

PSYCHOLOGY AND CULTURE

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■ **Abstract** Psychological processes influence culture. Culture influences psychological processes. Individual thoughts and actions influence cultural norms and practices as they evolve over time, and these cultural norms and practices influence the thoughts and actions of individuals. Large bodies of literature support these conclusions within the context of research on evolutionary processes, epistemic needs, interpersonal communication, attention, perception, attributional thinking, self-regulation, human agency, self-worth, and contextual activation of cultural paradigms. Cross-cultural research has greatly enriched psychology, and key issues for continued growth and maturation of the field of cultural psychology are articulated.

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INTRODUCTION

The relations between psychology and culture are multifaceted and dynamic, so inquiry into cultural psychology takes many distinct forms. Much recent research in cultural psychology focuses on cross-cultural comparisons. The past several years have witnessed an explosion of research on differences between East Asians and European North Americans in such areas as perception, thinking, and self-concept (e.g., Heine et al. 1999, Masuda & Nisbett 2001, Nisbett et al. 2001). Other recent research focuses on the situation-specific activation of cultural schemata (e.g., Hong et al. 2000). Still other lines of recent work focus on the psychological processes that contribute to origins of cultures and persistence of cultural information. This latter research, for example, reveals how distinct cultural populations emerge as the consequence of interpersonal communication and social influence (e.g., Harton & Bourgeois 2004). Each of these avenues of research contributes to our understanding of *psychology and culture*, yet oddly up until now they have not been considered together.

GOALS OF THIS REVIEW

With these observations in mind, we have three major goals for this review. One goal is to provide a faithful, albeit selective, review of recent research in cultural psychology. We had to omit considerable detail on topics that have already been reviewed thoroughly in other recently published papers, of which there are many, especially on cross-cultural differences (e.g., Choi et al. 1999, Diener et al. 2003, Fiske et al. 1998, Heine et al. 1999, Nisbett & Norenzayan 2002, Nisbett et al. 2001, Triandis & Suh 2002). We devote more space to topics that have not been so thoroughly reviewed as of late.

A second goal is to consider together two substantial bodies of research in cultural psychology that typically have been treated as entirely independent literatures: Research on the ways in which psychological processes influence culture, and research on the ways in which culture influences psychological processes.

Third, this chapter is meant to provide more than a summary of empirical findings; rather, we aim to illuminate deeper insights that emerge when these many different findings—addressing many different kinds of questions—are considered in aggregate. We highlight conceptual connections between superficially dissimilar phenomena, attempt to resolve apparent inconsistencies and outstanding debates, and identify important directions for future research within the vast area of cultural psychology.

PSYCHOLOGICAL FOUNDATIONS OF CULTURE

Virtually every definition of culture (e.g., Hofstede 1980, Mead 1955) suggests that it represents a coalescence of discrete behavioral norms and cognitions shared by individuals within some definable population that are distinct from those shared within other populations. These normative beliefs and behaviors provide resources

for realizing individual and collective goals, and so are often institutionalized in a variety of formal and informal ways. Moreover, there exist means for transmitting beliefs and behaviors to new members of the cultural population, so that the norms defining a culture may persist over very long periods of time.

Given this tacit definition of culture, psychological perspectives can yield novel answers to fundamental questions about the origins and persistence of culture: How do beliefs and behaviors become normative; that is, widely shared within populations? How do different types of norms coalesce to the point that a recognizable “culture” emerges? Why do cultural norms have certain content rather than other content? Why are some normative beliefs and behaviors successfully transmitted to new cultural members whereas others fail to persist over time? A body of theory and research is emerging that addresses these questions by focusing on cognitive processes and interpersonal behavior.

Evolutionary Perspectives on Culture

From an evolutionary perspective, solitude is dangerous; mutually supportive collective behavior is beneficial, both for survival and sexual reproduction. Thus, it makes sense to assume that humans have an evolved tendency toward the establishment of shared beliefs, behaviors, and normative structures that help hold social collectives together (Campbell 1982). Cultural norms—common beliefs, expectations, and practices—may also have conferred adaptive advantages by facilitating efficient coordination of activities necessary for survival, sexual reproduction, and the successful rearing of children to mating age. Consequently, several theoretical analyses suggest that culture emerged as an extraordinary and highly flexible sort of evolutionary adaptation (Barkow et al. 1992).

This evolutionary perspective also implicates constraints operating on the cultural norms that are and are not likely to emerge. Some beliefs and behaviors are better than others at solving adaptive problems, and these are the beliefs and behaviors that are likely to become and remain culturally normative. Examples are provided by recent analyses of specific kinds of cultural norms, including norms governing sexual behavior, communal sharing, and morality (Kameda et al. 2003, Kenrick et al. 2003, Pinker 2002). For instance, Krebs & Janicki (2004) articulated how evolutionary processes may have shaped culturally shared conceptions of morality pertaining to a broad set of behavioral domains, including obedience, reciprocity, interpersonal helping, social responsibility, and group solidarity. An important implication of this perspective is the assertion that, although culture may be socially constructed, there are fundamental biologically based constraints on the construction process: Some specific kinds of beliefs and behaviors are especially likely to be normative across human populations, whereas others are extraordinarily unlikely ever to be popular.

Psychological Needs and the Creation of Culture

Other conceptual approaches focus on specific psychological needs and their consequences for the creation of cultural norms. One perspective is offered by Terror

Management Theory, which posits that culture emerged, in part, to serve as a psychological buffer against the existential anxiety that results from the awareness of our own mortality (Greenberg et al. 1997, Solomon et al. 2004). Culture acts as such a buffer because many specific beliefs and behaviors that define cultural worldviews offer symbolic immortality (e.g., religious beliefs that provide for some sort of life after death, and ritualized practices of naming one's children after oneself so that one's name lives on). Culture also provides a buffer against anxiety by providing a set of values and normative standards against which an individual may be judged a worthwhile, socially acceptable person. The goal is to feel that one is a valuable member of a meaningful culture, which in turn evokes a feeling of symbolic immortality that mitigates the fear of finitude. This line of reasoning leads to two broad hypotheses. One hypothesis is that feelings of self-worth buffer against existential anxiety. Consistent with this hypothesis, events that temporarily enhance self-esteem also reduce anxiety responses to death-related thoughts and imagery (Greenberg et al. 1993, Harmon-Jones et al. 1997). The other hypothesis is that awareness of one's own mortality leads to enhanced attempts to defend one's own cultural worldview. Dozens of studies have supported this hypothesis in myriad ways. For instance, mortality salience increases derogation of alternative cultural worldviews, punishment of individuals who violate cultural rules, rewards to those who uphold cultural values, and unwillingness to desecrate iconic cultural symbols (Florian & Mikulincer 1997, Greenberg et al. 1995, Rosenblatt et al. 1989). More broadly, this theory offers a psychologically functional explanation for the remarkable persistence of extant cultural norms and values, including those that objectively appear to be trivial or even self-defeating.

Another approach suggests that culture arises in part from an epistemic need for verifiable knowledge, and for certainty and confidence in our perceptions of the world around us. The creation of a shared reality—a common set of beliefs, expectations, and rules for interpreting the world—helps fulfill this need to validate one's own construction of reality (Hardin & Higgins 1996). Classic research on norm formation is consistent with this perspective (Sherif 1936). Also consistent with this approach is recent research revealing that attitudes are more likely to be activated into working memory under conditions in which those attitudes are consistent with perceived cultural norms (Sechrist & Stangor 2001), and that recalled information is often assimilated toward shared cultural representations (Harris et al. 1992, Lau et al. 2001a). More direct evidence supporting the role of epistemic needs in the creation and maintenance of culture has emerged from research in which individuals' needs for epistemic "closure" are measured or manipulated. Under conditions in which needs for closure are heightened, individuals are more likely to conform with perceived norms, are more likely to reject deviants from social groups, and are quicker to achieve consensus—all evidence that the need for epistemic certainty contributes to the formation and persistence of culture (Kruglanski & Webster 1991; Kruglanski et al. 1993; Richter & Kruglanski 1999, 2004).

The terror management and epistemic perspectives are well supported by empirical evidence, and identify conceptually complementary processes that help

explain why cultures emerge at all. Understandably, however, neither approach addresses questions about why *some* cultural norms are more likely than others to arise.

Interpersonal Communication and the Creation of Culture

A very different perspective on the origins of culture implies that cultures—and the specific norms that define these cultures—emerge as unintended byproducts of interpersonal interaction. Dynamic Social Impact Theory provides one particularly well-defined model of cultural origins (Latané 1996). This model considers the consequences of persuasion processes within a dynamical systems framework, and reveals that the defining features of culture—the coalescence of distinctive shared beliefs and norms within a population—can arise simply as a consequence of interpersonal communication (Harton & Bourgeois 2004, Latané 1996, Latané & Bourgeois 2001). Because social influence attends any act of communication, and because individuals communicate more regularly with others who are closer to them in geographic or social space, a dynamic process is set in motion in which neighboring individuals mutually influence each other on a wide variety of beliefs and behaviors. In addition, people differ in their ability to influence others. As people communicate with their neighbors and others in close proximity, some will be more convincing and will persuade more people to agree with them. Over time, this mutual influence process leads to the emergence of different “clusters” of beliefs and behaviors. These different beliefs and behaviors tend to become increasingly correlated over time as well: Beliefs and behavioral practices that are initially unrelated tend to coalesce so that people in one cluster share a particular set of norms, whereas those in another cluster share a different set of norms. Furthermore, through majority influence, diversity in beliefs, values, and practices within a cluster will diminish. However, clustering also protects minorities from majority influence, thus ensuring continued diversity. This analysis has been supported in carefully controlled laboratory studies that track the emergence of rudimentary cultures over time (Latané & L’Herrou 1996), and also in longitudinal studies of real-world populations over time (Bourgeois & Bowen 2001, Guimond & Palmer 1985). The cultural processes predicted by the theory have been observed in a wide variety of beliefs and behaviors, ranging from attitudes toward mathematicians to alcohol use (Harton & Bourgeois 2004).

