



Networks of Meaning: Intergroup Relations, Cultural Worldviews, and Knowledge Activation Principles

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Abstract

In this article, we bring advances in the fields of social cognition, personality, and culture to bear on the topic of intergroup relations. Specifically, principles of knowledge activation (Higgins, 1996), and of the architecture of knowledge networks (Cervone, 2005; Mischel & Shoda, 1995) are applied to understanding how cultural groups develop divergent worldviews. We discuss these principles within a recently proposed model of culture and person dynamics, the Cultural Cognitive–Affective Processing System (Mendoza-Denton & Mischel, 2007). It is argued that the underlying psychological principles that govern knowledge acquisition and activation may be universal, but that the manifestations of these processes are culture specific. More precisely, culture impacts the availability, applicability, and accessibility of knowledge, as well as the organizational relationships among constructs. Together, these processes give rise to complex *networks of meaning* that, despite diverging across cultures, can nevertheless be communicated and understood by non-natives of that culture.

Networks of Meaning: Understanding Cultural Worldview Differences Through Principles of Knowledge Activation

A recent poll in which 14,000 people across 13 nations worldwide were interviewed (Pew Global Attitudes Project, 2006) found striking differences in how non-Muslim Westerners and Muslims around the world see each other. When non-Muslim Westerners were asked whether Muslims are fanatical or not, the majority of participants agreed to the question. More precisely, 83% of the Spanish, 78% of the German, 50% of the French, 48% of the British, and 43% of the American participants affirmed this question. When asked the *same* question with reference to Westerners, 68% of the Jordanian, 67% of the Turkish, 61% of the Egyptian, 41% of the Indonesian, and 24% of the Pakistani participants agreed to this question. A second question asked participants whether the other group is respectful toward women. The results revealed that 83% of the Spanish, 80% of the German, 77% of the French, 59% of the British,

and 69% of the American participants viewed Muslims as disrespectful to women. Similarly, 53% of the Jordanian, 39% of the Turkish, 52% of the Egyptian, 50% of the Indonesian, and 52% of the Pakistani participants viewed Westerners as lacking respect toward women.

What makes people from different groups unable to see eye to eye on certain issues? Why are the perspectives of these groups so different, and how can we account for broad group differences while simultaneously allowing for within-group variability as above? Historically, a principal goal of intergroup relations research has been to try to shed light on the psychological mechanisms that can help account for such discrepancies in worldviews. According to *Realistic Intergroup Conflict Theory* (Campbell, 1965), for example, conflict or competition between social groups leads to a devaluation of the other group because of the threat to the realization of the goals of one's in-group (Alexander, Brewer, & Hermann, 1999; Hogg, 2000; Sassenberg, Moskowitz, Jacoby, & Hansen, 2007; Shah, Kruglanski, & Thompson, 1998). Whereas in this case conflict between groups is based on material resources, it can also be based on symbolic or identity characteristics. In the latter vein, *Social Identity Theory* (Tajfel, 1978; Tajfel & Turner, 1979) posits that people strive for positive self-esteem as members of the social groups they belong to. As such, groups are motivated to compare each other and strive to evaluate the in-group more positively and out-groups more negatively. According to the *Ingroup Projection Model* (Mummendey & Wenzel, 1999), people who belong to a particular group tend to generalize (project) their own group's typical attitudes and characteristics to the broader, superordinate category (e.g., 'humans'), thereby making their own group's perspective normative. As a consequence of this process, the more group members perceive their own in-group as prototypical, the more the attitudes toward an out-group become negative (Waldzus, Mummendey, Wenzel, & Weber, 2002).

As the examples above make clear, theoretical and empirical advances have yielded important answers to understanding the puzzle of intergroup divergences in worldview. In this article, we contribute to this literature by attempting to explain difference through common ground – that is, by attempting to understand cultural differences in worldviews through the articulation of potentially universal psychological principles that govern how knowledge is acquired, activated, and used to interpret the world (cf. Higgins, 1996; Hong & Mallorie, 2004; Kashima, 2001). In so doing, we review a recently proposed model in which cultural differences in social behavior are seen as meaningful manifestations of a dynamic, culturally constituted information processing system. This system, which we call the 'Cultural Cognitive-Affective Processing System' (C-CAPS; Mendoza-Denton & Mischel, 2007), allows us to understand how culture influences information processing dynamics to yield culture-specific worldviews.

Culture, Person, and Intergroup Relations

What is culture? What is person? And what can their interrelationship reveal about the rise of intergroup tension? Psychologists have long been interested in the ways in which culture influences people as a way of understanding cultural differences in social behavior. Early attempts to characterize the relationship between culture and person sought to describe general personality types that were prevalent in one culture or another. Benedict (1934), for example, described two broad personality types of the Southwest Pueblos, the Dionysian and the Apollonian, with the former having a generalized love for excess and the latter as sober and mistrustful of excessive behavior. Later, research on the ‘national character’ and the ‘dominant personality’ of cultural groups (e.g., Linton, 1945; Kardiner, 1945) attempted to explain intergroup discord and conflict in terms of the different personalities that were prevalent (and prone to conflict) in a given culture. Today, the tradition of searching for cultural differences in personality is principally carried on by research that characterizes cultures in terms of the Big Five: openness to experience, agreeableness, conscientiousness, neuroticism, and extraversion (e.g., Allik & McCrae, 2004; McCrae & Allik, 2002).

Nevertheless, explaining *how* members of different cultural groups can come to see the world so differently requires moving toward a model that is able to capture the process through which a culture influences the stable, characteristic ways that people think, and the way that they use acquired knowledge to navigate their world. It involves a view of ‘personality’ not just as a description of broad behavioral tendencies (e.g., ‘Mehmet is gentle’; or ‘Johann is close minded’), but also as the way that people construe their world, the goals that they strive to achieve, the fundamental beliefs that they hold, and the values that they hold dear.

Toward an Information-Processing Account of Cultural Worldviews

Over the past 25 years, advances in the science of social cognition (see Cervone, 2005; Mischel & Shoda, 1998) have provided new clues toward understanding how cultural forces shape individual behavior (Kashima, 2001; Mendoza-Denton, Shoda, Ayduk, & Mischel, 1999). This general approach focuses on the social- and cognitive-mediating processes that motivate people to behave in their characteristic ways (Bandura, 1982, 1986; Cantor, 1990, 1994; Cantor & Kihlstrom, 1987; Dodge, 1993; Dweck, 2006; Higgins, 1996; Mischel, 1973, 1990). A crucial aspect of the social cognitive orientation for researchers interested in culture lies in its emphasis on the mediating *psychological processes* underlying behavior – the ways in which a person’s stable encodings, beliefs, expectations, goals, emotions, and self-regulatory strategies influence behavior in relation to

relevant features of situations (Mischel, 1973; Mischel, Shoda, & Mendoza-Denton, 2002). The approach harnesses behavioral variability across situations to understand such psychological processes (Mischel et al., 2002). How can such behavioral variability yield clues about psychological processes?

An example from the US context is useful here. As Cohen, Nisbett, Bowdle, and Schwarz (1996) note, data consistently suggest greater rates of violence in the American South than in the North. For example, homicide rates in the South and West have been shown to be higher than they are in the North for argument-related homicides (Nisbett & Cohen, 1996). At the same time, however, the South is also widely regarded for its politeness and charm. Charleston, South Carolina, for example, has been ranked for 10 straight years as the USA's most polite city in national polls (CNN, 2005).

Cohen et al. (1996) demonstrated this seemingly contradictory pattern in a laboratory setting. The researchers recruited participants who were either from the North or from the South, and created an experimental situation in which the participants needed to go back and forth across a narrow hallway. A research assistant (who, unbeknownst to the participant, was part of the experimental setup) was standing in front of a file cabinet in the middle of the hallway, purportedly looking for documents. In one condition, the research assistant acted annoyed by the inconvenience of having to let the participant pass, slamming the drawer, insulting the participant, and bumping the participant intentionally. In the other condition, the participant was not bumped or insulted. A few minutes later, as the participant walked back from the hallway, a new research assistant appeared and walked in the opposite direction – on a direct collision course with the participant unless someone moved.

Among Northern participants, the bumping manipulation did not have a significant effect on the distance at which the participant gave way to the oncoming confederate, moving out of the way approximately 70 inches before a potential collision across both conditions. Among Southern participants, however, there was a clear effect of experimental condition. When Southern participants had been previously insulted, they subsequently moved out of the way of the other confederate at an average distance of 37 inches. Tellingly, however, when Southern participants had *not* been bumped, they actually gave way much *earlier* than Northern participants, moving out of the way 108 inches before a potential bump. Independent observers' ratings of the dominance of the participants showed that while bumped Southern subjects seemed more aggressive and threatening than Northern participants, Southern participants who had not been bumped actually seemed less so than Northern participants.

Given the above data, a description of the people of the American South in terms of broad behavioral tendencies (e.g., not agreeable, or agreeable) would yield contradictory descriptions, each of which would

miss important and stable aspects of the culture. The reconciliation of these surface-level inconsistencies in behavior requires a different type of explanatory model – and provides a key to understanding cultural dynamics of personality on a dynamic level.

Cohen and Nisbett (1994, 1997) have provided a historically informed, compelling reconciliation of such apparent inconsistencies. According to these researchers, the South's economy was historically herding based, yet law enforcement was difficult in part due to low population densities. This combination led to a cultural adaptation over time in which honor and reputation became critical elements in the protection of one's property and name. The culture became characterized by strong vigilance to disrespect and ready use of violence in response to it. At the same time, in a context where violence is a consequence of disrespect, unambiguous displays of respect when not looking for trouble became highly adaptive, and readily adopted (Cohen, Vandello, Puente, & Rantilla, 1999). As such, a view of Southern cultural dynamics that focuses on the historically transmitted importance of valuing *honor* helps us understand otherwise contradictory behavior. Over time, a concern over honor has not only shaped people's values and the way in which situations may be psychologically characterized, but also in the behavioral possibilities that are afforded within the cultural system (Cohen, 1998; Norenzayan & Heine, 2005).

Culture and the 'active ingredients' of personality

When variability in behavior across situations is stable, it readily invites questions about a person's construals of different situations, and the relevant motivations, goals, expectations that are associated with these construals (Kammrath, Mendoza-Denton, & Mischel, 2005; Mendoza-Denton, Park, & O'Connor, forthcoming; Plaks, Shafer, & Shoda, 2003). Consider the following definitions of culture, both classical and modern:

... that complex whole which includes knowledge, belief, art, law, morals, custom, and any other capabilities and habits acquired by man as a member of society. (Tylor, 1871, 1)

... a set of meanings that human beings impose on the world. (Obeyeskere, 1981, 110)

... a historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which men [and women] communicate, perpetuate and develop their knowledge about and attitudes towards life. (Geertz, 1973, 89)

The judgmental or normative dimension, which reflects social standards and values ... the cognitive dimension, which relates to social perceptions, conceptions, attributions ... the affective dimension, the emotional structure of a social unit, including its common feelings, sources of motivations, joy and

sorrow, and sense of value ... the skills dimension, signifying those special capabilities people develop to meet the demands of their social and technoeconomic environment ... the technological dimension, the notion of culture as accumulated artifacts, instrumentation, and techniques. (Gordon, 1982, 187–188)

It includes what ‘has worked’ in the past and can be identified by examining the extent to which psychological processes, such as beliefs, attitudes, and values, are shared and transmitted from one generation to the next. (Triandis, 1997, 442–443, on cultural syndromes)

As the definitions above illustrate, conceptions of culture have historically included some of the same ‘active ingredients’ that help us explain surface-level inconsistencies in behavior – namely, a person’s goals, values, beliefs, encodings (ways of interpreting stimuli), self-regulatory mechanisms, and expectations. These units, which in the C-CAPS framework are called *cognitive-affective units* or *CAUs*, are widely agreed to be central not only to one’s cultural heritage (Mendoza-Denton et al., 1999; Mendoza-Denton & Mischel, 2007), but to a dynamic conceptualization of personality (Mischel & Shoda, 1995). As Mendoza-Denton et al. (1999; Mendoza-Denton & Mischel, 2007) have posited, CAUs provide a natural bridge between cultural context on the one hand and persons on the other. Given that people navigate various worlds and roles, each person’s goals, values, and other CAUs will include some CAUs that are shared broadly with other members of the superordinate culture (such as one’s national group), some that are shared with smaller cultural groups (e.g., one’s gender or ethnic group) as well as some idiosyncratic CAUs that are learned from specific family experiences or even private experience (Linton, 1936; Mendoza-Denton et al., 1999).

Principles of knowledge acquisition and activation

With CAUs providing a bridge for culture to influence the person (and vice versa, as discussed below), the C-CAPS framework draws on basic principles of knowledge activation (Higgins, 1996; Mischel & Shoda, 1995) to understand how cultural knowledge is acquired, activated, and used in everyday transactions. The basic architecture of the system and its governing principles – organization, availability, accessibility, and applicability – may broadly describe human information processing and together, give rise to different *networks of meaning* across cultural groups. We review these principles in the next section.

Organization

The C-CAPS conceptualizes the CAUs described above not as a mere collection of attributes, but rather as interacting within a stable network of activation – that is, by a distinctive set of *interrelationships*. This type of

model, in which representations interact within a network of relationships and constraints (e.g., Hinton, McClelland, & Rumelhart, 1986), provides a framework for conceptualizing an organized personality processing system that is sensitive to different features of situations and can respond discriminatively to them in characteristic and stable ways. As such, cultural (and individual) differences can arise not only from differences in CAUs, but also from the distinctive organization among these CAUs. For example, although concerns about discrimination and self-esteem are unrelated among African Americans (Crocker, Major, & Steele, 1998; Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002), these same concerns seem to have a negative impact on self-esteem among Asian Americans (Chan & Mendoza-Denton, forthcoming).

Availability, *accessibility*, and *applicability* can be explained via a metaphor to coloring with crayons (Mendoza-Denton & Mischel, 2007). One can think of the world 'out there' as a blank coloring book that contains a set of guidelines, yet leaves much of the final picture open to the coloring choices of cultures and individuals. Cultures are assumed to differ in the crayons that it makes *available* to its members. For example, the concept of bargaining to arrive at a price for vegetables in open markets is prevalent throughout much of West Africa, but is generally not part of the behavioral repertoire for grocery shopping in US markets. As such, a 'bargaining' crayon is available to members of some cultures, but not others.

Beyond differences in the availability of constructs, cultures can also differ in the *accessibility* of available constructs. Accessibility refers to how easily a concept comes to mind; it can be thought of in terms of how easy or difficult it is to reach crayons that are in the front of one's box versus the ones in the back rows. Ease of retrieval of concepts can occur both over the short term (e.g., if one hears a lecture about the dangers of heart disease, one may be less likely to order steak for dinner that night) or have more chronic sources (e.g., when the arachnophobe is quick to interpret any speck on the wall as a spider). Going back to 'the Culture of Honor' example above, the concept of 'honor' is likely to be more accessible to members of this culture than to members of the Northern USA (even if the concept is available to all). As another example, by virtue of shared experiences, stigmatized group members in a culture may have concerns about discrimination more chronically accessible than non-stigmatized group members (Mendoza-Denton, Ayduk, Shoda, & Mischel, 1997).

Finally, of all the beliefs, goals, values, encodings, and feelings that one can potentially experience at any given time, only those that are *relevant* in a given situation can become activated and influence subsequent behavior. This is the concept of *applicability*. For example, Banaji, Hardin, and Rothman (1993) found that participants for whom the construct 'aggressive' had been made situationally accessible used this construct in subsequent judgments of male targets, but not of female targets. This

finding illustrates accessibility effects because in general, the term ‘aggressive’ is applicable to male targets, but not to female targets. Applicability is important because in order for particular constructs to be used, it is not enough for them to be accessible – they must also be applicable to a relevant stimulus or situation. In terms of the metaphor, applicability suggests that culture can influence that crayons (or constructs) one can use to color in particular aspects of one’s world. For example, although the concept of *holiness* may be chronically accessible to religiously oriented individuals across cultures, the concept is differentially applicable to worldly entities (e.g., some animals are revered in one culture, but not in another). Norenzayan and Heine (2005) also propose availability, applicability, and accessibility as tools that may allow researchers to specify with greater precision the universality of a particular construct (the crayons in the metaphor above). We extend these authors’ analysis by proposing that these principles *themselves* may describe universal information-processing processes that give rise to cultural diversity. These principles are consistent with a growing tradition ‘conceptualizing human nature in terms of naturally selected psychological adaptations that are incomplete without culture-specific instantiation and coordination, which are mutually complementary and mutually necessary for psychological functioning’ (Norenzayan & Heine, 2005, 778).

Back to bargaining for vegetables: given differences in the availability of different skills related to bargaining, marketplaces may prime (i.e., make accessible) not only behavioral scripts related to bargaining, but additional associated meanings that together give rise to *what it means* to engage in particular cultural practices. In West Africa, for example, haggling for prices with one’s vegetable vendor is associated with relationship building, and provides a principal pathway to the development of *trust* between vendor and customer even in the presence of self-interest (to get the best price). By contrast, the network of meaning surrounding marketplaces is much different within the US context, with the concept of relationship building not accessible during monetary transactions between vendor and customer (indeed, engaging in bargaining at a US farmer’s market may lead to mistrust and a distinct downturn in the vendor-customer relationship). To understand culture and cultural practices deeply, it is necessary – yet not sufficient – for the student of that culture to learn the behavioral scripts associated with different contexts (e.g., how to bargain appropriately or how closely to walk past someone). One must also acquire – through reading, learning, observation, and experience – the associated network of meanings associated with these particular practices.

Reciprocal influences of culture and person

In line with cultural psychology (see Kitayama & Cohen, 2007), the C-CAPS approach recognizes that the influence of culture to persons is

co-constitutional or reciprocal. People are influenced by their surrounding culture, but they also reify and reinforce cultural beliefs, goals, and values through their actions, rites, and institution (Mendoza-Denton & Mischel, 2007). They can be relatively subtle practices that provide pathways to culturally valued practice, such as *not* having prices displayed on vegetable stands in West African marketplaces. They can also be relatively overt value displays, such as mosques or cathedrals that signify the importance of a given value system. Together, these practices and institutions make up what Triandis et al. (1980) have referred to as ‘physical culture’, and are important because they remind us that ‘culture’ does not manifest exclusively at the individual level. