words "subjective" and "objective" reflects a long-standing appreciation for the role of social verification in the status of experience. According to the *Oxford English Dictionary* (1971), both words are rooted in late Latin and have come to signify an elementary distinction between kinds of knowledge. Whereas "subjective" refers to solipsistic experience known only to the individual mind, "objective" refers to 'things' or 'realities' that are known to exist independently of the individual and can be observed by others.

More recently, in the history of science, objective is used to refer to phenomena that can be verified by other scientists. Hence, even the common English lexicon reflects the recognition of the distinction between experience that is shared and unshared.

A Classic Experimental Demonstration of Shared Reality

We believe that one of the best examples of the role of shared reality in the creation and maintenance of individual experience is found in Sherif's classic autokinetic experiments (reviewed in Sherif, 1936). In them, a fixed point of light exposed to subjects in a completely darkened room appears to move with an erratic quality, often attributed to saccadic eye movement (Gregory, 1966). In the basic paradigm, subjects are told by the experimenter that the light may appear to move, and that their task is to judge the direction and magnitude of the movement.

Sherif initially compared the autokinetic effect as it manifested for subjects "alone" versus those in groups of other subjects. Results indicated that the judgments of each subject who worked only with the experimenter clustered around a central tendency, and that there were individual differences across subjects. However, when subjects subsequently performed the task with others, their individual judgments converged to form a group norm. When subjects began the task in a group, convergence was even greater, and the number of trials necessary for the norm to be established was smaller. Follow-up studies have demonstrated that the shared reality created by the groups survives across generations of subjects, indicating that once a shared reality is achieved, it can be maintained with stability long after the originators of the norm have gone (Jacobs & Campbell, 1961; Weick & Gilfillan, 1971). Importantly, significant variation among group norms is typically observed, suggesting that the subjective becomes objective through whatever consensus happens to develop. In this case, the shared reality established by the groups has a relatively arbitrary relation to the external physical stimulus, just as the word "dog" no better represents a slobering four-legged creature with tail away than the word "chien"—suggesting that functions of shared reality are not limited to issues of accuracy or "truth" (cf. Festinger, 1950, 1954). Nevertheless, social consensus about "what it is," "how it functions," and "what it is called" are vital predicates for social interaction and the individual's own hold on reality.

Several additional aspects of the Sherif findings are germane to the hypothesis of shared reality. First, the subjects did not understand their experience in terms of conformity, but rather described their judgments as reflecting their actual perception of reality. Subjects denied that they were merely going along with their colleagues, but instead insisted that they were expressing their true experience (Sherif, 1936). Indeed, one of us participated in an autokinetic experiment as an undergraduate and can provide further testimony to the felt reality of the experience.

Most importantly, all evidence suggests that the experience was modulated by being shared with others. The creation and maintenance of the group norms are the most celebrated aspects of these experiments, and they clearly demonstrate how individual experience is constructed through public communication and social verification. Equally persuasive evidence is found by considering the experience of subjects who participated "alone." Of course, subjects did not perform the task in solitude, but in full collaboration with the experimenter. Hence, the situation involved a mutual understanding of the experimental 'theatre' and its concomitant roles, perspectives, and tasks (e.g., Goffman, 1959; Higgins, 1992b; Schwarz, 1994). In particular, the experimenter expressly implied that subjects would see the light move, and each subject's public expression of his or her experience was duly accepted by the experimenter (cf. Grice, 1971; Schwarz, 1994).

Even the identification of conditions in which there was no convergence to group norms suggests the operation of shared reality. For example, Spertling (1946) found that no convergence toward a confederate was observed for 60% of the subjects who were told that there was no objective movement but instead that whatever movement they saw was entirely subjective. In this case, subjects may be said to have achieved shared reality with the experimenter, who was the legitimate authority in the situation. Not only was it the shared reality that subjects might differ from the confederate, but implicit in the instruction was that their judgments should differ. Further, even when subjects were told that there was no objective movement, they were still required to tell what the stimulus looked like to them, hence establishing a shared reality that afforded disagreement about the particulars of the movement but still suggested that movement would be observed. Finally, it is important to point out that the remaining 40% of the subjects did exhibit the usual convergence effect. Their explanation? They did not believe the experimenter. Consistent with the assumption that shared reality is necessary to maintain belief in the veracity of experience is the possibility that these subjects brought with them knowledge previously shared with other students (or perhaps their psychology instructor) that experimenters tend to lie (cf. Kasin, 1979).

This latter finding illustrates two additional points. First, many experiences and beliefs have a history of being shared with significant others, and thus may be relatively resistant to challenge by new information. Indeed, we review evidence suggesting that once shared reality has been achieved, participants act in ways that protect and maintain it. The second and related point is that there are many situations in which previously or currently shared realities may be in conflict. For example, one may grow up sharing the reality with a religious authority that alcohol is uniformly unhealthy, but later in life may come to share the conflicting reality with a medical authority that a glass of wine a day is beneficial to the circulatory system. This possibility raises interesting questions about how multiple competing shared realities are managed in the regulation of social interaction and individual experience. A full description of the conditions in which one shared reality versus another will be adopted and maintained

as veridical for oneself awaits direct research at present, but inasmuch that follows we offer speculations based on existing evidence concerning how conflicting shared realities may be managed in the course of social interaction.

Shared Reality in the Genesis of Experience

We believe that the social construction of experience demonstrated in the Sherif (1936) experiments epitomizes the more general claim of shared reality. As such, the hypothesis of shared reality adopts the pragmatic assumption that all human experience is defined in the dialectical relation between the human organism and its environment—in particular, as mediated by social conventions including (but not limited to) language (e.g., Dewey, 1922/1930, 1929/1958; James, 1909; Mead, 1932, 1934, 1936, 1982). As Dewey (1929/1958) wrote:

Without language, the qualities of organic action that are feelings are pains, pleasures, odors, colors, noises, tones, only potentially and proleptically. With language they are discriminated and identified. They are then "objectified"; they are immediate traits of things. This "objectification" is not a miraculous ejection from the organism or soul into external things, nor an illusory attribution of psychological entities to physical things. The qualities were never "in" the organism; they always were qualities of interactions in which both extra-organic things and organisms partake. (pp. 258-259)

The hypothesis of shared reality is consistent with the common assumption that the functional properties of the world, such as values, beliefs, attitudes, and self-conceptions, are constructed through the individual's interactions with society (e.g., Triandis, 1989; Markus & Kitayama, 1991; Moscovici, 1993; Shweder & LeVine, 1984). For example, Berger and Luckmann (1966) have argued that the individual's understanding of the world emerges both through the internalization of its culture's world view as well as role-specific knowledge and vocabularies. Social currencies, including language, religion, values, vocation, economic status, and roles, act in concert to provide the reasons for being and doing. In addition, new contents of socialized knowledge come to be experienced as immediate reality by linking new roles and identifications to the known language of culture through ongoing social interaction (e.g., Mead, 1934, 1982; Schutz, 1967).

In addition to its role in defining the functional properties of the world (i.e., why something matters or what its utility is), we believe that shared reality also plays a definitive role in the experience of the stable properties of reality, both through social transmission and through the social construction of direct perceptions.¹ The establishment of reality through social transmission is non-controversial, and merely describes the fact that much of our knowledge is based not upon our own direct experience with a given phenomenon, but instead

comes to be known only through social communication. For example, no one is left alive who witnessed the French Revolution in person, yet virtually every educated person is quite sure that it occurred. Further, individual understandings that are at odds with prevailing knowledge (e.g., denials of the existence of the Nazi-perpetrated Holocaust) are themselves established and maintained through elaborate social networks, which often include books, newsletters, and other group activities.

In addition to social transmission, the stronger claim of shared reality includes the social construction of even direct perceptions, as in the Sherif (1936) study. That is, for one to know that even immediate sensation corresponds to objective reality, it too requires social validation. Many illustrations of how social consensus creates direct experience may be found in the common lexicon, which is itself built of social consensus. For example, it is through social convention that a sofa and a chair are experienced and immediately known as distinctive pieces of furniture. As Helen Keller (1903) wrote in her autobiography, "Everything had a name, and each name gave birth to a new thought." From the perspective of shared reality, Keller's individual experience was qualitatively changed and objectified when her grasp of language catapulted her into a new, socially shared world of tables, chairs, candles, and cakes.

Although such anecdotal examples are striking, it is important to note that the shared reality afforded by linguistic practice has measurable effects on broader populations, both in the laboratory and in everyday circumstances (reviewed in Hardin & Banaji, 1993). Even the temporary instantiation of shared reality through simple labels or linguistic descriptions is implicated in color perception and memory (e.g., Kay & Kempton, 1984; Lucy & Shweder, 1988; Schooler & Engstler-Schooler, 1990), memory for pictures (e.g., Carmichael, Hogan, & Walter, 1932; Daniel, 1972; Santa & Baker, 1975; Schooler & Engstler-Schooler, 1990), problem solving (e.g., Higgins & Chaires, 1980; Schooler, Ohlson, & Brooks, 1993), social perception (e.g., Hoffman, Lau, & Johnson, 1986), and the perception of speech-related sounds (e.g., Nusbaum & Goodman, 1994). Indeed, in a remarkable series of experiments, Moscovici and colleagues have reported findings suggesting that group consensus to call a blue stimulus "green" systematically changes individual perceptions of the afterimage (Doms & Van Avermaet, 1980; Moscovici & Doms, 1981, cited in Moscovici, 1985; Moscovici & Personnaz, 1980; Personnaz, 1981; see also Moscovici, 1985; Sorrentino, King, & Leo, 1980).

A Metaphor for the Functions of Shared Reality

To summarize the functions of consensual social verification in the establishment and maintenance of individual experience, we adopt a statistical metaphor. When an experience is recognized and shared with others in the process of social interaction, it achieves reliability, validity, generality, and pre-

dictability. Further, we suggest that an important corollary implied by the statistical metaphor is that shared reality will assume a prominent place in social regulation.

Reliability

Shared reality functions to establish the reliability of an experience, just as repeated observation of a phenomenon gives it statistical reliability. When an experience is shared, its reliability is demonstrated by its repeated recognition by members of the community who share the perception or belief. As one's experience is recognized by others, one learns that it is reproducible in others, and therefore not random or capricious. As in statistics, the reliability of an experience established through shared reality does not guarantee its "truth" or validity, although validity is predicated on reliability.

Validity

As in the scientific experiment, a basic function of shared reality is to establish that a given phenomenon is valid—that is, corresponds to some objectively real aspect of the world. Reliably shared experience is validated experience. Hence, through social verification, individual experience is transformed from a subjective ephemerality into an objective actuality. Of course, the validity of an experience as established within a given social group does not necessarily mean that this shared reality will correspond to the "facts" that may be known from a different perspective as established by another group. We simply propose that such a shared reality is sufficient to ground the individual's *experience* as veridical of the external world.

Generality

A goal of any scientific theory is to establish some level of generality, for a theory is not a theory if it merely redescribes the specific phenomenon to which it is supposed to apply. Generality is established to the degree that understanding is broader than a particular datum. Likewise, the process of sharing one's experience with others demonstrates directly that the experience is not one of a kind or unique, but that it has a reality that is broader and more general than the immediate moment. It exists across people, time, and particular situations. The generality of an experience, like the generality of a scientific theory, is established to the extent that it is verified by people other than the self (cf. Kelley, 1967).

Predictability

As it does for good scientific theories and statistical analyses, predictability follows from the reliability, validity, and generality that is achieved through shared

reality. Hence, shared reality serves the fundamental epistemic function of facilitating the prediction and control of oneself and one's environment.

Although we have adopted a statistical analogy to help elucidate the functions of shared reality, research on memory suggests that these functions may be more literal than metaphorical. For example, several studies have demonstrated that collaborative recall is more accurate than individual recall (for a review, see Hartwick, Sheppard, & Davis, 1982). Importantly, these findings are not limited to cases involving a division of labor, such as when different memories are distributed among members of a dyad or group (e.g., Wegner, 1987). Even under conditions in which the identical stimulus material is learned, groups outperform individuals on a variety of retrieval tasks, including free recall, recognition, hits, false alarms, and discriminability, as well as confidence in accurate versus inaccurate memories (e.g., Hinsz, 1990; Stephenson, Clark, & Wade, 1986; Vollrath, Sheppard, Hinsz, & Davis, 1989). Further, this research indicates that superior collective memory is achieved through several consensus-based processes. Although groups do generate a larger sample of potential memories, the larger sample in itself does not require that memory will be more accurate, for it could just as well lead to more false alarms (see Green & Swets, 1966; Lockhart & Murdock, 1970). Instead, it appears that consensus about accurate memories is established in groups, whereas little or no consensus is developed about inaccurate memories. Hence, consistent with the functions of shared reality, memories are established as reliable and valid to the extent that social consensus about them is achieved. In contrast, individuals have no comparable basis upon which to discriminate the validity of correct versus incorrect subjectivities. Consistent with the general utility of shared reality, it is not surprising that subjects are more confident about the accuracy of their memories when they have been achieved collectively than individually.

Although this research suggests that individuals operate on the principle that shared reality is accurate reality, this generally adaptive tendency may not yield "truth" in every instance. For example, Lous and Wells (1994) found that witnesses' confidence in the accuracy of their identification of a suspect from a police lineup varied twofold, depending on whether they thought another witness had corroborated their identification. Although the relationship between corroboration and confidence is consistent with the general adaptive properties of shared reality, it did not serve witnesses well in this particular case, for the variation in confidence was completely independent of their objective accuracy.

Social Regulation

A corollary of the statistical metaphor is that shared reality will be regularly realized in ongoing social regulation. Just as statistical models (or scientific theories) regulate the hypotheses addressed, tested, and pursued, the basic functions of shared reality suggest that its achievement should be a dominant regulatory goal of social interaction. That is, to the extent that shared reality is required for establishing the reliability, validity, predictability, and generality of experience,

efforts to establish shared reality should be in ubiquitous evidence in social interaction, and not limited to special circumstances involving highly ambiguous stimuli. In particular, efforts to establish shared reality should dominate social interaction, guiding its course and consequences (see Asch, 1952; Higgins, 1981a; Reiss, 1981; Rommetveit, 1974; Ruesch & Bateson, 1968; Watzlawick, Beavin, & Jackson, 1967).

Communication and Shared Reality

The hypothesis that the individual's grasp of reality is determined by the extent to which it is socially shared implies that communication plays an essential role in human cognition, and, indeed, that it will be impossible to understand individual cognition fully outside the context of ongoing communicative activity (see Fiedler & Semin, 1993; Higgins, 1981a; Krauss & Fussell, in press; Schwarz, 1994). In particular, it suggests that the cognitive system is not just the organ of communication, but instead that social activity and cognition are mutually defined in dialectical relation (e.g., Ostrom, 1984).

In an earlier discussion of the importance of shared reality, the "communication game" approach described the irreducibly social character of communication (Higgins, 1981a, 1992b; Higgins & McCann, 1984). In particular, communication is known (1) to involve shared, rule-governed conventions concerning social roles and behavior (cf. Austin, 1962; Cushman & Whiting, 1972; Gumperz & Hymes, 1972; Peirce, 1940; Rommetveit, 1974; Ruesch & Bateson, 1968; Searle, 1969; Watzlawick et al., 1967); (2) to require cooperative orientation and mutual perspective taking (cf. Cushman & Whiting, 1972; Grice, 1971; Mead, 1934; Merleau-Ponty, 1962; Rommetveit, 1974); (3) to function not only to transmit information, but also to create and define social relationships, with the content and relationship being interdependent (cf. Blumer, 1962; Bolinger, 1975; Garfinkel, 1967; Gumperz & Hymes, 1972; Hawes, 1973; Watzlawick et al., 1967); and (4) to be a socially interdependent process in which the purpose and very meaning of the interchange are collaboratively determined (cf. Blumer, 1962; Burke, 1962; Garfinkel, 1967; Goffman, 1959; Krauss & Fussell, in press; Hawes, 1973; Merleau-Ponty, 1962; Rommetveit, 1974; Watzlawick et al., 1967). Our current position on shared reality takes this approach one crucial step further by postulating that these factors not only characterize communication, but determine the individual's grasp of reality as well. That is, a hold on reality requires cooperative social activity; in particular, consensually validated social roles and relationships are required for the mutual creation, monitoring, and maintenance of the individual experience of reality.

Despite the conspicuous absence of communication as a dominant emphasis in social psychology, increasing numbers of theorists are attempting to integrate the study of communication and social cognition (e.g., Fiedler & Semin, 1993; Higgins, 1981a, 1992a; Schwarz, 1994). Contemporary models of communication focus on processes directly related to shared reality, in their emphases

on perspective taking as well as on the joint construction of meaning (for a review, see Krauss & Fussell, in press). Shared knowledge is constructed in part through a process of reciprocal perspective taking, in which communicators must "take the role or attitude of the other" (Mead, 1934). That is, for communication to proceed effectively, each communicator must experience the situation as it is experienced by the other. In addition, meaning is understood to emerge out of the joint process in which individual contributions are understood within the interaction situation as a whole, arising as speakers and addressees come to agree that a mutually consistent understanding has been achieved (Clark & Brennan, 1991; Clark & Schaefer, 1989; Clark & Wilkes-Gibbs, 1986; Isaacs & Clark, 1987). Hence, much of the research to which we now turn involves the direct examination of communicative interaction.

EMPIRICAL EVIDENCE OF SHARED REALITY

In the experience of conversation, a common ground constitutes itself between the other one and myself, my thought and his make up a single tissue, my words and his are called out by the phase of the discussion, they insert themselves in a common operation of which neither one of us is the sole creator. . . . we coexist within the same world.

—M. Merleau-Ponty (1945)

The paramount fact about social interaction is that the participants stand on common ground, that they turn *toward one another*, that their acts interpenetrate and therefore regulate each other.

—S. Asch (1952)

The achievement of shared reality requires collaboration—in particular, the mutual recognition and verification of experience in ongoing social activity. Evidence suggests that shared reality occurs not only through processes involved in message formulation, but also through the active role recipients play in the selection of particular meanings to achieve shared reality. Perhaps most importantly, evidence suggests that these social verification processes create meaning for the participants, as indicated by effects on perception, judgment, and memory.²

In broad outline, this section is organized heliotropically, in a way we think reflects to some degree the iterative, dialectical relationship between self and society. We begin at the broadest level of social regulation by reviewing evidence that efforts to establish shared reality play a prominent role in communicative activity, as implied by the statistical metaphor. We then discuss evidence that these efforts are met with success. Not only do participants in communicative activity reach consensus, but the shared reality they establish has important consequences for both the recipients and the formulators of messages, implicating shared reality in the creation of meaning for the individual. We then discuss evidence suggesting that shared reality is further implicated in social regulation, particularly in who shares which realities with whom. The heliotrope circles

round again with a discussion of how realities shared both temporarily and chronically in social relationships create and maintain the self-concept. Finally, we present evidence from our own laboratory suggesting that self-concepts with a strong basis in shared reality, in turn, modulate new opportunities for social interaction.

Efforts to Achieve Shared Reality in Ongoing Communication

It has long been observed that social interaction requires taking others into account (e.g., James, 1890; Lewin, 1931; Mead, 1934; Weber, 1967), and moreover, that perspective taking is an essential attribute of communication and emergent meaning (e.g., Bakhtin, 1986; Brown, 1965; Clark & Brennan, 1991; Clark & Carlson, 1982; Higgins, 1981a; Krauss & Fussell, 1991b; Mead, 1956; Rommetveit, 1974; Volosinov, 1986). The symbolic-interactionist movement is probably most closely associated with emphasizing the role of perspective taking in social interaction (e.g., Stryker & Statham, 1985), but theorists of communication have increasingly emphasized the essential role of perspective taking in their models as well (e.g., Clark & Wilkes-Gibbs, 1986; Sperber & Wilson, 1986). In particular, this literature suggests that communicators take into account both relatively stable aspects of one another's perspectives, such as background knowledge and attitudes, as well as more immediate situational factors, such as momentary vantage point and states of current comprehension (Krauss & Fussell, 1988, 1991a)—evidence consistent with the hypothesis that the experience of reality may be shared chronically, through long-standing social and cultural practices and relationships, as well as situationally, through the immediate verification of experiences and attitudes in ongoing social interaction.

Efforts to achieve shared reality are reflected by a variety of linguistic strategies regularly utilized in everyday conversation. Communicators modulate their utterances to elicit specific feedback from their partners that the utterance is mutually understood (see Clark & Wilkes-Gibbs, 1986; Sacks & Schegloff, 1979; for a review, see Krauss & Fussell, in press). For example, "try-markers" (uttering declarative statements as questions) and "installation phrases" (presenting new information in incremental segments) function to elicit confirmation that mutual understanding is accruing (e.g., "The Tarantino film . . . we saw together . . . over Thanksgiving . . ."). Explicit preliminary queries called "pre-sequences" also function to establish that a given body of knowledge is mutually known (e.g., "You know the film about the botched bank robbery?"). Verification that communication is understood is accomplished by various factors, including tone of voice, facial expression, and motor mimicry (e.g., Bavelas, Black, Chovil, Lemery, & Mullet, 1988; Bavelas, Black, Lemery, & Mullet, 1986; Bruner, 1979; Chovil, 1991; Goodwin, 1981), as well as vocal and nonvocal "back-channel" responses like "uh-huh" or head nods (e.g., Duncan & Fiske, 1977; Kendon, 1967; Schegloff, 1982). These strategies not only establish a shared reality that can be assumed and utilized in subsequent interaction, but are em-

ployed in ways that suggest that the ongoing achievement of shared reality is required for communication to proceed at all. Anyone can readily observe this by simply withholding such feedback in conversation. Without feedback, communicators suspend the communication of new information and immediately initiate attempts to rectify the apparent breakdown in shared reality.

Perhaps the most rudimentary way in which shared reality is achieved through perspective taking is when knowledge directly available about another is utilized in communication, such as when communicators modify messages to suit the immediate informational needs of their partners (e.g., Clark & Schaefer, 1987). Although children are not initially adept at such perspective taking, the ability develops rapidly as they mature (e.g., Glucksberg, Krauss, & Higgins, 1975; Higgins, 1977). Even young children will vary their messages to suit the immediate needs of their communication partners. For example, children's messages about identical stimuli are different depending upon whether they are addressed to (1) adults versus children their own age (Sachs & Devin, 1976; Shatz & Gelman, 1973), (2) someone blindfolded versus someone not blindfolded (Maratsos, 1973), and (3) people they know have information in common with them versus those they know do not (Higgins, 1977). Piaget and Inhelder (1956) argued that the ability to appreciate differences between one's own and others' perspectives is a crucial early developmental achievement, and described children's perspective taking in the context of, physically different vantage points. More recent research shows that adult communicators require more time to create messages to the degree that their perspective is different from another's, and that a speaker's descriptions of the relative location of an object are more likely to take the addressee's perspective as the difference in their vantage points increases (e.g., Schober, 1993).

Physical vantage point is not the only directly available information communicators use in perspective taking. For example, Hupet, Seron, and Chantraine (1991) had subject pairs communicate about sets of nonsense figures that varied in terms of their discriminability. Although communicators typically used simple descriptive labels alone when the figures were easily discriminable, they provided supplemental information in addition to the label when the figures were difficult to discriminate. Fussell and Krauss (1989a) found that communicators' descriptions of nonsense figures were over twice as long when they were formulated for the use of other persons than when they were formulated for themselves. Descriptions for others employed commonly known features, such as the geometric elements of the stimuli, rather than idiosyncratic characterizations that would be uninterpretable to others.

Perspective taking also involves inferences about how others will respond to a particular stimulus or situation, and plenty of evidence suggests that communicative behavior reflects mutual efforts to take into account what the participant know, feel, think, and believe (e.g., Manis, Cornell, & Moore, 1974; Zimmerman & Bauer, 1956). Several classic experiments have demonstrated that people can and do adopt the perspectives of others through role taking. For example, Jones and DeCharms (1957) found that subjects' attributions concerning

the personality characteristics of a former prisoner of war who had signed enemy propaganda statements varied, depending upon whether they adopted the role of a friend, an examining psychiatrist, or a member of a military tribunal. Zukier and Pepitone (1984) found that subjects who adopted the role of "scientist" used more ostensibly objective base-rate information in a person judgment task than those who adopted the role of "clinical counselor," who instead employed more personality-based information. Janis and Mann (1965) demonstrated that information learned through role playing has larger effects on subsequent behavior than does equivalent information learned outside a perspective-taking context.

Social categories are a ubiquitous basis for inferences about the perspectives of others. For example, a field experiment by Kingsbury (1968) suggests that communicators act on the knowledge that nonlocals may require more information. Responses to requests for directions were longer and more detailed when the requester was perceived as an "out-of-towner" rather than as a "local" (cf. Higgins, 1977). Communicators proved to be quite sensitive to group membership cues. Asking for directions in a nonlocal accent produced the same results as did explicitly claiming to be from out of town. More controlled laboratory studies have provided corroborating evidence of the use of social category information in the achievement of shared reality. For example, Isaacs and Clark (1987) had participants communicate about New York City landmarks, and found that communicators quickly adapted their expressions to their audience's apparent degree of familiarity with New York City. Fussell and Krauss (1992) found that communicators' prior beliefs about their recipients were correlated with speakers' referential strategies. Communicators provided more elaborate descriptions as the perceived probability that the listener would know the referent's name declined, whether communication involved everyday objects or public figures. Furthermore, the results suggested that social categories were used initially to tailor messages and then adjusted as a function of the ongoing feedback recipients subsequently provided.

A relatively more abstract way in which communicators collaborate in the attempt to achieve shared reality is demonstrated by experiments on "cognitive tuning," which demonstrate effects of the communicative orientation participants adopt early in the communication sequence. In an early study, for example, Zajonc (1960) found that in order to produce clear, concise messages, communicators polarize and distill stimulus information to a greater extent than do recipients, who must remain prepared for a wide range of possible information contained in the message. This effect has been replicated many times, and Zajonc's basic interpretation has been corroborated through direct manipulations of both the speaker's and the recipient's communicative roles, as well as manipulations of both the speaker's and the recipient's expectations of receiving further information (e.g., Higgins, McCann, & Fondacaro, 1982).

In sum, evidence abounds that communicators in both natural and laboratory conditions go to great lengths to ensure that their messages are mutually understood. However, although the ubiquity with which the achievement of

shared reality is attempted provides one index of its importance in the modulation of social interaction, the hypothesis of shared reality is predicated on the actual establishment of shared reality—the issue to which we now turn.

Shared Reality Is Achieved

From the perspective of shared reality, evidence of attempts to modulate communication by taking others into account would be academic if the attempts were not successful. However, evidence suggests that perspective taking is indeed successful in the achievement of shared reality. In an early study, for example, Krauss, Vivekananthan, and Weinheimer (1968) asked subjects to describe color chips either for their own use or for someone else's, and found that the chips were more accurately identified by others when they were originally intended for another person. Mutual understanding was achieved because messages intended for another person employed conventional color terminology as well as comparisons to colors of broadly familiar objects, whereas those intended for the subject's own use were more likely to involve idiosyncratic associations. More recent experiments have also demonstrated that subjects are better able to correctly identify referents of messages intended for another's use than of those intended for personal use (e.g., Fussell & Krauss, 1989a). Further, evidence suggests that shared realities established in ongoing relationships can facilitate subsequent mutual understanding. For example, Fussell and Krauss (1989b) found that descriptions addressed to a specific friend communicated more effectively to that friend than to a randomly selected recipient. Shared reality can be achieved even under conditions that involve highly confusable stimuli. For example, Hupet et al. (1991) demonstrated that establishing efficacious communication required more time and effort when either the discriminability or codability of the stimuli was low than when it was high. By the final trial of the study, however, dyads in all conditions were equally proficient at communicating about the stimuli. The achievement of shared reality has been documented in more ecological conditions as well. For example, SturGIS (1959) found that teachers' knowledge of their students' background was associated with superior learning.

The achievement of shared reality is reflected by a variety of linguistic phenomena—including the fact that indefinite and definite articles distinguish between initial acts of reference and subsequent ones (Linde & Labov, 1975; Osgood, 1971; Sridhar, 1988). Use of the definite article implies that the noun following the article is already known rather than "new" information (e.g., *a boat versus the boat*). Hence, comparing the use of definite versus indefinite articles is one index of the degree to which the information conveyed in communication is assumed to be mutually known. In one study, Hupet and Chantraine (1992) manipulated whether subjects believed they were interacting with the same partner over the course of four trials in which they communicated about a set of nonsense figures. Subjects who believed that they were addressing the

same individual were more likely to use definite articles on subsequent trials than those who thought they were addressing a different partner on each trial.

Given evidence that more communicative activity is required under conditions in which shared reality is difficult to achieve (as indicated by elaborate descriptions, more feedback, etc.), and that communicative behaviors such as comments and questions increase when there is a disconfirmation of expectations (Stamm, 1972) or a deviancy from consensus (Schachter, 1951), the achievement of shared reality is reflected by communicative abbreviation. In particular, several studies have established that communicators' referring messages become shorter with repeated reference to the same stimulus, and that the total number of speaking turns taken by communicators declines over subsequent encounters with the stimulus, both of which indicate when meaning of the reference is mutually understood (e.g., Clark & Wilkes-Gibbs, 1986). For example, Krauss and Weinheimer (1964, 1967) found that when pairs of communicators repeatedly referred to nonsense figures their descriptions became more succinct over successive occasions of mention. This abbreviation phenomenon has been replicated in a variety of studies using nonsense figures, (Clark & Wilkes-Gibbs, 1986; Hupet, Chantraine, & Neff, 1993; Hupet et al., 1991; Wilkes-Gibbs & Clark, 1992), as well as studies employing more everyday objects, locations, and people (Clark & Schacter, 1987; Fussell & Krauss, 1993; Garrod & Anderson, 1987; Isaacs & Clark, 1987; Schober, 1993).

Consistent with the hypothesis of shared reality, research suggests that the maintenance of shared reality requires ongoing social verification. For example, communicators in the Clark and Wilkes-Gibbs (1986) experiment often requested clarifying information and frequently proposed additional details to ensure understanding in the early trials of the experiment. However, by the later trials, when a joint perspective had been achieved, communications were usually accepted without further verbal communication (see also Fussell & Krauss, 1992; Hupet et al., 1991; Isaacs & Clark, 1987; Schober, 1993; Wilkes-Gibbs & Clark, 1992). Krauss and colleagues have directly implicated such feedback in the achievement of shared reality by demonstrating that under conditions in which communicators' feedback is delayed or otherwise disrupted, the abbreviation effect is reduced (Krauss & Bricker, 1966; Krauss & Weinheimer, 1966).

Especially important evidence of the establishment of shared reality is the appropriateness of responses to communicative attempts, for inappropriate responses imply that there has been a misunderstanding (e.g., Grice, 1971, 1975). In one line of study, for example, Traxler and Gernsbacher (1992, 1993) demonstrated that such feedback is employed in the modification of future communication, and that this in turn facilitates the achievement of a shared perspective. Subjects were asked to write descriptions of nonsense figures that would allow another person to identify the figure in an array of distractors. Each description was given to two subjects who attempted to identify the referent correctly. Half the original writers were given feedback about whether their descriptions were understood or not, and half were not given feedback. Communicators were then allowed to modify their descriptions. When communicators received feedback,

the effectiveness of their messages increased over trials, as measured by their partners' accuracy in correctly identifying the referent. Without feedback, no improvement was observed.

The utility of ongoing communicative appropriateness in establishing shared reality is also revealed by evidence suggesting that even communicative styles come to be shared. For example, Garrod and Anderson (1987) had dyads play a computerized maze game that required subjects to refer to specific locations on the maze. Results indicated that (1) subjects employed a variety of communication strategies, and (2) the relative use of particular types of strategies was highly correlated within dyads but not across dyads, suggesting that subjects had developed a joint perspective on the maze. Interestingly, subjects rarely decided upon a strategy explicitly; instead, mutual understanding was achieved implicitly over the course of the interaction. Schober (1993) found that when communicators switched roles, they tended to adopt the referential strategy that their partners had just used. Complementary evidence is found in the group literature in research demonstrating that individuals adopt the decision-making strategies used by their group later when they work individually, both on the same type of problems that their group worked on (e.g., Laughlin & Ellis, 1986), and on different but related problems (e.g., Stasson, Kameda, Parks, Zimmerman, & Davis, 1991).

Consistent with the notion that shared reality is achieved ipasively, from situation to situation and partner to partner, evidence suggests that communicators do not assume that the joint perspective achieved with one partner can be extended to a new partner, even when the new partner was privy to the previous conversation. In a two-phase experiment, Wilkes-Gibbs and Clark (1992) found that the participatory status of subjects in one conversation was an important determinant of the collaborative strategy employed in a second conversation. Each subject first communicated about nonsense figures with one partner. In the second phase, each subject performed the same task using the identical stimuli but with a different partner. The crucial manipulation was the participatory status the second partner had adopted in the first phase of conversation. During the first conversation, the second partner had been either (1) an "omniscient" bystander, who could see the figures and hear the conversation via audiovisual link; (2) a side participant, who did not verbally participate but was physically proximal, could hear the conversation and see the figures, and could also see and be seen by the other participants; (3) a bystander, who was situated at some distance from the focal interaction and could hear the conversation but could not see the figures; or (4) a completely naive partner who was not present for the initial interaction.

Participatory status affected perceived shared reality, as indicated both by message length and by the use of definite versus indefinite articles. In the second phase, communicators with naive partners or either of the bystanders from the first phase switched immediately from using definite references (as they had been doing by the end of the first phase) to indefinite articles. Moreover, messages to naive partners and bystanders at the beginning of the second phase were

over twice as long as messages had been at the end of the first phase. Messages to side participants from the first phase, although longer than they had been by the end of the first phase with the initial partner, were appreciably shorter than messages to naive participants and bystanders, including "omniscient" bystanders. This finding is striking evidence that the shared reality afforded by actual participation in communicative activity is not easily duplicated, even under conditions in which the referent-relevant information required for common ground is otherwise available. Even though omniscient bystanders were privy to all the information required to achieve common ground (i.e., which referent expressions applied to which objects), the audiovisual link did not fully afford the achievement of shared reality established by actual interaction.

This finding suggests that shared reality and common ground are not equivalent concepts (see Higgins, 1992b), and that the benefits of social interaction exceed the transmission of explicit, task-relevant information (cf. Schachter, 1959). Shared reality varied directly with the amount and quality of *actual* social interaction. Not only was the shared reality achieved by side participants more complete than that achieved by omniscient bystanders, but the shared reality achieved by full participants (by the end of the first phase) was greater than that achieved by side participants (at the beginning of the second phase). Employing a similar procedure, Schober and Clark (1989) demonstrated that subjects who merely overheard the initial interaction identified the intended referents less accurately than participants, suggesting that such differences in shared reality do in fact affect communicators' understanding.

In sum, research indicates that communicators' attempts to establish shared reality in the course of interaction are met with success. Shared knowledge is established through communicative negotiation, which facilitates further interaction. Evidence suggests that shared reality is negotiated ipsatively, as appropriate to the immediate task and with each new communicative partner, even if the new partner has been partially privy to previous similar interactions. Finally, efforts to achieve shared reality have consequences for the recipients' understanding of communicative messages. We now examine evidence that further implicates shared reality in the creation of meaning—in particular, not only for recipients of messages, but also for speakers.

Shared Reality and the Communicator: The Creation of Meaning

As we have seen, research in the communication literature has emphasized how individuals take into account their audience's knowledge of a topic (e.g., Krauss & Fussell, in press). Other research demonstrates that communicators also take others' attitudes into account (Manis et al., 1974; Newson & Czerlinsky, 1974). From the perspective of shared reality, however, it is important to examine how taking others into account influences one's own representation of knowledge—that is, how it creates meaning for the communicator of the message.

Several studies demonstrate that perspective taking creates meaning as as-

essed by memory measures. For example, Anderson and Pitcher (1978) found that subjects remembered different, role-consistent aspects of a house they examined, depending upon whether they had adopted the perspective of a burglar or a home buyer (see also Bellezza & Bower, 1981; Clark & Woll, 1981; Snyder & Uranowitz, 1978). In a classic study demonstrating effects of communicative intent on representation, Zimmerman and Bauer (1956) found that subjects who expected to communicate information they received on an issue to an audience with a particular attitude on that issue remembered information that was congruent with the audience's attitude better than information that was incongruent.

In more recent studies, Higgins and colleagues have demonstrated the role of perspective taking in the creation of meaning for communicators. For example, Higgins and Rholes (1978) found not only that messages were tailored to audience attitudes, but that this perspective taking, in turn, affected the communicators' own judgment and memory. Subjects were given a target description of a person and led to believe that someone they expected to interact with either liked or disliked the target person about whom their communication centered. Descriptions were distorted positively when subjects believed that their partner liked the target, but distorted negatively when subjects believed that their partner disliked the target. Evidence that shared reality was achieved was demonstrated by effects of the descriptions on the communicators' own attitudes about the target. Under conditions in which subjects communicated with their partners, subjects' attitudes about the target were more positive when their partners' attitudes were positive, but more negative when their partners' attitudes were negative—an effect that did not obtain under conditions in which subjects did not actually communicate with their partners. Finally, results indicated that the shared reality achieved by communicating about the target had a lasting impact. Communicators' memory for the original target description became increasingly distorted over a 2-week period in the direction of their audience-tailored messages (cf. Bartlett, 1932; Ross, 1989).

In another study, Higgins et al. (1982) demonstrated that communicators varied their message description of a stimulus person, depending on whether their recipient had been exposed to the same or different information about the person, and that this variation also produced effects on the communicators' own perception and memory. Subjects were told that their partner had read the same paragraph or a different paragraph describing a stimulus target. Prior to communication, subjects were asked to reproduce the paragraph word for word. Subjects then communicated about the target person to their partner. Finally, subjects were again asked to reproduce the original stimulus paragraph. Results indicated that communicators' descriptions of the stimulus person were less distorted when they believed that their listener had different information about the stimulus person than when they believed the listener had identical information—a finding consistent with the goal of providing maximally informative information (see Grice, 1975). These differences in communication produced corresponding effects on memory. Reproductions of the stimulus paragraph

became more accurate after communicating to a listener with "different" information, but became less accurate after communicating to a listener with "identical" information. Similar results have been obtained under conditions in which subjects are given the information about the message target before they receive communication instructions or learn about the audience attitude (Sedikides, 1990).

Interestingly, communicators appear to take the audience into account when creating messages, but do not take the audience into account when later using the message in reconstructive memory (see Higgins & Stangor, 1988). Hence, one reason why social action is so influential on communicators' own understanding over time is that it is very difficult to calibrate the extent to which the social circumstances, which in large part determine message meaning, change from situation to situation. For example, McCann, Higgins, and Fondacaro (1991) had male subjects interact face to face with two confederates across two experimental sessions about a target person. Communicators were led to believe that their summaries would be used to help the others decide whether or not to accept the target as a roommate. The confederate mentioned incidentally that he either "kinda liked" or "kinda disliked" the target. Results indicated that communicators tailored their messages to the first audience, despite the fact that the recipient stated that his impression was based only on a brief interaction, and that accurate information would be the most useful for his decision. Communicators also tailored their messages to a second confederate after either a brief delay (15 minutes) or a long delay (1 week). However, after a long delay, the evaluative tone of second message was determined more by the evaluative tone of the first message. This suggests that, all other things being equal, and given a difference in the shared reality achieved between communicative interactions, the first interaction will determine more what (shared) reality is utilized (see Zimmerman & Bauer, 1956).

Although all things rarely are equal under ecological conditions, these findings provide an important clue toward an eventual understanding of the relationship between competing shared realities. That is, under conditions in which one shared reality has already been established, it can survive at least for a time to influence individual judgment and experience, even under subsequent conditions in which a competing shared reality is established. Further research is necessary to establish the conditions in which a once-shared reality may survive in the face of new interactions that produce incompatible shared realities. However, findings from the construct accessibility literature offer a plausible working hypothesis (e.g., Bargh, Lombardi, & Higgins, 1988; Higgins & King, 1981; Higgins, Bargh, & Lombardi, 1985). This research demonstrates that temporarily accessible information may become "chronically accessible" if it is repeatedly employed in social judgment. Likewise, once a particular shared reality has been established and repeatedly realized over multiple social interactions, it too may become chronically accessible for the individual, even in subsequent interactions in which competing shared realities are afforded.

It is interesting to note that evidence of shared reality through audience

tuning appears to fly in the face of Grice's (1975) maxim of relevance, in which communicators are said to attempt to provide one another with maximally informative information. In this case, the maxim of relevance would suggest that communicators should give a different impression of the target (at least when it is accurate) than the audience already has. However, in some cases, perhaps especially when new relationships are being established, the achievement of shared reality may supersede goals of relevance and informativeness (cf. Hilton, 1991; Schwarz, 1994; Trope, 1986). For example, Brown and Levinson (1978) demonstrated that communicators will sacrifice the maxims of "quality," "quantity," and "manner" for the sake of politeness. These kinds of results provide converging evidence that the achievement of shared reality not only may be necessary for the individual's grasp of reality, but may also be utilized to regulate social interaction.

Shared Reality in the Regulation of Social Interaction

Given the crucial functions of shared reality in the construction and maintenance of experience, as well as its regular achievement in ongoing social interaction, individuals may attempt to further regulate social interaction by exerting control over when, how, and with whom they cooperate in the achievement of shared reality. Evidence suggests that in some circumstances people do indeed wrest control over social interaction by modulating which reality is shared with whom. For example, the literature on "speech accommodation" shows that communicators will shift their speech style to converge with or diverge from the speech style of their audience, in order to associate themselves with or dissociate themselves from their audience (e.g., Giles, Mulac, Braada, & Johnson, 1987; Giles & Smith, 1979).

Particularly interesting conditions in which shared reality functions to regulate social distance are those that involve "multiple audiences," in which communication occurs among a variety of people who share different spheres of information (e.g., Fleming & Darley, 1991). For example, in a cocktail party conversation that involves one's spouse, one's boss, and a visiting uncle, each member may be said to hold a different "participatory status," as defined by who shares which realities with whom (Clark & Carlson, 1982; Goffman, 1959). One basic problem in such a situation concerns how to formulate messages that will communicate best to all. Communicators may attempt to take into account the perspective of each individual addressee, or may attempt to generalize across the group (e.g., Volosinov, 1986).

Another multiple-audience problem involves attempts to share a particular set of information with one part of the audience but to exclude others who are nevertheless simultaneously participating in the conversation (Fleming & Darley, 1991; Fleming, Darley, Hilton, & Kojutin, 1990). That is, one may want to maintain different shared realities with different participants. For example, teenagers are notorious for employing slang that their parents do not under-

stand, or, better, misunderstand in a benign way. Although the multiple-audience problem poses a unique set of regulatory problems that must be negotiated in communication, people nevertheless appear to be quite adept at solving them (for a review, see Fleming, 1994).

Several factors appear to mediate the degree to which communicators will attempt to achieve shared reality with another. For example, convergence of attitudes or opinions is especially likely under conditions in which communicators are attracted to or seek approval from the audience (e.g., Giles et al., 1987). Such attraction or approval seeking is defined in large part by the power relations of the communicators (e.g., Fiske, 1993; Kelman, 1958; French & Raven, 1959; Kelley, 1979). Considerable evidence exists that persons high in authoritarianism are more responsive and deferential to a higher-status partner than are persons low in authoritarianism (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Berg & Vidmar, 1975; Harvey & Beverly, 1961; Thibaut & Riecken, 1955), and some evidence suggests that low authoritarians may actually respond negatively to a higher-status partner (e.g., Epstein, 1965). Higgins (1992a) has summarized these various audience-tuning effects by characterizing them as (1) "supertuning" under conditions in which the establishment of shared reality is especially likely to occur; (2) "non-tuning" under conditions in which the establishment of shared reality is not attempted or resisted; and (3) "anti-tuning" under conditions in which the establishment of shared reality is not only actively resisted, but an alternative understanding is expressly adopted.

Most importantly, such evidence illustrates that shared reality may be used by communicators to modulate social relations. That is, people may differentially attempt to share reality in order to create or maintain social distance, or otherwise to regulate social relationships (Higgins, 1992a). For example, employing the same paradigm as Higgins and Rholes (1978), Higgins and McCann (1984) found that with a higher-status partner high authoritarians converged or supertuned in order to express association, whereas low authoritarians diverged or anti-tuned to express disassociation. When communicators' and partners had equal status, normal audience tuning was found. As in previous studies, communicators own memory was distorted in the direction of the tailored messages. Providing converging evidence, McCann and Hancock (1983) compared audience tuning between persons high and low in self-monitoring (see Snyder, 1979). Because high self-monitors are said to be motivated to act in situation-appropriate ways but low self-monitors are motivated to maintain consistency with "internal" values and beliefs, high self-monitors tailored their messages to the audience but low self-monitors did not. Congruent memory distortions were obtained for high but not low self-monitors.

Results suggesting that people modulate social relations through the regulation of shared reality may be interpreted as evidence that shared reality is not obligatory in social interaction, or that there are circumstances in which communicators' knowledge has a basis other than shared reality. However, we think that these findings are better understood in terms of competing shared realities. In particular, we believe that they are consistent with the assumption that newly

alternative shared realities may be resisted, and older beliefs maintained and defended, to the extent that the older beliefs have a strong basis in being regularly shared with others. Consistent with models of information processing that delineate how new instantiations of information use may become chronically accessible if they have been applied frequently over a long period of time (e.g., Higgins, *in press*), we believe that experiences may be objectified temporarily within particular situations as a function of immediate social verification, as well as shared chronically with others over time. Further, it is likely that under conditions in which competing alternative shared realities are plausible alternatives, the shared reality that is adopted will be determined by the recency and frequency with which that reality has been shared in the past in combination with what realities are currently being shared.

Hence, even the studies demonstrating the differential extents to which communicators will adopt high-status partners' attitudes may be understood from the perspective of shared reality. It is likely, for example, that low authoritarians have a history of sharing with significant others the reality that demanding authorities, or those who press for compliance, should be actively resisted. On the other hand, high authoritarians have probably shared with significant others the alternative reality that the attitudes of authorities require special consideration. Unless these particular realities cease to be socially supported, or until alternative shared realities are achieved and regularly realized, they should be expected to regulate social interaction in circumstances in which obvious power discrepancies exist. The corollary of this hypothesis is that in the absence of regular social verification, even chronically shared realities may not be maintained for long under conditions in which a sustained attack is posed through the selection and verification of an alternative, competing reality. For example, Schein (1956) found that even very basic beliefs in capitalism held by most U.S. prisoners of war during the Korean conflict were changed when the prisoners came to share the reality of their communist captors in Chinese prison camps. Although the prisoners initially resisted their re-education, most were isolated from the social support of like-minded others, and hence eventually came to share the view of their captors by adopting a previously unimagined appreciation for communism. Equally important is Schein's finding that the same process occurred in reverse when the prisoners returned to the United States. Although upon return most espoused pro-communist beliefs, these beliefs typically changed as their new social conditions not only afforded well-orchestrated attacks on their newer communist beliefs, but also reinstated social support for their older capitalist ideology (see also Newcomb, 1943; Newcomb, Koenig, Flacks, & Warwick, 1967).

In sum, why might shared reality achieved through social tuning be an especially powerful force in creating meaning? Social tuning not only involves taking others into account, but also involves achieving a common understanding of the world that in turn facilitates social interaction. Hence, the establishment of shared reality is basic to social regulation. Socialization involves people's learning how other respond to the world, including how others respond to

them, and using this knowledge in self-regulation. As a basic feature of the self-regulatory system, then, social tuning is charged with motivational significance, including serving the basic needs of nurturance and security, which are essential to the establishment and maintenance of the self (see Higgins, 1989b, 1996).

Shared Reality in the Regulation of Self

We have seen that processes of shared reality are involved in the creation of meaning for the individual. Achieving shared reality in social interaction also affects the representation of information, which is strong evidence that shared reality creates meaning for the participants. Given that the lineage of the hypothesis of shared reality may be traced through the writings of the social behaviorists to the symbolic-interactionist theories of sociology, it should be no surprise that we would expect to find similar evidence of shared reality in the development, maintenance, and regulation of the self (cf. Cooley, 1902; Mead, 1934; Stryker & Satham, 1985). As Mead (1934) argued, even self-awareness is established through social interaction:

The individual experiences himself as such, not directly, but only indirectly, from the particular standpoints of other individual members of the same social group, or from the generalized standpoint of the social group as a whole . . . and he becomes an object to himself only by taking the attitudes of the other individuals toward himself within a social environment or context of experience and behavior in which both he and they are involved. (p. 138)

We turn now to evidence suggesting that, once established, the shared realities achieved and utilized in social interaction function for self-regulation, closing the dialogical circle of self and society (cf. Mead, 1934, 1956; Piaget, 1976; Vygotsky, 1962, 1978).

Shared Reality in Development

Today, it is safe to say that the most fundamental assumption shared by theories of socio-emotional development is that children learn to regulate themselves in relation to the desires and demands of the significant others in their lives (e.g., Case, 1985, 1988; Damon & Hart, 1986; Fischer, 1980; Selman, 1980). Indeed, some have suggested that the only means by which a child can establish an understanding of the outside world is as it is objectified through social interaction (e.g., Berger & Luckmann, 1966; Mead, 1982; Vygotsky, 1962, 1978). Very early in development, children exhibit the capacity to associate events (e.g., Case, 1988; Kagan, 1984), which affords communication with others. Not only does emerging communicative activity qualitatively change the course of social and cognitive development, it is the mechanism by which self and society are integrated. By the end of the second year, a dramatic shift in children's representation of

the world has occurred, which is usually associated with the emergence of symbolic representation (Bruner, 1964; Case, 1985; Fischer, 1980; Huttenlocher & Higgins, 1978; Piaget, 1951; Werner & Kaplan, 1963). Because children can now consider the bidirectional relationship between themselves and another person, children are capable of role taking—the ability to anticipate the responses of others to their actions and the personal consequences of these social responses (e.g., Benthall & Fischer, 1978; Harter, 1983; Lewis & Brooks-Gunn, 1979). These self-other contingencies link a child to the larger society by providing the social meanings of the child's attributes, affording new forms of self-regulation such as social identification. Shortly thereafter, children shift from "egocentric" to "nongocentric" thought (Case, 1985; Feffer, 1970; Fischer, 1980; Flavell, Borkin, Fry, Wright, & Jarvis, 1968; Piaget, 1965; Selman & Byrne, 1974; Werner, 1957), which indicates the emergence of full-fledged perspective taking (Higgins, 1981b; Shantz, 1983). Children infer expectations, values, and preferences that others have about them. Hence, they can self-regulate in reference to another person's standpoint on them, giving them both the ability and the motivation to acquire internalized standards or "self-guides" (Gesell & Ilg, 1946; Fischer & Watson, 1981; Higgins, 1990; Higgins, Loeb, & Moretti, in press).

Hence, the early developmental sequence engenders the incorporation of others' knowledge, expectations, and desires in social regulation and ultimately in self-regulation. Children soon learn the complex of social attitudes that will guide their own self-understanding and behavioral regulation, including others' beliefs about their duties and obligations as well as others' hopes and aspirations for them (e.g., Higgins, 1989a; Higgins et al., in press). That is, shared reality appears to be implicated in the most basic processes of self-regulation, including the establishment and maintenance of security and nurturance, which are the very bases of survival (see Bowlby, 1969, 1973; Damon, 1977; Higgins, 1996).

Chronic and Temporary Shared Realities about the Self

Increasingly, research on the self has focused upon motivation, including ego protection (e.g., Greenwald, 1980), future achievement (e.g., Markus & Nurius, 1986), as well as goals and standards concerning who one "ought" or "ideally" would like to become (Higgins, 1989a, 1991; Rogers, 1951; Schlenker & Weigold, 1989). We believe that each aspect of self-identification and self-regulation is influenced by processes of shared reality, particularly by one's personal history of social recognition and verification. Most research in social psychology, however, has emphasized the self-concept—that is, people's view of the attributes that *ideally* characterize them (e.g., Greenwald & Pratkanis, 1984; Markus & Wurf, 1986; McGuire & McGuire, 1988; Wylie, 1979). It is this literature to which we now turn to illustrate the role of shared reality in the establishment and maintenance of self-understanding.

Shared reality is implicated in the regulation of self as demonstrated by two complementary processes. On the one hand, research suggests a crucial role

for ongoing, immediate social verification in the regulation of one's current experience of self. That is, much of one's experience of self is determined by what understandings about the self are being shared in the current social situation. On the other hand, research also suggests that over time, certain aspects of self that are shared regularly with significant others may become relatively resistant to change and actively defended, even in circumstances that would seem to offer more self-enhancing alternatives. Such chronically shared realities may lend a certain stability to the experience of self, even as it navigates changing circumstances and their concomitant variety of newly shared, self-relevant experiences. We consider each of these complementary processes in turn.

The shared reality achieved temporarily within a particular situation can have powerful effects on one's experience of self, even when it involves self-related values and beliefs that have been held with conviction over a long period of time. For example, current experience of self is known to be defined in part as a function of (1) salient characteristics of others (e.g., Morse & Gergen, 1970; Strack, Schwarz, Chassein, Kern, & Wagner, 1990); (2) current behavior of others (e.g., Brickman, Coates, & Janoff-Bulman, 1978; Festinger, 1954; Schachter, 1959, 1964); (3) immediate standards of comparison (e.g., Clark, Martin, & Henry, 1993; Higgins & Stangor, 1988; Manis & Armstrong, 1971); (4) current evaluations of others (e.g., Gergen, 1965; Snyder & Swann, 1978); (5) one's own strategic self-presentation (e.g., Jones, Rhodewalt, Berglas, & Skelton, 1981); (6) currently salient autobiographical information (e.g., Fazio, Effrein, & Falender, 1981; McGuire & McGuire, 1988; Salancik & Conway, 1975); and (7) currently salient social relationships (e.g., Baldwin, Carrell, & Lopez, 1990).

Such findings are typically explained in terms of individual cognitive or motivational mechanisms, which are assumed to be principally independent of interpersonal relationships. Yet virtually all such demonstrations include the real or implied presence of others, and thus allow for the possibility that processes of shared reality may be involved. In an experiment that directly implicates the operation of shared reality, Tice (1992) found that subjects internalized their own behavior (whether indicating emotional expressiveness or emotional stability) as representing their "true selves" significantly more when it was expressed to a peer than when it was expressed anonymously. Control conditions, as well as independent ratings of subjects' behavior, indicated that the effect could not be attributed to subjects' behaving differently in the public versus private conditions. In a second experiment, the effect was generalized to another dimension of self and linked to subjects' subsequent behavior with a confederate. Subjects who publicly behaved in an introverted or extraverted manner internalized the behavior more than subjects who performed the identical behavior privately. Effects of public behavior on the self-concept were further reflected by subjects' behavior with the confederate, as assessed by sitting distance and the degree to which they initiated and participated in conversation with the confederate (cf. Fazio et al., 1981).

In an especially striking demonstration, Ross, Amabile, and Steinmetz (1977) found that temporary role enactments have large effects on the experi-

ence of self. In the experiment, subject pairs randomly assigned to role participated in a "quiz game," in which one partner attempted to give correct answers to general knowledge questions posed by the other. Although "contestants" were able to answer a significant proportion of the questions correctly, this performance was perceived by the contestants themselves as undistinguished. By design, "questioners" asked only questions to which they knew the answers, and hence appeared to be more knowledgeable than "contestants," despite the fact that this difference in perceived knowledge was completely defined by the roles that the participants had adopted in the quiz game. Nevertheless, the contestants themselves came to believe that the questioners had a greater command of general knowledge than they did.

Further evidence consistent with the hypothesis that current self-understanding through social interaction creates meaning for the participants is indicated by findings implicating changes in how the self is cognitively represented. Hardin (1994) demonstrated that the shared reality achieved in the quiz game situation affected not only subjects' perceptions of themselves and their partners, but memory for their own previous self-evaluations. In one experiment, after participating in a quiz game procedure adapted from Ross et al. (1977), subjects attempted to recall self-evaluations they had made several weeks previously in another situation. Results indicated that subjects' memory for their own previous self-evaluations was distorted congruently toward the current shared reality that had been established in the quiz game.

These findings are consistent with other research demonstrating that people's memory of their personal history tends to be consistent with their currently shared understanding of reality (e.g., Ross, 1989; Ross & Conway, 1986). For example, McFarland and Ross (1987) found that subjects' evaluations of themselves and their dating partners' past demeanor was highly correlated with their current understanding of the relationship, whether positive or negative. In addition, several experiments have demonstrated that attitudes currently shared with the experimenter about exercise and personal hygiene produce corresponding memory distortions about the frequency with which subjects remember exercising, brushing their teeth, and bathing in recent months (Olson & Cal, 1984; Ross, McFarland, Conway, & Zanna, 1983; Ross, McFarland, & Fletcher, 1981). Such results provide converging evidence, in concert with research on audience tuning in communication, that the shared reality achieved in ongoing social interaction has important consequences for cognitive representation. Not only does currently shared reality affect communicators' judgments of some external social target, but it even exerts influence on one's understanding of one's own history of behavior and self-evaluation.

Complementary research demonstrating the role of temporarily shared reality in the experience of self comes from literatures suggesting that aspects of self that have been socially recognized and shared over a long period of time may be able to survive temporary challenge, especially under conditions in which the currently posed alternative is weak or is proposed by an unreliable source. That is, over time, like any other information that is regularly utilized,

the self-understanding achieved through a consistently shared reality may become chronically utilized (e.g., Higgins, 1990, in press).

The extent to which historically shared information is defended is illustrated by literatures documenting that people's behavior often functions to verify, protect, and maintain their extant conceptions and evaluations of themselves (e.g., Swann, 1990). Counterintuitively, such behavior can occur at the expense of ego protection, since people sometimes act in ways that maintain even very negative self-concepts (cf. Grenwald, 1980). Whether information about the self is positive or negative, subjects (1) spend more time looking at remarks of a partner they suspect will confirm rather than disconfirm their self-concept (cf. Pyszczynski & Greenberg, 1987; Swann & Read, 1981a); (2) rate information as more diagnostic if it is consistent than if it is inconsistent with the self-concept (Swann & Read, 1981b); (3) indicate more confidence in partners who confirm than in ones who disconfirm the self-concept (Swann, Griffin, Predmore, & Gaines, 1987); (4) solicit more feedback that is consistent rather than inconsistent with the self-concept, even if they think it might make them depressed (Swann & Read, 1981b; Swann, Wenzlaff, Krull, & Pelham, 1992); and (5) intensify efforts to elicit self-consistent information when they think their partner has an inaccurate conception of them (Swann & Read, 1981a; Swann & Hill, 1982). The preference for new information consistent with the self-concept occurs more on dimensions on which subjects are certain rather than uncertain (cf. Pelham, 1991; Swann & Ely, 1984; Swann, Pelham, & Chidister, 1988; Trope, 1986). Remarkably, the pattern extends to people's interaction choices. Subjects will choose to interact with those who give unfavorable evaluations of them over those who give favorable evaluations of them if the unfavorable evaluations are consistent with their self-beliefs (Swann, Pelham, & Krull, 1989; Swann, Stein-Seroussi, & Giesler, 1992). Further, Swann, Hixon, and De La Ronde (1992) found that people were more committed to their marriages when the views of their spouses matched rather than mismatched their self-concepts. Subjects with high self-concepts were more committed to partners who appraised them positively, but subjects with low self-concepts were more committed to partners who appraised them negatively.

Various motives have been proposed to account for these kinds of findings, including needs for cognitive consistency (e.g., Lecky, 1945; Secord & Backman, 1965) and for dissonance reduction (e.g., Aronson, 1968; Steele, 1988; Tesser & Cornell, 1991), as well as more epistemic motives of uncertainty reduction (Trope, 1986) and the ability to predict and control the environment through self-verification (Swann, 1990). We believe that they also can be understood from the perspective of shared reality. In particular, evidence suggests that self-conceptions are themselves achieved through processes of sharing reality with significant others (e.g., Stryker & Statham, 1985). For example, Pelham and Swann (1994) found that subjects' self-concepts were highly correlated with their own mothers' and friends' views of them on dimensions of high certainty, but that the correlations were lower on dimensions of low certainty—a pattern that did not hold for randomly paired classmates and mothers. Further, the correla-

tions between self-views and others' views were higher when the others were subjects' own mothers rather than classmates.

Such findings are consistent with the assumption that significant others are particularly important in the selection and maintenance of one's self-understanding (e.g., Cooley, 1902; Freud, 1923/1960; James, 1890; Mead, 1934). Congruently, we propose that people's preference for information that is consistent rather than inconsistent with their extant self-understanding occurs *because* it has a history of being shared with others. This preference is not only consistent with the hypothesis that shared reality is worth defending on basic epistemic grounds, but that shared reality functions in part to maintain valued social relationships (e.g., Cameron, 1963; Freud, 1937; Hoffman & Saltzstein, 1967; Kelman, 1958; Mowrer, 1960; Rommetveit, 1974; Stryker & Statham, 1985).

Shared Realities about the Self Are Utilized in Social Regulation

The hypothesis of shared reality implies that information about the self will be preferred to the extent that it is shared with others. That is, the more a given aspect of self has been recognized in the social verification process, the more "reality" it achieves, and the more likely it is that it will be maintained and defended. The preference for shared reality should hold for both positive and negative information, because the functions of shared reality are assumed to be principally independent of evaluative valence. Hence, the hypothesis of shared reality provides a useful complement to self-verification theory (e.g., Swann, 1990) in understanding the role of self-understanding in social regulation. In addition to providing an account of how self-understanding develops, shared reality subsumes some predictions of self-verification theory and makes additional predictions about which self-enhancement and self-verification theories are silent.

We explored these hypotheses in two experiments employing a preference paradigm (Hardin, Higgins, & Schachinger, 1995). In Experiment 1, subjects indicated whom they would prefer to meet in an upcoming study on the basis of impressions their potential partners supposedly held of them. In Experiment 2, subjects indicated which aspects of themselves they would prefer to learn more about from a supposedly newly developed computer program designed to make personality assessments. In both experiments, the attributes of self on which subjects made their choices were idiomatically constructed from their responses to a questionnaire administered several weeks previously in an ostensibly unrelated psychological battery. In it, subjects had listed attributes they believed were characteristic of themselves, as well as attributes they believed significant others thought were characteristic of them. In the experiments, preference judgments were made between (1) attributes that were self-descriptive versus their opposites, and (2) self-descriptive attributes that were shared with significant others versus those that were not. Hence, the design allowed a replication of the basic self-verification finding, in which subjects prefer information about themselves that is consistent rather than inconsistent with the self-concept. In addi-

tion, the design allowed a test of the prediction unique to the shared-reality hypothesis—in particular, that subjects would prefer information about themselves that was shared with significant others to unshared self-relevant information.

As part of a battery of tasks administered near the beginning of the term, each subject listed attributes characteristic of the self, as well as attributes believed about the subject by (1) the subject's mother, (2) the subject's father, (3) the subject's best friend, (4) people in general, and (5) a typical new acquaintance.³ In addition, subjects rated the degree of certainty with which they believed each attribute they listed was truly self-descriptive. Subjects' responses were utilized in the idiographic construction of individualized attribute sets on which the preference judgments were made. A self-attribute was defined as "shared" if subjects believed at least one other thought the attribute characteristic of them, and "unshared" if the attribute was listed as self-descriptive only by the subject.⁴ The shared and unshared attributes later given to subjects for their preference judgments were matched on certainty. Hence, any preferences for shared self-attributes over unshared self-attributes could not be attributed to differences in certainty. Finally, in both experiments, subjects made preference judgments on attributes that they had listed as self-descriptive, as well as attributes that another "yoked" subject had listed as self-descriptive. This procedure provided experimental control for any effects of the content of the attributes.

EXPERIMENT 1 Subjects were contacted by telephone, ostensibly to be recruited for an upcoming study concerning "how people get acquainted." Subjects were asked to choose among several potential interaction partners they would prefer to meet who had supposedly formed impressions of them on the basis of the psychology inventory they had completed earlier that term. In a two-phase procedure, subjects were asked to consider the various impressions of them held by those who had examined their responses, and to choose whom they would prefer to meet in the upcoming study. In the first decision phase, each attribute and its opposite were presented for a preference judgment. For example: "One person thought you seemed *opinionated*, but another person thought you seemed *not opinionated*. Which person would you prefer to meet?" Alternatively: "One person thought you seemed *gullible*, but another person thought you seemed *not gullible*. Which person would you prefer to meet?" Subjects were given at least three attributes and their opposites they had listed earlier as self-descriptive, as well as at least three yoked control attributes and their opposites. In the second decision phase, subjects chose between partners who held impressions that were "shared" versus "unshared." Each impression pair consisted of either positive attributes or negative attributes. For example: "One person thought you seemed *lazy*, but another person thought you seemed *depressed*. Which person would you prefer to meet?" Here too, subjects indicated their preferences on both self-descriptive attributes and yoked control attributes. In all, subjects made no more than 12 and no fewer than 8 choices across both decision phases.

From the perspective of shared reality, subjects were predicted to choose to

interact with partners whose impressions were (1) consistent rather than inconsistent with their self-concepts, even if the impressions were negative; and (2) "shared" versus "unshared" attributes, whether positive or negative. As predicted by both self-verification theory and the shared-reality hypothesis, subjects chose reliably more partners who held self-consistent rather than inconsistent impressions of them. Not only was the overall relationship reliable, but it remained reliable when choices were broken down by trait valence: Subjects chose partners whose impressions were consistent rather than inconsistent, whether the impressions were positive or negative. The preference for confirming over disconfirming partners was not found on the yoked attributes.

Strong support for the unique prediction of shared reality was also found. Subjects chose reliably more partners whose confirmatory impressions of them were "shared" rather than "unshared." Again the relationship held whether the impressions were positive or negative, suggesting that shared reality is not moderated by valence. And, again, the preference for impressions that were shared versus unshared was not found for the yoked attributes.

EXPERIMENT 2 The procedure of Experiment 2 essentially replicated that of Experiment 1. Subjects were contacted by telephone, ostensibly to be recruited for an upcoming study concerning "the development of a new computer program designed to make personality assessments." Subjects were told that an initial run of the program had utilized data from the psychological inventory they had completed earlier in the term to generate a series of attributes describing them. Subjects were asked to choose the self-attributes they were most interested in learning more about in an upcoming study in which the computer program would generate a more detailed analysis. Subjects indicated their preferences in a two-phase procedure that mimicked Experiment 1. For example, "One attribute generated about you was *unfazed*, but another was *excitable*. Which would you prefer to learn more about?" In all, each subject made 12 choices across both decision phases.

Again, the hypothesis of shared reality predicted that subjects would prefer to learn more information about aspects of the self that were (1) consistent versus inconsistent with their self-concepts, and (2) "shared" versus "unshared." Replicating Experiment 1, subjects preferred reliably more information that was consistent rather than inconsistent with their self-concepts whether it was positive or negative.

Support for the unique prediction of shared reality was also found, replicating Experiment 1. Subjects preferred to learn more about reliably more self-consistent attributes that were "shared" rather than "unshared" with significant others, whether the attributes were positive or negative, suggesting that shared reality is not moderated by valence. Importantly, the preference for attributes that were shared versus unshared was not found for the yoked attributes.

In sum, research from existing literatures as well as from our own laboratory suggests that shared reality is a promising theoretical strategy with which to integrate understanding of the development and maintenance of self-under-

standing. Shared reality is implicated in research demonstrating the role of immediate ongoing interaction in the construction of experience of self, as well as in research demonstrating that well-established self-concepts may be defended in new situations that offer alternative understandings of the self. The analysis is corroborated by direct evidence from our own laboratory, which suggests that extant self-concepts are defended through the regulation of future social interaction to the extent that they are currently shared with significant others. Hence shared reality provides one synthesis of the decades-old debate concerning whether the self-concept is relatively fixed or fluid. In particular, self-understanding emerges from what is recognized and verified in ongoing social interaction, and this self-understanding may acquire some stability to the extent that aspects of self are grounded in a network of regular social verification. Finally, however, the perspective of shared reality implies that even highly valued, long-held beliefs about the self will not survive indefinitely if they cease to be verified by others or if competing aspects of self are newly recognized and regularly established in social interaction. The peculiarities of the degree to which self-concepts that are not supported by ongoing social verification can be maintained awaits direct research. However, current assumptions of cognitive theory suggest that the answer to this question may involve the frequency and recency with which particular existing aspects of self have been shared, in combination with what realities are newly established through social interaction.

GENERAL DISCUSSION AND CONCLUSIONS

But the human essence is no abstraction inherent in each single individual. In its reality it is the ensemble of the social relations.

—K. Marx (1888/1970)

From the outset, we, the actors on the social scene, experience the world we live in as a world both of nature and of culture, not as a private but as an intersubjective one, that is, as a world common to all of us, either actually given or potentially accessible to everyone; and this involves intercommunication and language.

—A. Schütz (1962)

We must keep open the view that many distinctive psychological operations take form only within a social field and that the changes they produce alter individuals at their center.

—S. Asch (1952)

The hypothesis of shared reality not only is consistent with the literatures we have already reviewed, but has several important implications for future research. Shared reality engages current empirical issues in social psychology, as well as suggesting an alternative to some prevailing metatheoretical assumptions that characterize the contemporary social psychological enterprise.

Further Empirical Implications of Shared Reality

We believe that the hypothesis of shared reality has implications for several prominent topics in social psychology, including stereotyping, attitude change, and group influences on the individual. We briefly consider each of these topics in turn.

Stereotyping and Attitudes

As traditionally defined, stereotypes are beliefs consensually held by individuals about social groups and their members (see Allport, 1954). Various functions have been attributed to stereotypes, including cognitive efficiency (e.g., Allport, 1954; Hamilton & Trolter, 1986), ego maintenance (e.g., Adorno et al., 1950; Allport, 1954; Katz & Braly, 1935), group justification (e.g., Allport, 1954; Sherif & Sherif, 1956; Tajfel, 1981; Oakes et al., 1994), and justification of the social status quo (e.g., Allport, 1954; Jost & Banaji, 1994; Mackinnon, 1989). The contemporary social-cognitive view of stereotypes has coalesced around issues of mental representation, or how information is organized and utilized in cognition (e.g., Banaji & Greenwald, 1994; Hamilton & Sherman, 1994; Stangor & Lange, 1994). Interestingly, with few exceptions, the consensual nature of stereotypes has not been emphasized in stereotyping theory. This is probably attributable in part to the fact that stereotypes are consensual by definition. It has been suggested recently, however, that existing theories of stereotyping may be distinguished in terms of consensus—that is, how they account for which stereotypes are held by whom (see Jost & Banaji, 1994).

The perspective of shared reality provides yet another alternative by implying that stereotypes exist in part *because* they are based in social consensus. Stereotypes serve social-regulatory functions by creating and maintaining social relationships, including relationships between social groups (cf. Tajfel & Turner, 1979; Oakes et al., 1994). In addition, because stereotypes are consensus-based “shared realities” about social groups, they may be maintained and defended by individuals in order to protect their own grasp of reality, even at the expense of the self. This is not to deny other functions of stereotyping, such as their role in perpetuating the status quo (e.g., Hoffman & Hurst, 1990; Jost & Banaji, 1994). Indeed, we view many of these functions as fully compatible with the perspective of shared reality.

The perspective of shared reality, however, does make empirical predictions that are not as easily derived from other stereotyping theories. For example, to the degree that stereotypes exist because they are shared, they may be relatively more fluid than alternative accounts would predict. Stereotypes should survive only so long as they benefit from social verification. Further, the use of a particular stereotype would be expected to be minimized to the extent that alternative beliefs are established and maintained in social interaction and stereotyping effects should be strongest to the degree that the stereotypes are grounded in shared reality.

Processes of shared reality may also be involved in stereotype subtyping (e.g., Crocker & Major, 1989; Judd & Park, 1988; Park, Ryan, & Judd, 1992). Common stereotypes of social groups are rarely monolithic, but instead appear to have a variety of potentially incompatible components. For example, although one stereotype of men is that they can be pious and responsible (e.g., "Father knows best"), another is that men can be irresponsible rakes (e.g., "Boys will be boys"). To the extent that each subtype represents a different consensual belief or shared reality, the perspective of shared reality suggests at least one counterintuitive implication. Inducing subjects to think about a variety of stereotypes of a particular group may actually reduce subsequent stereotyping. Why? Because the exercise demonstrates a lack of consensus about the reality of the target group, hence reducing the individual's confidence in the veracity of its understanding of the group (cf. Park et al., 1992).

Shared reality appears to be implicated in the maintenance and change of other beliefs and attitudes. For example, research suggests that the amount and type of cognitive activity are affected by the amount of social support a person expects to receive either during or outside the interaction (cf. Doms & Van Averaet, 1985; Miller, Gross, & Holtz, 1991). Gross, Riemer, and Collins (1974) found that there was greater self-persuasion from producing a counterattitudinal essay when the communicators believed the audience considered them sincere than when they believed the audience considered them insincere. In a complementary finding, Carver and Humphries (1981) demonstrated that students who associated an opinion with a negative group showed less agreement with the position than did students who did not make the association (see also Asch, 1952).

Shared reality is also implicated by belief change that occurs in anticipation of future social interaction. For example, subjects who expect to interact with another target person remember information about that person better on a variety of measures (Devine, Sedikides, & Fuhrman, 1989; Fiske & Von Hendy, 1992; Osborne & Gilbert, 1992), and learn material better when they expect to teach it to others than when they do not (Bargh & Schul, 1980; Benware & Deci, 1984). Several hypotheses have been suggested to account for such effects, including the production of issue-relevant thought (e.g., Ciaidini & Petty, 1981; McFarland, Ross, & Conway, 1984), as well as pre-emptive self-criticism, self-justification, and simply saying what others want to hear (e.g., Tetlock, 1992). We believe that many of these findings may be understood by assuming that attitude change occurs when people *expect* to share reality. If so, anticipatory attitude change should be a function of who the expected interaction partners are (e.g., a significant other, an expert, or a new acquaintance), and in particular the relevance of the anticipated interaction partner to the dimension of judgment. This hypothesis is consistent with findings demonstrating that attitude change is greater when the anticipated partner is an expert than a layperson (e.g., Fitzpatrick & Eagly, 1981).

Group Processes

The social-regulatory functions of shared reality are implicated by the extent to which social groups impose shared realities on and maintain them among their participants. For example, research indicates that (1) a group's efforts to transmit its norms are particularly strong when newcomers are involved (Levine & Moreland, 1991; Moreland & Levine, 1989); (2) groups provide newcomers with the knowledge, ability, and motivation they will need to play the role of full members (e.g., Van Maanen & Schein, 1979; Wanous, 1980); (3) newcomers are especially receptive to group influence (e.g., Van Maanen, 1977); and (4) opinion deviants receive more influence attempts by the group than others do (e.g., Festinger & Thibaut, 1951; Levine, 1989), particularly when the deviants appear to be uncertain about their position (Levine & Ranelli, 1978). Further, group members typically do not exchange all the information available to the members; instead, rather than disseminating unshared information, group discussions tend to be dominated by information that members initially share and that supports their initial preferences (e.g., Stasser, 1992).

If the establishment of shared reality creates meaning for the participants in social interaction, then the use of shared reality to modulate social regulation should influence individual understanding. In addition to research we have already discussed, support for this proposition can be found in research on the role of group membership in the formation and maintenance of individual attitudes, beliefs, and behavior (e.g., Asch, 1952; Deutsch & Gerard, 1955; Festinger, 1954; Kelman, 1958; Levine & Russo, 1987; Tajfel & Turner, 1986; Turner, Hogg, Oakes, Reicher, & Wetherall, 1987). Evidence includes well-known demonstrations of group polarization, in which participants in group discussions express increasingly extreme attitudes in the direction of the prevailing group position (e.g., Burnstein, 1982; Janis, 1982; Jellison & Arkin, 1977), as well as judgment convergence in the direction of inaccurate group norms (e.g., Asch, 1952). Importantly, research suggests not only that individuals act in ways that are consistent with the social groups to which they belong, but that this social regulation has consequences for individuals' privately held beliefs. For example, Charters and Newcomb (1952) found that increasing the salience of Roman Catholic students' religious identity by emphasizing their common religious identification caused students' opinions to shift toward more orthodox Roman Catholic beliefs (see also Gerard, 1954).

Traditionally, such group effects on the individual have been understood in terms of "informational" versus "normative" influences (cf. Deutsch & Gerard, 1955; Kelman, 1958; Moscovici, 1976). Informational influence involves the dependence of individuals on others for information, particularly when others are regarded as valid and reliable. This includes new and persuasive information, as well as social comparisons that reduce subjective uncertainty (cf. Festinger, 1954; Levine & Moreland, 1986; Suls & Miller, 1977; Trope, 1986). Normative in-

fluence or conformity involves the power of groups to regulate the behavior of individuals through demands, expectations, rewards, and punishments, including the groups' power to accept or reject individuals (cf. Deutsch & Gerard, 1955; Festinger, 1979; Kiesler & Kiesler, 1969; Levine & Russo, 1987; Nail, 1986). For example, group polarization effects, in which individuals over the course of discussion adopt increasingly extreme views in the direction of the prevailing group attitude, have been explained in terms of the new information afforded by the group discussion (e.g., Burnstein, 1982; Burnstein & Vinokur, 1977; Vinokur & Burnstein, 1978), as well as in terms of social desirability (e.g., Jellison & Atkin, 1977; Myers, Brugink, Kersting, & Schlosser, 1980; Sanders & Baron, 1977).

In discussions of group influences that are not assumed to involve conformity or compliance, two mechanisms have been proposed. Under conditions in which alternative opinions are initially proposed by an individual and others, "informational influence" may occur, such that the individual is persuaded on the basis of new information provided by others who participate in the group discussion. Later, this information is used in the individual's opinion (e.g., Burnstein, 1982). On the other hand, in cases of "mediated memory" later opinion convergence occurs because individuals misremember the source of the new information by assuming that they had generated the information themselves (e.g., Bem & McConnell, 1970). Interestingly, both processes assume a fundamental distinction between information generated by the self versus that generated by others (i.e., "I" vs. "they"). The perspective of shared reality, in contrast, does not assume that opinion convergence is a memory error in which different subjectivities are mismanaged, but rather that shared reality changes the character of individual representations. For example, to adopt connectionist language (e.g., Smith, 1990), a particular thought may be characterized by a particular complex of activation states. To the extent that the thought is not shared with others, it is less likely to be reactivated. If it is shared, however, reactivation is more likely. Hence, sharing reality strengthens what is agreed upon, which in turn is more likely to be accurate (cf. Hinsz, 1990). The individual subjectivity is transformed through social consensus (i.e., "we") into an objective reality, which is experienced as an "entity" or "it" (see Kelley, 1967).

In a related vein, it is interesting to note that until relatively recently Kelman's (1958) observation that group influence can also occur because individuals identify with the group has been little studied, perhaps because the notion was difficult to operationalize. But the emergence of the social identity literature has brought issues of identification to the fore by emphasizing the individual's self-definition as a group member (Hogg & Turner, 1987a; Turner, 1982, 1985). In particular, individuals act to create or maintain positive social identities through processes of intergroup comparison. Social identity theory assumes that both normative and informational influences reflect the same underlying "self-categorization" or identification process. It proposes that group influence is maximized to the extent that individuals identify themselves as members of the group, and is minimized to the extent that individuals disidentify with the

group. From this perspective, then, group polarization arises from the recognition of a shared group membership concerning the items under discussion (Mackie, 1986; Mackie & Cooper, 1984; Turner et al., 1987; Turner & Oakes, 1986; Wetherall, 1987). Research in this tradition has demonstrated that (1) individuals act in ways that distinguish their own group from other groups, particularly when group membership boundaries are salient (e.g., Abrams, 1985); (2) information is more influential when it comes from ingroup members than when it comes from other sources (e.g., Hogg & Turner, 1987b); (3) individuals endorse attitudes that increase their proximity to the stereotypical group position, even in the absence of explicit group pressure (e.g., Reicher, 1984); and (4) self-categorization processes moderate the autokinetic effect, judgment conformity, and group polarization (Abrams, Wetherall, Cochrane, Hogg, & Turner, 1990).

Although we applaud the new emphasis on the social aspects of individual behavior found in the social identity and self-categorization literatures, we believe that shared reality offers a useful alternative understanding of the role of groups in the construction and maintenance of individual perception, behavior, and attitudes. Although the perspectives of shared reality and of social identity both predict that processes of social identification should modulate group influence on the individual, they do so for different reasons. First, social identity theory assumes that social identities are managed in service of the individual's self-esteem (cf. Hogg & Abrams, 1988; Tajfel & Turner, 1979). Shared reality, in contrast, views social identification pragmatically—that is, in terms of its role in serving epistemic functions of reality construction and maintenance, as well as social regulation. Second, despite the role of social identity and self-categorization theories in renewing a proper emphasis on the social construction of individual experience (e.g., Turner et al., 1987), they remain essentially individualistic in several important ways. Social identification processes are performed by the individual to serve individual ego maintenance needs by means of individual cognitive categorization processes. Although social circumstances may moderate whether individuals view themselves in terms of their group identification or of an "individual" identification, they do so by making one or the other identity more cognitively salient. In contrast, the perspective of shared reality emphasizes the essential role of mutual, social cooperation in the regulation of self, including social identities—functions which, as we have seen, need not be gratifying to the self. We would hardly deny the role of individual cognitive representation in mediating these processes, but believe that even the most basic information processes are themselves crucially defined by the social activity in which they operate. Finally, we are uncomfortable with the distinction between social and individual identities proposed by social identity and self-categorization theories. If reified, such a terminological distinction would be unfortunate because we believe it unlikely that any identification could be described independently of some social relationship.

At the same time, the perspective of shared reality implies that social identification can proceed in a variety of ways that include but are not limited to abstract social categories. In particular, evidence suggests that shared reality is

achieved in the service of valued relationships between people or valued reference groups, in which the individuals may or may not perceive themselves as members of the same social category (e.g., Siegal & Siegal, 1957). For example, although "basking in the reflected glory" of others typically occurs between those who share a currently valued relationship (e.g., Tesser, 1988), the individuals do not necessarily perceive themselves as forming a group. Further, attempts to achieve shared reality, regardless of group membership, seem to us to be a more plausible description of relatively temporary social convergence effects, such as those found in the literature on dyadic communication.

The perspective of shared reality may also be compared with Moscovici's (1976) theory of minority influence. Moscovici (1985) points out that the relationship between public acts of compliance and private acceptance or "conversion" remains theoretically problematic, but he argues that differences between majority and minority influence may be understood by comparing the respective cognitive processes of deviant individuals. Majority influence is characterized by compliance more than conversion because the individual does not ruminate on the controversial reality, presumably because the group opinion is perceived to represent current consensus. Perceiving relatively little power to influence the majority, the individual "is tempted to make concessions, being impelled by the need to reach a consensus, even if consensus is actually unjustified" (Moscovici, 1985, p. 394). Conversion is minimized because individual consideration of the majority position is superficial. Minority influence, in contrast, is characterized by conversion because members of the majority ruminate on how the minority members could possibly believe what they claim to believe. This produces a "validation process," in which the minority responses are examined with respect to the reality in question, "before seeking to negotiate an agreement and reestablishing a consensus" (Moscovici, 1985, p. 394). Conversion is maximized because in attempting to take the perspective of the minority in an effort to understand it, individuals are at least in part successful.

Interestingly, this account in both cases presupposes that individuals are motivated to achieve some social consensus—a motivation consistent with the perspective of shared reality. In addition, from the perspective of shared reality, minority conversion is minimal in the face of majority pressure because that very pressure makes the absence of shared reality salient. That is, the experience of feeling pressured undermines the experience of shared reality. Because the minority is not in a position to threaten or pressure for consensus, the lack of shared reality is less salient to majority members. This account could be tested by making the lack of shared reality salient to the majority. For example, the experimenter might say, "While you are reaching a group decision, it is important that you not feel pressured to adopt a position you do not believe." Although such an instruction would appear to reduce mere compliance, it might function implicitly to highlight the experience of feeling pressured, thereby reducing feelings of shared reality, and consequently conversion.

We should point out that the existing research regarding group influences

on the individual is consistent with the perspective of shared reality. For example, even normative influence is greatest when individual behavior is open to actual (Deutsch & Gerard, 1955) or anticipated (Lewis, Langan, & Hollander, 1972) group surveillance, both of which would appear to afford or imply shared reality. Findings indicating that individuals are more influenced by groups in which they are members are also consistent with the perspective of shared reality. Such findings complement those of studies demonstrating the role of perspective taking in judgment and memory. Given the facility with which people can adopt the perspectives of others (e.g., Clark & Brennan, 1991; Stryker & Staham, 1985), even in situations that involve hypothetical perspectives or anticipated interaction (e.g., Anderson & Pichert, 1978; Bargh & Schul, 1980; Jones & DeCharms, 1957), it is not surprising that individuals who actually participate in group activities adopt the perspective of their own group (e.g., Abrams et al., 1990; Burstein, 1982).

Shared reality is implicated even in studies that traditionally have been understood in terms of disrupting individual self-regulation in social situations (e.g., Brown & Turner, 1981; Latané & Darley, 1970; LeBon, 1896). For example, "social loafing" studies show that the contribution of individuals in groups is less than their contribution alone, findings often understood in terms of "deindividuation" (Latané, Williams, & Harkins, 1979). However, social loafing can be reduced or eliminated by increasing the identifiability and uniqueness of members' task contributions (e.g., Harkins & Petty, 1982, 1983), ease of evaluating those contributions (e.g., Harkins & Szymanski, 1989), and members' accountability (e.g., Weldon & Gargano, 1988). Although the latter findings are typically understood in terms of reasserting individual self-regulation, each of these variables probably enhances the ability of individuals in groups to share reality, and in particular to reach a mutual understanding of task-appropriate behavior (e.g., "doing your share").

Some Metatheoretical Implications of Shared Reality

The story has now come full circle. First, we have proposed the hypothesis that the individual's grasp of reality is achieved and maintained through processes of social recognition and verification, which establish a "shared reality" that serves both epistemic and social-regulatory functions. Our review of the literature suggests not only that people attempt to achieve shared reality, but that these attempts succeed. Second, evidence suggests that the establishment of shared reality modulates the very construction and maintenance of meaning. Research reveals that shared reality facilitates social interaction and has profound representational implications, affecting both ongoing judgment and memory for past activity. Evidence suggests that shared reality plays a prominent role in the establishment and maintenance of the experience of self through two complementary processes. Shared reality established temporarily within particular situa-

tions has significant effects on individuals' experience of self, as well as on memory for their own earlier experience. In addition, evidence suggests that realities about the self shared with significant others—presumably with some regularity over a long period of time—may be defended in the face of newly posed alternatives, even at the expense of self-enhancement. Finally, we have suggested a few ways in which the perspective of shared reality engages issues concerning stereotyping, attitudes, and group influences on the individual. In sum, we believe that the perspective of shared reality offers a promising integration of individual and social contributions to the structure of individual experience, suggesting that they may be synthesized as complementary processes in a fully dialectical self-society system.

As such, the perspective of shared reality takes a clear stand in the long-running debate concerning the place of the individual in society, and more recently the privileged position of the individual in North American (social) psychology. Consistent with an emerging re-emphasis on the social foundations of individual behavior and cognition (Brewer, 1988; Fiske, 1993; Higgins, 1981a, 1992a, 1992b; Jost & Banaji, 1994; Levine et al., 1993; Markus & Kitayama, 1989; Ostrom, 1984; Resnick et al., 1991; Fiedler & Semin, 1993), the perspective of shared reality represents an empirically driven attempt to ground even the most basic aspects of cognition—including how experience is represented in memory—in terms of the individual's place in ongoing social activity.

It is worth noting that shared reality differs essentially from an important, if usually implicit, assumption in psychological theory that the individual stands somehow independent of its society. Although most theorists assume that society is one source of influence on the individual, a driving theme has been that psychological integrity is to be found in the individual (cf. Allport, 1961; Bakhtin, 1986; Cooley, 1902; Freud, 1923/1960; LeBon, 1896; Marx & Engels, 1846/1970; Mead, 1982; Moscovici, 1986; Piaget, 1976; Rogers, 1951; Skinner, 1953; Vygotsky, 1978; Weber, 1967; Wittgenstein, 1980). For example, LeBon (1896) assumed that the individual loses its normal self-regulatory ability in the crowd (cf. Reicher, 1984). Piaget (1976) assumed that social development is predicted on antecedent individual cognitive development (cf. Vygotsky, 1978). Freud (1923/1960) assumed that the fundamental conflict the individual faces is achieving the satiation of its desires against the strictures of society (cf. Dewey, 1922/1930). Both psychodynamic and behaviorist approaches assume a drive for individual need satisfaction, which provides "meaning" and "significance" (cf. Mead, 1934).

Contemporary social psychology also locates the basis of individual experience and behavior within the individual. Instead of social circumstances or processes of social interaction, theory in social psychology has focused on individually held psychological processes. For example, although individual behavior and experience are now assumed to be determined by a person-situation interaction (e.g., Higgins, 1990; Lewin, 1935; Mischel, 1968; Ross & Nisbett, 1991), theories proposed in part to explain cross-situational behavioral inconsistency

have nevertheless emphasized individual processes, including individual capacities or competencies (e.g., Cantor & Kihlstrom, 1987), individual construals of self (e.g., Markus & Wurf, 1987; Swann, 1983, 1984), individual construals of situations (e.g., Cantor & Kihlstrom, 1987), individual goals and motives (e.g., Markus & Nurius, 1986), and even individually held tendencies to behave with consistency across situations (e.g., Bem & Allen, 1974; Snyder, 1979).

The perspective of shared reality, in contrast, views the individual as fully of the society in which it exists. Social influence is not the stepchild of individual choice, but is its very basis. Society's discontents do not exist in opposition to the social world. They are full participants in it. As Mead (1934, 1956, 1982) argued, the individual mind exists only among other minds that share understandings. If one's gesture evokes in oneself the functionally identical response that it does in others, it is no longer private. By being socially shared and accepted by others, it becomes objective and real. In relieving knowledge of its subjectivity, Mead broke with introspectionism, phenomenology, and, ultimately solipsism. By embracing this tradition in an empirically tractable way, we hope to pursue with others a truly social cognition.

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Notes

1. We argue that shared reality is required for understanding what exists, as well as its function. Although these two aspects of knowledge are often distinguished, some have argued persuasively that they are mutually definitive—that is, function determines form (e.g., Dewey, 1929/1958; James, 1909; Mead, 1934; Wittgenstein, 1953, 1980).
2. It is important to point out that most, following Weber (e.g., 1967), have defined an action as a social action insofar as participants take others into account. This definitional strategy has been useful for delineating the applicable range of study for social psychology. But the perspective of shared reality makes the stronger, empirical claim that all experience—whether it be of social or seemingly nonsocial objects—is validated and objectified through social verification, which may be evidenced by perspective taking.
3. The instrument used was a modified form of the Selves Questionnaire (see Higgins, 1989a), which also asks subjects to indicate attributes that characterize who they aspire to become ("ideal self"), as well as attributes that characterize who they feel obligated to become ("ought self"). Because these data are not relevant for present purposes, they are not discussed further here.
4. Although the perspective of shared reality implies that any attribute held to be self-descriptive must have a history of being socially verified by someone, we assumed that the degree to which an attribute is shared with significant others would be reflected by this operationalization.

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