Some constraints on the emergence of culture are implied by Dynamic Social Impact Theory. The dynamic process and its specific outcomes vary as a function of the number and proximity of individuals within any given population, as well as their potency as sources of social influence (Latané 1996). In addition, the operation of these processes is hypothesized to occur more readily among beliefs and behaviors that are more highly prone to social influence. Consistent with this analysis, attitudes that are highly heritable—and so are less amenable to social influence (for examples and empirical elaboration, see Tesser 1993)—are less likely to coalesce into distinct cultural clusters (Bourgeois 2002).

If indeed culture emerges and evolves as the byproduct of interpersonal communication, then the specific contents of cultures are likely to be influenced by individual-level processes that govern the contents of communication. Beliefs and behaviors that are more “communicable,” for whatever reason, are more likely to become culturally normative and to remain that way (Heath et al. 2001, Schaller 2001, Schaller et al. 2002, Sperber 1984). The contents of communication are constrained by many different psychological considerations, and these considerations therefore can exert indirect consequences on culture. For instance, the specific contents of socially shared stereotypes are influenced by concerns ranging from impression management to social identity, and these cultural-level consequences appear largely unintended—an indirect by-product of the more direct influences on interpersonal communication (Haslam et al. 1998, Ruscher 1998, Schaller & Conway 1999).

Complementarity of Different Perspectives on the Origins of Culture

The processes specified by these different conceptual approaches to culture are logically independent and complementary. Several recent lines of research reveal points of integration between these different perspectives. Of particular note are studies revealing how psychological needs—including needs based on evolutionary pressures—may influence communication processes.

Evolutionary considerations suggest that individuals may be especially likely to communicate information that has affective content relevant to survival and reproduction; consequently, knowledge structures that are highly evocative of these affective states may be especially likely to become culturally shared (Kenrick et al. 2002). Research on contemporary “urban legends” is consistent with this analysis: Legends that elicit greater disgust are more likely to be communicated and to become part of popular culture (Heath et al. 2001).

Epistemic needs—such as needs for cognitive efficiency and closure—also exert important influences on the kinds of information that individuals attempt to communicate, and so constrain the specific contents of emergent cultural norms and whether they persist over time (Crandall & Schaller 2004, Kashima 2000b, McIntyre et al. 2003, Thompson et al. 2000). In addition, epistemic needs influence individuals’ understanding of and memory for communicated information (Richter & Kruglanski 2004). This in turn affects the persistence of various cultural norms. Individuals more easily recall information that is sufficiently novel to merit attention, but is not so unusual as to wholly violate existing perceptions of reality (Cohen 2001). This process places important constraints on the nature of religious mythologies and other “magical” belief systems that evolve over time within a culture (Barret & Nyhof 2001, Norenzayan & Atran 2004). Constraints on memory processes also influence the persistence of other cultural artifacts that depend on an oral tradition, such as ballads and children’s counting-out rhymes (Rubin 1995).

CULTURAL FOUNDATIONS OF PSYCHOLOGY

Just as psychological processes exert fundamental influences on culture, so too culture exerts fundamental influences on basic psychological processes. Most inquiries into cross-cultural psychological differences are informed by the concept of cultural schemas or paradigms, which consist of a set of socially shared practices, norms, values, and other mental events that are loosely organized around some common theme (Shore 1996, Triandis 1989). These cultural paradigms guide the construction of meaning across many domains of social life. Among the most heavily researched cultural paradigms in psychology are those that have focused on two overlapping conceptual distinctions: the distinction between independent and interdependent self-concept (Markus & Kitayama 1991), and the distinction between individualism and collectivism (Triandis 1989). There is increasing consensus among cultural researchers that these and other cultural paradigms help individuals and groups solve complex problems of social coordination (Cohen 2001, Fiske 2000, Kashima 1999, Sperber 1996). Culture represents an inescapably fundamental element in individuals' physical and social environments, and so—through the mechanisms of cultural learning—has enduring consequences on individuals' thoughts, feelings, and behaviors (Boesch & Tomasello 1998, Carpenter et al. 1998, Fiske 2000).

Clearly a cultural paradigm is not the same as any demographically defined regional group or ethnocultural population (Kashima 2000a, Triandis 1989). Nevertheless, the underlying influence of complex cultural paradigms often is manifested in meaningful between-group differences in shared cognitions, behaviors, and normative practices (Han & Shavitt 1994, Kashima & Kashima 1998, Kim & Markus 1999, Peng & Nisbett 1999, Rothbaum & Tsang 1998). Consequently, within much psychological research, regional or ethnocultural groups often are used as proxies for cultural paradigms. Such studies test hypotheses about differences in basic psychological processes between demographically defined groups. The vast majority of such research, and what we focus on in this review, concerns comparisons between East Asians and European North Americans. The aim is neither to dichotomize the world nor to claim that these cultures represent the rest of the world. Rather, it is to articulate two divergent systems of co-construction of culture and psychology. At the outset, however, it is important to note that we recognize that there is significant variability both across the various East Asian and European North American cultures, and within cultures.

Attending, Perceiving, Thinking, and Attributing

Adaptive learning requires both attunement to environmental information that is diagnostic of specific outcomes, and detection of covariation between environmental events and adaptive response patterns. Solution of such complex problems requires coordination of attention. Nisbett and his colleagues (2001) suggested that as the ecological and symbolic environment coevolved, East Asians developed an

intellectual tradition emphasizing holistic, dialectical information processing. This intellectual tradition is categorically different from the European North American intellectual tradition, which privileges an analytical, linear thinking style. East Asians therefore should be especially attentive to object-context relations, good at detecting covariation of events, believe in change instead of consistent trends, have high tolerance of seemingly incompatible cognitions, and prefer to rely on holistic impressions rather than formal logic to solve problems.

Consistent with these notions, East Asians have better memory for objects-in-context than European North Americans (Masuda & Nisbett 2001), are more field dependent (Ji et al. 2000), are more confident in their ability to detect covariation (Ji et al. 2000), have stronger expectations that outcome or behavioral trends will reverse in the future (Ji et al. 2001), are more likely to attribute incompatible traits or values to the self (Choi & Choi 2002), are less surprised by counterintuitive behaviors or counterintuitive research findings (Choi & Nisbett 2000), have a greater tendency to consider arguments from both sides and to compromise in conflict situations (Peng & Nisbett 1999), are more influenced by exemplar typicality when asked to make rule-based categorization and categorical inferences (Norenzayan et al. 2002), and are more willing to accept deductive inferences when the premises are believable (Norenzayan et al. 2002).

Compared to East Asians, European North Americans are more likely to attribute situationally induced events to the actor's dispositions (Choi & Nisbett 1998, Miyamoto & Kitayama 2002), and attribute the causes of social events to the actor's internal factors (Morris & Peng 1994, Zarate et al. 2001). In addition, they are less aware of the influence of the situation on behavior (Morris & Peng 1994), and they make stronger predictions of trait-relevant behavior based on previous trait-relevant behavior (Norenzayan et al. 2002). By comparison, East Asians are more affected by information about situational constraints when predicting trait-relevant behavior in a particular situation (Norenzayan et al. 2002).

The two groups also differ in how they use information to make social inferences. Specifically, East Asians exclude less directly relevant information than European North Americans when they make causal inferences (Choi et al. 2003). And East Asians rely more on relational information (i.e., the target's interpersonal network, or community memberships) than individuating information in making social predictions, whereas European North Americans exhibit the reverse pattern (Gelfand et al. 2000).

Interestingly, in many of these studies (e.g., Choi & Nisbett 1998, Ji et al. 2000, Miyamoto & Kitayama 2002, Norenzayan et al. 2002) East Asians' responses deviate from those of European North Americans only when the relevance of the East Asian intellectual paradigm is made salient (e.g., when the contradictions between holistic and analytical reasoning are made salient, when the research participants are not given control over the test procedures, when the situational constraints on behavior are highlighted, or when the stimulus behavior is not diagnostic of personal dispositions). This "salience" effect suggests that although East Asians are also capable of analytical and person-focused reasoning, they apply

the culturally encouraged way of thinking once the relevance or applicability of the East Asian intellectual paradigm is made salient in the particular context. Of course, European North Americans are also capable of thinking more holistically and relationally, although, interestingly, empirical demonstrations of this are currently lacking.

Constructing Selfhood

CONSTRUCTION OF SELF-CONCEPTS Cultural paradigms play a constitutive role in the evolution of the self. Geertz (1966) argued that culture not only provides a model of self, it is a model for self. That is, not only does culture define what the self is, it also prescribes how people should manage their self in everyday life. In anthropological discourse, the "Western" self, characterized as self-contained and autonomous, is generally taken as a point of departure. Non-Western conceptions of selves are defined by the negation of these qualities (Sokefeld 1999). Similar rhetoric has dominated psychological analyses of the self as a cultural construction. The focus of psychological inquiry has been on how the interdependent cultural paradigm provides an alternative construction of self from that which is derived within the independent cultural paradigm. Research on people's spontaneous self-descriptions has revealed consistent group differences: East Asians generally mention more interdependent or group-related self-statements, whereas European North Americans generally mention more independent self-statements (Rhee et al. 1995, Wang 2001).

SELF-REGULATION Solution of complex social problems also requires social consensus on how individuals should behave in a society. An important cultural coordination device for self-regulation is the shared ideal type of human development in the culture. Tweed & Lehman (2002) described the ideal types of a learned person in the Socratic tradition (which grows out of an independent cultural paradigm) and the Confucian intellectual tradition (which grows out of an interdependent cultural paradigm). An ideal Socratic learner is an active learner who pursues knowledge for its own sake, values self-generated knowledge, and engages in self-directed learning through dialogic exchanges. By contrast, ideal Confucian learners view knowledge pursuit as a route to self-improvement. Learning is achieved through applying the self, and constantly reflecting and meditating on traditional wisdom (see also Kim 2002, Li 2002). An ideal Socratic learner derives self-respect from the actualization of one's potentials for independent learning, whereas an ideal Confucian learner derives self-respect from moral self-transformation and from pursuits of prosocial goals.

Ideal types of a learned person are rooted in cultural models of human development. Within an independent cultural paradigm, the goals of personal development are self-direction (Iyengar & Lepper 1999), pursuits of personal excellence, and actualization of inner potentials. These goals focus on the attainment of positive outcomes. Research has shown that European North Americans perceive

success-foregone events to be more important than failure-avoidance events (Lee et al. 2000), attribute successes to internal causes more often than to external causes (Hallahan et al. 1997), feel that success situations have more influence on self-esteem than do failure situations (Kitayama et al. 1997), and find success feedback to be more motivating than failure feedback (Heine et al. 2001).

Within an interdependent cultural paradigm, the goal of personal development is to transcend the bounded individual self through cultivating concerns for the collective good. This cultural orientation prescribes devaluation of one's distinctive personal strengths that are unrelated to or would even hinder actualization of collective goals, and valuation of personal qualities that would facilitate actualization of these goals. The emphasis on devaluation of distinctive personal strengths may create a propensity toward self-criticism (Heine et al. 2000) and a strong motivation to avoid failures that would reflect badly on the group. Consistent with these ideas, East Asians pursue more avoidance goals than do European North Americans (Elliot et al. 2001), perceive failure-avoidance events to be more important than success-foregone events (Lee et al. 2000), think that failures would decrease their self-esteem more than successes would increase their self-esteem (Kitayama et al. 1997), and find failure feedback to be more motivating than success feedback (Heine et al. 2001). In addition, East Asians believe that although others are more likely than them to encounter positive events, they are less likely than others to encounter negative events (Chang et al. 2001, Heine & Lehman 1995).

Many entrenched egocentric biases in self-appraisals found among European North Americans may be related to the high accessibility of the independent cultural paradigm in the West. Such biases include self-enhancement (viewing one's personal attributes as better than they really are), unrealistic optimism (perceiving the self as more invulnerable and more likely to experience positive events than it really is), and self-affirmation (justifying one's personal choices). These biases are much less evident in East Asians (Chang et al. 2001; Heine & Lehman 1995, 1997a,b; Hetts et al. 1999; Kurman 2001). East Asians also use more negative and fewer positive self-descriptions than do European North Americans, particularly when they describe themselves in front of an authority figure (Kanagawa et al. 2001), and they are more modest when describing their achievement (Akimoto & Sanbonmatsu 1999). In some studies, East Asians even exhibit a significant self-criticism bias (Heine et al. 2000, Hetts et al. 1999) or unrealistic pessimism (Heine & Lehman 1995). In addition, they are less likely to view criticism or negative feedback as a self-threat. In response to failure feedback, East Asians do not defend their self-esteem by derogating strong performers (Brockner & Chen 1996), and persist more than European North Americans (Heine et al. 2001).

CULTURAL CONSTRUCTION OF AGENCY It would be a mistake to conclude that East Asians do not value agency. Human agency consists of personal but also collective or group agency (Bandura 2002). Agentic blends of personal and group

agency may vary across cultural paradigms. For example, European North Americans tend to privilege personal agency, whereas East Asians tend to privilege group agency (Chiu et al. 2000, Menon et al. 1999). Markus & Kitayama (2002) refer to these as disjoint and conjoint models of agency, respectively. The former, which originates in the independent self, is agency that is separate or distinct from the actions of others. The latter, which originates in the interdependent self, is agency that in important ways is impelled by others, in relationship and interaction with those others.

Despite cultural variations in the relative primacy of personal (disjoint) and group (conjoint) agency, these two modes of agency may coexist in people, and are not antithetical to each other (Bandura 2002). For example, European North Americans can exercise their personal agency through pursuing their self-chosen activities, or group agency through pursuing a self-identified collective choice (Iyengar & Lepper 1999).

CULTURAL TRADEOFF Self-enhancement serves a self-esteem function. With a weaker self-enhancement tendency and a stronger self-criticism tendency, East Asians often report lower levels of self-esteem than do those from independent cultures (Campbell et al. 1996, Heine & Lehman 2004). However, this does not imply that self-worth is not important to those from interdependent cultures (Kitayama & Karasawa 1997), but rather that self-worth is built on a different psychological foundation. And some recent research reveals that East Asians hold positive and sometimes unrealistically positive views of the self when they appraise themselves on dimensions that are central to the cultural definition of the self (e.g., communal traits, collectivistic attributes; Brown & Kobayashi 2002; Kurman 2001; but see Heine & Lehman 1999). Thus, for people from interdependent cultures, lower self-esteem may be compensated for by positive feelings of being a valued member of the group, and of being psychologically connected to group members.

SOURCES OF SELF-WORTH AND LIFE SATISFACTION Different cultural paradigms suggest different ideas of what constitutes a good life, and prescribe different routes to self-worth. For East Asians, self-worth is established on the social standing of one's group, as well as the group's appraisal of the self. Compared to European North Americans, East Asians are more likely to perceive group failures as ego-threatening, although they are less likely to perceive personal failures as ego-threatening (Chen et al. 1998). Feedback on group performance, which has little impact on self-evaluations by European North Americans, significantly affects self-evaluations by East Asians (Earley et al. 1999).

Similarly, factors related to personal agency (self-esteem, identity consistency, personal freedom, and pursuit and attainment of individual goals) and personal affect are better predictors of life satisfaction for European North Americans than for East Asians, whereas factors related to feelings of connectedness (pursuit and attainment of interdependent goals, and quality of interpersonal relationships)

are better predictors of life satisfaction for East Asians than for European North Americans (Diener & Diener 1995, Kwan et al. 1997, Oishi & Diener 2001, Oishi et al. 1999, Schimmack et al. 2002b, Suh 2002, Suh et al. 1998). In addition, events involving personal influence are more cognitively accessible to European North Americans, whereas events involving adjustment are more cognitively accessible to East Asians. Finally, influence events that are accessible to European North Americans tend to evoke feelings of efficacy, whereas adjustment events that are accessible to East Asians tend to evoke feelings of relatedness (Morling et al. 2002).

Connecting to the Social World

Joint activities invariably involve social coordination, and culture's influence on these activities is pronounced. For example, East Asians are more likely to take the perspective of the interaction partner than are European North Americans, who in turn are more likely to project their own perspectives onto their interaction partner (Cohen & Gunz 2002). In interpersonal communication, East Asians are more attuned to the relational context, and more sensitive to the presence of a common ground of knowledge in the communication context, than are European North Americans (Haberstroh et al. 2002).

Consistent with the finding that those from collectivistic cultures are more sensitive to the relational context than are those from individualistic cultures, group opinions, concerns for in-group benefits, and group harmony play a more important role than personal attitudes and preferences in social interactions for East Asians, and the reverse is true for European North Americans. For example, compared to European North Americans, East Asians find commercial advertisements that appeal to in-group benefits, harmony, and family integrity more persuasive, and those that appeal to personal preferences and benefits less persuasive (Han & Shavitt 1994). East Asians tend to make choices that will enhance in-group benefits, and will be popular in the group. By contrast, European North Americans tend to make competitive choices, and choices that highlight their personal distinctiveness and individuality (Aaker & Schmitt 2001, Domino & Regmi 1992, Kim & Markus 1999). In resolving conflicts, East Asians prefer mediational or accommodating strategies that minimize interpersonal animosity, whereas European North Americans prefer direct, confrontational strategies (Briley et al. 2000, Derlega et al. 2002, Ohbuschi et al. 1999).

Cultures also provide guidelines on how to regulate children's behavior and how to integrate children into the cultural world. European North American mothers expect earlier attainment of independence in children than East Asian mothers (Stewart et al. 1999; see also comparative work on cosleeping, Shweder et al. 1995), who in contrast place greater emphasis on regulation of children's social demeanors (Schulze et al. 2001). For example, Japanese teachers are more likely to direct communication to the group than are European North American teachers, who in turn are more likely to direct communication to individual students (Hamilton et al. 1991).

CONTEXTUAL ACTIVATION AND CULTURAL FRAME SWITCHING

One of our overarching points is that contrastive cultural paradigms are available to regional or ethnocultural groups. Evidence from several lines of research supports this idea. First, as noted, group differences are accentuated when the relevance or applicability of cultural paradigms are highlighted in the judgment or behavioral context, and attenuated when the paradigm's relevance is obscure (Choi & Nisbett 1998, Hong et al. 2003, Ji et al. 2000, Kanagawa et al. 2001, Miyamoto & Kitayama 2002, Norenzayan et al. 2002). These findings make plain that culture does not rigidly determine the responses of its group members. Instead, culture provides interpretive perspectives for making sense of reality.

Aside from the cultural paradigm's applicability, its epistemic value in a particular situation also affects how likely it is to be adopted in the situation. A particular cultural paradigm is likely to be adopted when it offers a consensually validated, conventionalized solution to a problem, and when the problem solver lacks the capability, motivation, or resources to consider alternative solutions. Consistent with this idea, the likelihood of following a cultural paradigm in judgment and decision making increases when people need to recruit culturally validated reasons to justify their decisions (Briley et al. 2000), have a high need for cognitive closure (Chiu et al. 2000, Morris & Fu 2001), are cognitively busy (Knowles et al. 2001), or need to make judgments under time pressure (Chiu et al. 2000).

In addition, people often express or affirm their ethnocultural identities by engaging in practices prescribed by the dominant cultural paradigm in their ethnocultural group. Not surprisingly, culture's influences on behavior are particularly pronounced in ethnocultural groups when ethnocultural identities are accessible (Rhee et al. 1995), or when there is strong identification with the group (Jetten et al. 2002).

Second, people often follow different cultural paradigms in different contexts. For example, European North American students mention more group attributes and fewer idiocentric attributes when their collective self is primed than when their private self is primed. This finding reveals that both independent and interdependent self-construals are available to European North Americans, and contextual priming can bring to the forefront one or the other of these self-construals (Gardner et al. 1999, Trafimow et al. 1991).

Susanna Harrington, a multicultural informant of South American origin in Sparrow's (2000) study, said, "I think of myself not as a unified cultural being but as a communion of different cultural beings. Due to the fact that I have spent time in different cultural environments I have developed several cultural identities that diverge and converge according to the need of the moment" (p. 190). This notion of flexibility in cultural frame switching may help explain a consistent finding regarding immigration, ethnic identity, and psychological well-being: Immigrants with both a strong ethnic identity and a strong national identity tend to exhibit the best psychological adaptation (Phinney et al. 2001).

Experiences of cultural frame switching are familiar to groups with multiple cultural identities. Hong and her colleagues (Hong et al. 1997, 2000, 2003) have captured cultural frame switching experiences in their research by priming bicultural individuals (i.e., Hong Kong Chinese, Chinese Americans) with either Chinese cultural icons (e.g., the Chinese dragon) or American cultural icons (e.g., Mickey Mouse). Bicultural individuals made more external or group attributions and fewer individual dispositional attributions when they were primed with Chinese cultural icons than when they were primed with American cultural icons. Analogous cultural priming effects have been found in other studies using different bicultural samples (e.g., Chinese Canadians, multicultural Hawaiians, and Dutch-Greek bicultural children; Bhawuk & Brislin 1992, Lehman et al. 2004, Ross et al. 2002, Verkuyten & Pouliasi 2002), and a variety of cultural primes (e.g., language, experimenter's cultural identity, and salience of ethnocultural identity; Gardner et al. 1999, Hong et al. 2001, Ross et al. 2002, Trafimow et al. 1997, Verkuyten & Pouliasi 2002) on various dependent measures (e.g., endorsement of cultural values, moral decisions, spontaneous self-concept, memory for object context, and self-esteem; Briley & Wyer 2001, Gardner et al. 1999, Hong et al. 2001, Lehman et al. 2004, Ross et al. 2002, Verkuyten & Pouliasi 2002).

The findings from cultural frame switching research are consistent with the idea that cultural paradigms are consensually validated interpretive tools (DiMaggio 1997). Individuals with extensive multicultural experiences may have more tools in their toolbox than do monocultural individuals (Tweed & Lehman 2002, Yamada & Singelis 1999). How multicultural individuals choose among the multiple tools available to them depends on how they manage their multiple cultural identities. As noted, cultural paradigms serve important identity expression functions. Some bicultural individuals view their dual cultural identities as oppositional, whereas others see them as independent or complementary (Benet-Martinez et al. 2002, Tsai et al. 2000). Among bicultural minorities, some seek to assimilate into the majority group by aligning their values with those in the majority group (Tafarodi et al. 2002), whereas others seek to affirm their ethnocultural identity by adhering to the dominant values in their ethnocultural group and by distancing themselves from the majority group (Kosmitzki 1996). Variations in how dual identities are managed are related to bicultural individuals' responses to cultural priming. Those who view their dual identities as independent or complementary tend to assimilate their responses to those expected from the primed cultural paradigms. Those who view their dual identities as oppositional and those who seek to affirm their ethnocultural identities may respond reactively to the cultural primes, and exhibit responses that are contrastive to the responses expected from the primed cultural paradigms (Benet-Martinez et al. 2002, Bond & Cheung 1984).

The above analysis points to what we refer to as the paradox of group differences and cultural influence. When culture is reduced to a fixed response pattern in a regional or ethnocultural group, the absence of predicted group differences poses a threat to the explanatory utility of culture (Briley & Wyer 2001). In a recent review of group differences in individualism and collectivism, Oyserman et al.

(2002) found that those from individualistic cultures do not always have higher scores on measures of individualism and lower scores on measures of collectivism than do those from collectivistic cultures. On the face of it, this seems to threaten the construct validity of individualism and collectivism.

The threat is more apparent than real when we separate individualism and collectivism as cultural paradigms from group averages on value measures of individualism and collectivism. Psychological influences of culture are much more contextualized and dynamic than a model of culture as fixed response patterns in groups would anticipate (Briley & Wyer 2001, Fiske 2002, Hong & Chiu 2001). Paradoxically, the explanatory utility of cultural paradigms is most apparent when the predicted group differences emerge in a concrete situation only when cultural paradigms are relevant and useful in that situation, and disappear when they are not. Thus, the absence of group differences in some circumstances might highlight the explanatory utility of culture, instead of undermining it. A critical test of the theoretical utility of a cultural account of psychological processes is whether we can predict the specific circumstances under which group differences will emerge based on known principles of cultural knowledge application.

In response to Oyserman et al.'s (2002) observations, some cultural psychologists, instead of abandoning individualism and collectivism, have called for more dynamic, nuanced analyses of cultural processes (Kitayama 2002). Others have sought to identify the specific context within which predicted group differences in individualism and collectivism should arise. An emerging finding is that coherent group differences are likely to be observed when cultural differences are made salient by placing contrastive cultural paradigms in juxtaposition, such as when Japanese and European North Americans are asked to use each other as a reference group to calibrate their self-ratings (Heine et al. 2002), or when individualism scores and collectivism scores are pitted against each other (Schimmack et al. 2002a).

DYNAMIC INTERPLAY BETWEEN PSYCHOLOGY AND CULTURE

Psychological processes influence culture. Culture influences psychological processes. Individual thoughts and acts influence cultural norms and practices as they evolve over time, and these cultural paradigms influence the future thoughts and actions of individuals, which then influence the persistence and change of culture over time. And so on. By methodological necessity, most psychological research focuses on fixed slices of this inherently dynamic process, and culture often is conceptualized in static terms, thus reinforcing stereotypical images of a certain culture. To understand more fully the relations between psychology and culture, however, it is necessary to focus more explicitly on this dynamic interaction. Several lines of research illustrate promising strategies for doing so. One strategy is to examine the effects of existing cultural paradigms on those communication

processes that are so central to the ongoing evolution of cultures. The existing cultural popularity of any piece of knowledge influences the manner in which that knowledge is communicated, which in turn constrains future representation of that knowledge at both the cognitive and cultural levels (Chiu et al. 1998, 1999; Lau et al. 2001b). This constraint on communication and culture itself differs across cultures. For example, individuals from interdependent cultures are more attentive to the development of common ground in communication (Haberstroh et al. 2002). A complementary strategy is to apply the logical and methodological tools of dynamical systems theory to examine the longitudinal consequences of interpersonal interaction on both individual- and cultural-level outcomes (Kameda et al. 2003, Kashima et al. 2000, Kenrick et al. 2003, Latané 1996). As these tools and research strategies are applied in increasingly sophisticated ways, we should be able to describe more fully the complex set of processes that bind psychology and culture together.

FUTURE DIRECTIONS

Much recent research has demonstrated the strength of culture in influencing the perceptions, construals, thoughts, feelings, and behaviors of its members. Culture promotes, encourages, and sustains ways of being, and in turn these then seem natural and ubiquitous. This makes clear the pitfalls of interpreting any given culturally based practice without first considering its relation to the cultural context. Nothing transpires in a cultural vacuum.

Findings from the burgeoning field of cultural psychology are significantly enhancing the generativity of psychological theorizing. Not only are we discovering fascinating differences between people from distinct cultures, we are gaining deeper understandings of the psychological processes that support behaviors of many kinds. It is becoming fashionable in empirical work to “unpack” culture, and thus to attempt to gain a better handle on why, precisely, the cultural differences exist. More developmental research is sorely needed within cultural psychology in order to increase understanding of culturally based psychological processes, and how such processes take shape as children are socialized and develop into adulthood. There is also a need for inquiry into a broader array of cultural paradigms, as well as inquiry into additional variables that can serve as proxies for well-mined paradigms. Markus’ recent work (e.g., Markus et al. 2003) comparing high school-educated and college-educated groups is a noteworthy example of the latter. Finally, as is true with many areas of psychology, cross-cultural research would benefit from having a greater percentage of studies being conducted with people other than college sophomores (Sears 1986).

Cultural psychology no doubt soon will move beyond the east-west comparisons that have become so commonplace. Broader coverage of world cultures will take the field in new and exciting directions. Yet learning about different cultures and different ways of being is tough going. For many social-personality psychologists who do not engage in cross-cultural research it has been difficult enough to be

convinced that those who grow up participating in East Asian cultures can be so different from those who grow up participating in European North American cultures. The notion that one may have to go through this learning process again and again with still different cultures can be unsettling. Yet if the goal of psychology is to better understand *people*, and the ways they think, feel, and behave, we see no reason to be closed to this process.

Given globalization, increasingly cultural psychology will focus on how new members learn a culture. And this connects with one of the more interesting issues in the field concerning public versus private culture. In what ways is culture external and in what ways is it internal? Can culture reasonably be reduced to individual psychology? Or can culture be studied only from a distance? How does culture get into the heads of individuals? Analyses such as Sperber's (1996), of internalization of cultural representations ("culture in mind"), exemplify an important channel for future research.

Consideration of how societies adapt to multiculturalism, how citizens are educated about cross-cultural differences, ways that people learn flexible cultural styles (Tweed & Lehman 2002), and intercultural relations and conflict (Eidelson & Eidelson 2003) will become more and more important in the coming years. In a similar vein, understanding religion and religion's influence on psychology (Atran & Norenzayan 2004) will take on greater importance, as will a better appreciation for cultural change and its affect on people.

The field of cultural psychology will also be well served by research that focuses more fully on the dynamic relations between psychology and culture. We have discussed research on the psychological foundations of culture as well as research on the cultural foundations of psychology, but we have done little more than merely juxtapose these two fertile lines of inquiry. There remains a need to integrate these different lines of research, conceptually as well as empirically. An explicitly dynamical approach (e.g., Vallacher et al. 2002), abetted by sophisticated research methods that allow the tracking of dynamic bidirectional influences over time, will be of considerable utility in forging this sort of integration.

More generally, it will be important to develop a deeper understanding of the complex connections between cross-cultural differences and psychological universals. The integration of cultural psychology with evolutionary psychology presents itself as one particularly exciting opportunity. Depending on the particular level of analysis that one focuses on, one can perceive differences or similarities between any two populations. Since the field of cultural psychology took off in the mid-1990s, considerable resources have been devoted to the documentation and understanding of cross-cultural differences, many of which operate at very basic levels of attention, perception, and cognition. Still, there remains a powerful desire among many research psychologists to demonstrate ways in which ostensible cross-cultural differences may in fact be manifestations of deeper psychological similarities in motivation and cognition. Sometimes different actions by different peoples may indeed reflect similar underlying psychological processes. However, even when people from different cultures appear to be psychologically "the same," there may be fundamental cross-cultural differences in the deep meanings of the

motivations, cognitions, emotions, and behaviors. That is, the entire dynamic—both content *and* process—may differ. In the rush to document the existence of psychic universals unaffected by cultural context, the very heart of the psychological process may be fundamentally misunderstood. This reflects an essential tension that accompanies any investigation into the intersection of the study of culture (which typically assumes meaningful cross-cultural differences) and the study of psychology (which typically assumes fundamental human universals). It remains for future research in cultural psychology to confront this tension, and to find ways of resolving it so that we may more fully comprehend the important relations between human culture and human psychology.

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LITERATURE CITED

- Aaker J, Schmitt B. 2001. Culture-dependent assimilation and differentiation of the self: preferences for consumption symbols in the United States and China. *J. Cross-Cult. Psychol.* 32:561–76
- Akimoto SA, Sanbonmatsu DM. 1999. Differences in self-effacing behavior between European and Japanese Americans: effect on competence evaluation. *J. Cross-Cult. Psychol.* 30:159–77
- Atran S, Norenzayan A. 2004. Religion's evolutionary landscape: counterintuition, commitment, compassion, communion. *Brain Beh. Sci.* In press
- Bandura A. 2002. Social cognitive theory in cultural context. *Appl. Psychol: An Int. Rev.* 51:269–90
- Barkow JH, Cosmides L, Tooby J. 1992. *The Adapted Mind: Evolutionary Psychology and the Generation of Culture*. New York: Oxford Univ. Press
- Barret JL, Nyhof MA. 2001. Spreading nonnatural concepts: the role of intuitive conceptual structures in memory and transmission of cultural materials. *J. Cogn. Cult.* 1:69–100
- Benet-Martinez V, Leu J, Lee F, Morris MW. 2002. Negotiating biculturalism: cultural frame switching in biculturals with oppositional versus compatible cultural identities. *J. Cross-Cult. Psychol.* 33:492–516
- Bhawuk DPS, Brislin R. 1992. The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *Int. J. Intercult. Relat.* 16:413–36
- Boesch C, Tomasello M. 1998. Chimpanzee and human cultures. *Curr. Anthropol.* 39:591–614
- Bond MH, Cheung M-K. 1984. Experimenter's language choice and ethnic affirmation by Chinese trilinguals in Hong Kong. *Int. J. Intercult. Relat.* 8:347–56
- Bourgeois MJ. 2002. Heritability of attitudes constrains dynamic social impact. *Personal. Soc. Psychol. Bull.* 28:1063–72
- Bourgeois MJ, Bowen AM. 2001. Self-organization of alcohol-related attitudes and beliefs in a campus housing complex: an initial investigation. *Health Psychol.* 20:434–37
- Briley DA, Morris MW, Simonson I. 2000.

- Reasons as carriers of culture: dynamic versus dispositional models of cultural influence on decision-making. *J. Consum. Res.* 27:157-78
- Briley DA, Wyer RS Jr. 2001. Transitory determinants of values and decisions: the utility (or nonutility) of individualism and collectivism in understanding cultural differences. *Soc. Cogn.* 19:197-227
- Brockner J, Chen Y-R. 1996. The moderating roles of self-esteem and self-construal in reaction to a threat to the self: evidence from the People's Republic of China and the United States. *J. Personal. Soc. Psychol.* 71:603-15
- Brown JD, Kobayashi C. 2002. Self-enhancement in Japan and America. *Asian J. Soc. Psychol.* 5:145-68
- Campbell DT. 1982. Legal and primary-group social controls. *J. Soc. Biol. Struct.* 5:431-38
- Campbell JD, Trapnell PD, Heine SJ, Katz IM, Lavalley LF, Lehman DR. 1996. Self-concept clarity: measurement, personality correlates, and cultural boundaries. *J. Personal. Soc. Psychol.* 70:141-56
- Carpenter M, Nagell K, Tomasello M. 1998. Social cognition, joint attention, and communicative competence from 9 to 15 months of age. *Monogr. Soc. Res. Child Dev.* 63:1-174
- Chang EC, Asakawa K, Sanna LJ. 2001. Cultural variations in optimistic and pessimistic bias: Do Easterners really expect the worst and Westerners really expect the best when predicting future life events? *J. Personal. Soc. Psychol.* 81:476-91
- Chen Y-R, Brockner J, Katz T. 1998. Toward an explanation of cultural differences in in-group favoritism: the role of individual versus collective primacy. *J. Personal. Soc. Psychol.* 75:1490-502
- Chiu C-y, Krauss RM, Lau IY-m. 1998. Some cognitive consequences of communication. In *Social and Cognitive Psychological Approaches to Interpersonal Communication*, ed. SR Fussell, RJ Kreuz, pp. 127-43. Hillsdale, NJ: Erlbaum
- Chiu C-y, Krauss RM, Lee S-I. 1999. Communication and social cognition: a post-Whorfian approach. In *Progress in Asian Social Psychology*, ed. T Sugiman, M Karasawa, J Liu, C Ward, 2:127-43. Map-ku, Korea: Kyoyook-Kwahak-Sa
- Chiu C-y, Morris MW, Hong Y-y, Menon T. 2000. Motivated cultural cognition: the impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *J. Personal. Soc. Psychol.* 78:247-59
- Choi I, Choi Y. 2002. Culture and self-concept flexibility. *Personal. Soc. Psychol. Bull.* 28:1508-17
- Choi I, Dalal R, Kim-Prieto C, Park H. 2003. Culture and judgment of causal relevance. *J. Personal. Soc. Psychol.* 84:46-59
- Choi I, Nisbett RE. 1998. Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personal. Soc. Psychol. Bull.* 24:949-60
- Choi I, Nisbett RE. 2000. Cultural psychology of surprise: holistic theories and recognition of contradiction. *J. Personal. Soc. Psychol.* 79:890-905
- Choi I, Nisbett RE, Norenzayan A. 1999. Causal attribution across cultures: variation and universality. *Psychol. Bull.* 125:47-63
- Cohen D. 2001. Cultural variation: considerations and implications. *Psychol. Bull.* 127:451-71
- Cohen D, Gunz A. 2002. As seen by the other . . . : perspectives on the self in the memories and emotional perceptions of Easterners and Westerners. *Psychol. Sci.* 13:55-59
- Crandall CS, Schaller M. 2004. Scientists and science: how individuals' goals shape cultural norms. See Schaller & Crandall 2004, pp. 200-23
- Derlega VJ, Cukur CS, Kuang JCY, Forsyth DR. 2002. Interdependent construal of self and the endorsement of conflict resolution strategies in interpersonal, intergroup, and international disputes. *J. Cross-Cult. Psychol.* 33:610-25
- Diener E, Diener M. 1995. Cross-cultural correlates of life satisfaction and self-esteem. *J. Personal. Soc. Psychol.* 68:653-63
- Diener E, Oishi S, Lucas RE. 2003. Personality, culture, and subjective well-being: emotional

- and cognitive evaluations of life. *Annu. Rev. Psychol.* 54:403–25
- DiMaggio P. 1997. Culture and cognition. *Annu. Rev. Sociol.* 23:263–87
- Domino G, Regmi MP. 1992. Cooperation and competition in Chinese and American children. *J. Cross-Cult. Psychol.* 23:456–67
- Earley PC, Gibson CB, Chen CC. 1999. “How did I do?” versus “How did we do?”: cultural contrasts of performance feedback use and self-efficacy. *J. Cross-Cult. Psychol.* 30:594–619
- Eidelson RJ, Eidelson JI. 2003. Dangerous ideas: five beliefs that propel groups toward conflict. *Am. Psychol.* 58:182–92
- Elliot AJ, Chirkov VI, Kim Y, Sheldon KM. 2001. A cross-cultural analysis of avoidance (relative to approach) personal goals. *Psychol. Sci.* 12:505–10
- Fiske AP. 2000. Complementarity theory: why human social capacities evolved to require cultural complements. *Personal. Soc. Psychol. Rev.* 4:76–94
- Fiske AP. 2002. Using individualism-collectivism to compare cultures—A critique of the validity and measurement of the constructs: comments on Oyserman et al. (2002). *Psychol. Bull.* 128:78–88
- Fiske AP, Kitayama S, Markus HR, Nisbett RE. 1998. The cultural matrix of social psychology. In *The Handbook of Social Psychology*, ed. D Gilbert, S Fiske, G Lindzey, pp. 915–81. San Francisco: McGraw-Hill
- Florian V, Mikulincer M. 1997. Fear of death and the judgment of social transgressions: a multidimensional test of terror management theory. *J. Personal. Soc. Psychol.* 73:369–80
- Gardner WL, Gabriel S, Lee A. 1999. “I” value freedom, but “we” value relationships: self-construal priming mirrors cultural differences in judgment. *Psychol. Sci.* 10:321–26
- Geertz C. 1966. Religion as a cultural system. In *Anthropological Approaches to Religion*, ed. M Banton, pp. 1–46. London: Tavistock
- Gelfand MJ, Spurlock D, Sniezek JA, Shao L. 2000. Culture and social prediction: the role of information in enhancing confidence in social predictions in the United States and China. *J. Cross-Cult. Psychol.* 31:498–516
- Greenberg J, Pyszczynski T, Solomon S, Pinel E, Simon L, Jordan K. 1993. Effects of self-esteem on vulnerability-denying defensive distortions: further evidence of an anxiety-buffering function of self-esteem. *J. Exp. Soc. Psychol.* 29:229–51
- Greenberg J, Simon L, Porteus J, Pyszczynski T, Solomon S. 1995. Evidence of a terror management function of cultural icons: the effects of mortality salience on the inappropriate use of cherished cultural symbols. *Personal. Soc. Psychol. Bull.* 21:221–28
- Greenberg J, Solomon S, Pyszczynski T. 1997. Terror management theory of self-esteem and cultural worldviews: empirical assessments and conceptual refinements. In *Advances in Experimental Social Psychology*, ed. M Zanna, 29:61–139. New York: Academic
- Guimond S, Palmer DL. 1985. The political socialization of commerce and social science students: epistemic authority and attitude change. *J. Appl. Soc. Psychol.* 26:1985–2013
- Haberstroh S, Oyserman D, Schwarz N, Kuhen U, Ji L-j. 2002. Is the interdependent self more sensitive to question context than the independent self? Self-construal and the observation of conversational norms. *J. Exp. Soc. Psychol.* 38:323–29
- Hallahan M, Lee F, Herzog T. 1997. It’s not just whether you win or lose, it’s also where you play the game: a naturalistic, cross-cultural examination of the positivity bias. *J. Cross-Cult. Psychol.* 28:768–78
- Hamilton VL, Blumenfeld PC, Akoh H, Mui-ran K. 1991. Group and gender in Japanese and American elementary classrooms. *J. Cross-Cult. Psychol.* 22:317–46
- Han S-P, Shavitt S. 1994. Persuasion and culture: advertising appeals in individualistic and collectivistic societies. *J. Exp. Soc. Psychol.* 30:326–50
- Hardin CD, Higgins ET. 1996. Shared reality: how social verification makes the subjective objective. In *Handbook of Motivation and*

- Cognition: Foundations of Social Behavior*, ed. RM Sorrentino, ET Higgins, pp. 28–84. Chichester: Wiley
- Harmon-Jones E, Simon L, Greenberg J, Pyszczynski T, Solomon S, McGregor H. 1997. Terror management theory and self-esteem: evidence that increased self-esteem reduces mortality salience effects. *J. Personal. Soc. Psychol.* 72:24–36
- Harris RJ, Schoen LM, Hensley D. 1992. A cross-cultural study of story memory. *J. Cross-Cult. Psychol.* 23:133–47
- Harton HC, Bourgeois MJ. 2004. Cultural elements emerge from dynamic social impact. See Schaller & Crandall 2004, pp. 41–75
- Haslam SA, Turner JC, Oakes PJ, Reynolds KJ, Eggers RA, et al. 1998. When do stereotypes become really consensual? Investigating the group-based dynamics of the consensualization process. *Eur. J. Soc. Psychol.* 28:755–76
- Heath C, Bell C, Sternberg E. 2001. Emotional selection in memes: the case of urban legends. *J. Personal. Soc. Psychol.* 81:1028–41
- Heine SJ, Kitayama S, Lehman DR, Takata T, Ide E, et al. 2001. Divergent consequences of success and failure in Japan and North America: an investigation of self-improving motivations and malleable selves. *J. Personal. Soc. Psychol.* 81:599–615
- Heine SJ, Lehman DR. 1995. Cultural variation in unrealistic optimism: Does the West feel more invulnerable than the East? *J. Personal. Soc. Psychol.* 68:595–607
- Heine SJ, Lehman DR. 1997a. The cultural construction of self-enhancement: an examination of group-serving bias. *J. Personal. Soc. Psychol.* 72:1268–83
- Heine SJ, Lehman DR. 1997b. Culture, dissonance, and self-affirmation. *Personal. Soc. Psychol. Bull.* 23:389–400
- Heine SJ, Lehman DR. 1999. Culture, self-discrepancies, and self-satisfaction. *Personal. Soc. Psychol. Bull.* 25:915–25
- Heine SJ, Lehman DR. 2004. Move the body, change the self: acculturative effects on self-concept. See Schaller & Crandall 2004, pp. 305–31
- Heine SJ, Lehman DR, Markus HR, Kitayama S. 1999. Is there a universal need for positive self-regard? *Psychol. Rev.* 106:766–94
- Heine SJ, Lehman DR, Peng K, Greenholtz J. 2002. What's wrong with cross-cultural comparisons of subjective Likert scales? The reference-group effect. *J. Personal. Soc. Psychol.* 82:903–18
- Heine SJ, Takata T, Lehman DR. 2000. Beyond self-presentation: evidence for self-criticism among Japanese. *Personal. Soc. Psychol. Bull.* 26:71–78
- Hetts JJ, Sakuma M, Pelham BW. 1999. Two roads to positive self-regard: implicit and explicit self-evaluation and culture. *J. Exp. Soc. Psychol.* 35:512–59
- Hofstede G. 1980. *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage
- Hong Y-Y, Benet-Martinez V, Chiu C-y, Morris MW. 2003. Boundaries of cultural influence: construct activation as a mechanism for cultural differences in social perception. *J. Cross-Cult. Psychol.* 34:453–64
- Hong Y-Y, Chiu C-y. 2001. Toward a paradigm shift: from cross-cultural differences in social-cognition to social-cognitive mediation of cultural differences. *Soc. Cogn.* 19:181–96
- Hong Y-Y, Chiu C-y, Kung TM. 1997. Bringing culture out in front: effects of cultural meaning system activation on social cognition. In *Progress in Asian Social Psychology*, ed. K Leung, Y Kashima, U Kim, S Yamaguchi, 1:135–46. Singapore: Wiley
- Hong Y-Y, Ip G, Chiu C-y, Morris MW, Menon T. 2001. Cultural identity and dynamic construction of the self: collective duties and individual rights in Chinese and American cultures. *Soc. Cogn.* 19:251–69
- Hong Y-Y, Morris MW, Chiu C-y, Benet-Martinez V. 2000. Multicultural minds: a dynamic constructivist approach to culture and cognition. *Am. Psychol.* 55:709–20
- Iyengar SS, Lepper MR. 1999. Rethinking the value of choice: a cultural perspective on intrinsic motivation. *J. Personal. Soc. Psychol.* 76:349–66
- Jetten J, Postmes T, Mcauliffe B. 2002. "We're

- all individuals": group norms of individualism and collectivism, levels of identification and identity threat. *Eur. J. Soc. Psychol.* 32:189–207
- Ji L-j, Nisbett RE, Su Y. 2001. Culture, change, and prediction. *Psychol. Sci.* 12:450–56
- Ji L-j, Peng K, Nisbett RE. 2000. Culture, control, and perception of relationships in the environment. *J. Personal. Soc. Psychol.* 78:943–55
- Kameda T, Takezawa M, Hastie R. 2003. The logic of social sharing: an evolutionary game analysis of adaptive norm development. *Personal. Soc. Psychol. Rev.* 7:2–19
- Kanagawa C, Cross SE, Markus HR. 2001. "Who am I?" The cultural psychology of the conceptual self. *Personal. Soc. Psychol. Bull.* 27:90–103
- Kashima ES, Kashima Y. 1998. Culture and language: the case of cultural dimensions and personal pronoun use. *J. Cross-Cult. Psychol.* 29:461–86
- Kashima Y. 1999. Culture, groups, and coordination problems. *Psychol. Beitrage* 41:237–51
- Kashima Y. 2000a. Conceptions of culture and person for psychology. *J. Cross-Cult. Psychol.* 31:14–32
- Kashima Y. 2000b. Maintaining cultural stereotypes in the serial reproduction of narratives. *Personal. Soc. Psychol. Bull.* 26:594–604
- Kashima Y, Woolcock J, Kashima ES. 2000. Group impressions as dynamic configurations: the tensor product model of group impression formation and change. *Psychol. Rev.* 107:914–42
- Kenrick DT, Li NP, Butner J. 2003. Dynamical evolutionary psychology: individual decision rules and emergent social norms. *Psychol. Rev.* 110:3–28
- Kenrick DT, Maner JK, Butner J, Li NP, Becker DV, Schaller M. 2002. Dynamical evolutionary psychology: mapping the domains of the new interactionist paradigm. *Personal. Soc. Psychol. Rev.* 6:356–67
- Kim HS. 2002. We talk, therefore we think? A cultural analysis of the effect of talking on thinking. *J. Personal. Soc. Psychol.* 83:828–42
- Kim HS, Markus HR. 1999. Deviance or uniqueness, harmony or conformity? A cultural analysis. *J. Personal. Soc. Psychol.* 77:785–800
- Kitayama S. 2002. Culture and basic psychological processes—toward a system view of culture: comment on Oyserman et al. (2002). *Psychol. Bull.* 128:89–96
- Kitayama S, Karasawa M. 1997. Implicit self-esteem in Japan: name letters and birthday numbers. *Personal. Soc. Psychol. Bull.* 23:736–42
- Kitayama S, Markus HR, Matsumoto H, Norasakkunkit V. 1997. Individual and collective processes in the construction of the self: self-enhancement in the United States and self-criticism in Japan. *J. Personal. Soc. Psychol.* 72:1245–67
- Knowles ED, Morris MW, Chiu C-y, Hong Y-Y. 2001. Culture and process of person perception: evidence for automaticity among East Asians in correcting for situational influences on behavior. *Personal. Soc. Psychol. Bull.* 27:1344–56
- Kosmitzki C. 1996. The reaffirmation of cultural identity in cross-cultural encounters. *Personal. Soc. Psychol. Bull.* 22:238–48
- Krebs D, Janicki M. 2004. Biological foundations of moral norms. See Schaller & Crandall 2004, pp. 125–48
- Kruglanski AW, Webster DM. 1991. Group members' reactions to opinion deviates and conformists at varying degrees of proximity to decision deadline and of environmental noise. *J. Personal. Soc. Psychol.* 61:212–25
- Kruglanski AW, Webster DM, Klem A. 1993. Motivated resistance and openness to persuasion in the presence or absence of prior information. *J. Personal. Soc. Psychol.* 65:861–76
- Kurman J. 2001. Self-enhancement: Is it restricted to individualistic cultures? *Personal. Soc. Psychol. Bull.* 27:1705–16
- Kwan VSY, Bond MH, Singelis TM. 1997. Pancultural explanations for life satisfaction: adding relationship harmony to self-esteem. *J. Personal. Soc. Psychol.* 73:1038–51

- Latané B. 1996. Dynamic social impact: the creation of culture by communication. *J. Commun.* 6:13–25
- Latané B, Bourgeois MJ. 2001. Successfully simulating dynamic social impact: three levels of prediction. In *Social Influence: Direct and Indirect Processes: The Sydney Symposium on Social Psychology*, ed. J Forgas, K Williams, pp. 61–76. Philadelphia, PA: Psychol. Press
- Latané B, L'Herrou T. 1996. Spatial clustering in the conformity game: dynamic social impact in electronic groups. *J. Personal. Soc. Psychol.* 70:1218–30
- Lau IY-m, Chiu C-y, Hong Y-Y. 2001a. I know what you know: assumptions about others' knowledge and their effects on message construction. *Soc. Cogn.* 19:587–600
- Lau IY-m, Chiu C-y, Lee S-l. 2001b. Communication and shared reality: implications for the psychological foundations of culture. *Soc. Cogn.* 19:350–71
- Lee AY, Aaker JL, Gardner WL. 2000. The pleasure and pains of distinct self-construals: the role of interdependence in regulatory focus. *J. Personal. Soc. Psychol.* 78:1122–34
- Lehman DR, Hamamura T, Akieda N. 2004. *Contextual Memory is Influenced by Self-Construal Priming, But Only for Bi-Culturals*. Vancouver, Can.: Univ. BC. Unpubl. manuscript.
- Li J. 2002. A cultural model of learning: Chinese "heart and mind for wanting to learn." *J. Cross-Cult. Psychol.* 33:248–69
- Markus HR, Kitayama S. 1991. Culture and self: implications for cognition, emotion, and motivation. *Psychol. Rev.* 98:224–53
- Markus HR, Kitayama S. 2002. Models of agency: sociocultural diversity in the construction of action. In *The 49th Annu. Neb. Symp. Motivation: Cross-Cultural Differences in Perspectives on Self*, ed. V Murphy-Berman, J Berman. Lincoln: Univ. Neb. Press
- Markus HR, Ryff CD, Barnett K, Palmersheim K. 2003. In their own words: well-being at midlife among high school and college-educated adults. In *A Portrait of Midlife in the United States*, ed. CD Ryff, RC Kessler. Chicago: Univ. Chicago Press
- Masuda T, Nisbett RE. 2001. Attending holistically versus analytically: comparing the context sensitivity of Japanese and Americans. *J. Personal. Soc. Psychol.* 81:922–34
- McIntyre A, Lyons A, Clark A, Kashima Y. 2004. The microgenesis of culture: serial reproduction as an experimental simulation of cultural dynamics. See Schaller & Crandall 2004, pp. 227–58
- Mead M. 1955. *Cultural Patterns and Technical Change*. New York: Mentor Books
- Menon T, Morris MW, Chiu C-y, Hong Y-Y. 1999. Culture and the construal of agency: attribution to individual versus group dispositions. *J. Personal. Soc. Psychol.* 76:701–17
- Miyamoto Y, Kitayama S. 2002. Cultural variation in correspondence bias: the critical role of attitude diagnosticity of socially constrained behavior. *J. Personal. Soc. Psychol.* 83:1239–48
- Morling B, Kitayama S, Miyamoto Y. 2002. Cultural practices emphasize influence in the United States and adjustment in Japan. *Personal. Soc. Psychol. Bull.* 28:311–23
- Morris MW, Fu H-Y. 2001. How does culture influence conflict resolution? A dynamic constructivist analysis. *Soc. Cogn.* 19:324–49
- Morris MW, Peng K. 1994. Culture and cause: American and Chinese attributions for social and physical events. *J. Personal. Soc. Psychol.* 67:949–71
- Nisbett RE, Norenzayan A. 2002. Culture and cognition. In *Stevens' Handbook of Experimental Psychology: Cognition*, ed. H Pashler, DL Medin, 2:561–97. New York: Wiley. 3rd ed.
- Nisbett RE, Peng K, Choi I, Norenzayan A. 2001. Culture and systems of thought: holistic versus analytic cognition. *Psychol. Rev.* 108:291–310
- Norenzayan A, Atran S. 2004. Cognitive and emotional processes in the cultural transmission of natural and nonnatural beliefs. See Schaller & Crandall 2004, pp. 149–69

- Norenzayan A, Choi I, Nisbett RE. 2002. Cultural similarities and differences in social inference: evidence from behavioral predictions and lay theories of behavior. *Personal. Soc. Psychol. Bull.* 28:109–20
- Ohbuschi K-I, Fukushima O, Tedeschi JT. 1999. Cultural values in conflict management: goal orientation, goal attainment, and tactical decision. *J. Cross-Cult. Psychol.* 30:51–71
- Oishi S, Diener EF. 2001. Goals, culture, and subjective well-being. *Personal. Soc. Psychol. Bull.* 27:1674–82
- Oishi S, Diener EF, Lucas RE, Suh EM. 1999. Cross-cultural variations in predictors of life satisfaction: perspectives from needs and values. *Personal. Soc. Psychol. Bull.* 25:980–90
- Oyserman D, Coon HM, Kemmelmeier M. 2002. Rethinking individualism and collectivism: evaluation of theoretical assumptions and meta-analyses. *Psychol. Bull.* 128:3–72
- Peng K, Nisbett RE. 1999. Culture, dialectics, and reasoning about contradiction. *Am. Psychol.* 54:741–54
- Phinney JS, Horenczyk G, Liebkind K, Vedder P. 2001. Ethnic identity, immigration, and well-being: an interactional perspective. *J. Soc. Issues* 57:493–510
- Pinker S. 2002. *The Blank Slate: The Modern Denial of Human Nature*. New York: Viking
- Rhee E, Uleman JS, Lee HK, Roman RJ. 1995. Spontaneous self-descriptions and ethnic identities in individualistic and collectivistic cultures. *J. Personal. Soc. Psychol.* 69:142–52
- Richter L, Kruglanski AW. 1999. Motivated search for common ground: need for closure effects on audience design in interpersonal communication. *Personal. Soc. Psychol. Bull.* 25:1101–14
- Richter L, Kruglanski AW. 2004. Motivated closed mindedness and the emergence of culture. See Schaller & Crandall 2004, pp. 101–21
- Rosenblatt A, Greenberg J, Solomon S, Pyszczynski T, Lyon D. 1989. Evidence of terror management theory: I. The effects of mortality salience on reactions to those who violate or uphold cultural values. *J. Personal. Soc. Psychol.* 57:681–90
- Ross M, Xun WQE, Wilson AE. 2002. Language and the bicultural self. *Personal. Soc. Psychol. Bull.* 28:1040–50
- Rothbaum F, Tsang BY-P. 1998. Lovesongs in the United States and China on the nature of romantic love. *J. Cross-Cult. Psychol.* 29:306–19
- Rubin DC. 1995. *Memory in Oral Traditions: The Cognitive Psychology of Epic, Ballads, and Counting-out Rhymes*. New York: Oxford Univ. Press
- Ruscher JB. 1998. Prejudice and stereotyping in everyday communication. In *Advances in Experimental Social Psychology*, ed. M Zanna, 30:241–307. New York: Academic
- Schaller M. 2001. Unintended influence: social-evolutionary processes in the construction and change of culturally-shared beliefs. In *Social Influence: Direct and Indirect Processes*, ed. JP Forgas, KD Williams, pp. 77–93. Philadelphia, PA: Psychol. Press
- Schaller M, Conway LG. 1999. Influence of impression-management goals on the emerging contents of group stereotypes: support for a social-evolutionary process. *Personal. Soc. Psychol. Bull.* 25:819–33
- Schaller M, Conway LG, Tanchuk TL. 2002. Selective pressures on the once and future contents of ethnic stereotypes: effects of the communicability of traits. *J. Personal. Soc. Psychol.* 82:861–77
- Schaller M, Crandall CS, eds. 2004. *The Psychological Foundations of Culture*. Hillsdale, NJ: Erlbaum
- Schimmack U, Oishi S, Diener EF. 2002a. *Individualism: A Valid and Important Dimension of Cultural Differences*. Urbana-Champaign: Univ. Ill.
- Schimmack U, Radhakrishnan P, Oishi S, Dzokoto V. 2002b. Culture, personality, and subjective well-being: integrating process models of life satisfaction. *J. Personal. Soc. Psychol.* 82:582–93

- Schulze PA, Harwood RL, Merich A. 2001. Feeding practices and expectations among middle-class Anglo and Puerto Rican mothers of 12-month-old infants. *J. Cross-Cult. Psychol.* 32:397-406
- Sears DO. 1986. College sophomores in the laboratory: influences of a narrow database on social psychology's view of human nature. *J. Personal. Soc. Psychol.* 51:515-30
- Sechrist GB, Stangor C. 2001. Perceived consensus influences intragroup behavior and stereotype accessibility. *J. Personal. Soc. Psychol.* 80:645-54
- Sherif M. 1936. *The Psychology of Social Norms*. New York: Harper
- Shore B. 1996. *Culture in Mind: Cognition, Culture, and the Problem of Meaning*. New York: Oxford Univ. Press
- Shweder R, Jensen LA, Goldstein WM. 1995. Who sleeps by whom revisited: a method for extracting moral goods implicit in practice. In *Cultural Practices as Contexts for Development*, ed. JJ Goodnow, PJ Miller, F Kessel, pp. 21-40. San Francisco: Jossey-Bass
- Sokefeld M. 1999. Debating self, identity, and culture in anthropology. *Curr. Anthropol.* 40:417-47
- Solomon S, Greenberg J, Schimel J, Arndt J, Pyszczynski T. 2004. Human awareness of mortality and the evolution of culture. See Schaller & Crandall 2004, pp. 15-40
- Sparrow LM. 2000. Beyond multicultural man: complexities of identity. *Int. J. Intercult. Relat.* 24:173-201
- Sperber D. 1984. The epidemiology of beliefs. In *The Social Psychological Study of Widespread Beliefs*, ed. C Fraser, G Gaskell, pp. 25-44. Oxford UK: Clarendon
- Sperber D. 1996. *Explaining Culture: A Naturalistic Approach*. Oxford: Blackwell
- Stewart SM, Bond MH, Deeds O, Chung SF. 1999. Intergenerational patterns of values and autonomy expectations in cultures of relatedness and separateness. *J. Cross-Cult. Psychol.* 30:575-93
- Suh EM. 2002. Culture, identity consistency, and subjective well-being. *J. Personal. Soc. Psychol.* 83:1378-91
- Suh EM, Diener EF, Oishi S, Triandis HC. 1998. The shifting basis of life satisfaction judgments across cultures: emotions versus norms. *J. Personal. Soc. Psychol.* 74:482-93
- Tafarodi RW, Kang S-J, Milne AB. 2002. When different becomes similar: compensatory conformity in bicultural visible minorities. *Personal. Soc. Psychol. Bull.* 28:1131-42
- Tesser A. 1993. The importance of heritability in psychological research: the case of attitudes. *Psychol. Rev.* 100:129-42
- Thompson MS, Judd CM, Park B. 2000. The consequences of communicating social stereotypes. *J. Exp. Soc. Psychol.* 36:567-99
- Trafimow D, Silverman ES, Fan RM-T, Law JSF. 1997. The effects of language and priming on the relative accessibility of the private self and the collective self. *J. Cross-Cult. Psychol.* 28:107-23
- Trafimow D, Triandis HC, Goto SG. 1991. Some tests of the distinction between the private self and the collective self. *J. Personal. Soc. Psychol.* 60:649-55
- Triandis HC. 1989. The self and social behavior in differing cultural contexts. *Psychol. Rev.* 96:506-20
- Triandis HC, Suh EM. 2002. Cultural influences on personality. *Annu. Rev. Psychol.* 53:133-60
- Tsai JL, Ying Y-W, Lee PA. 2000. The meaning of being Chinese and being American: variation among Chinese American young adults. *J. Cross-Cult. Psychol.* 31:302-32
- Tweed RG, Lehman DR. 2002. Learning considered within a cultural context: Confucian and Socratic approaches. *Am. Psychol.* 57:89-99
- Vallacher RR, Read SJ, Nowak A. 2002. The dynamical perspective in personality and social psychology. *Personal. Soc. Psychol. Rev.* 6:264-73
- Verkuyten M, Pouliasi K. 2002. Biculturalism among older children: cultural frame switching, attributions, self-identification, and attitudes. *J. Cross-Cult. Psychol.* 33:596-609

- Wang Q. 2001. Culture effects on adults' earliest childhood recollection and self-description: implications for the relation between memory and the self. *J. Personal. Soc. Psychol.* 81:220-33
- Yamada A, Singelis TM. 1999. Biculturalism and self-construal. *Int. J. Intercult. Relat.* 23:697-709
- Zarate MA, Uleman JS, Voils CI. 2001. Effects of culture and processing goals on the activation and binding of trait concepts. *Soc. Cogn.* 19:295-323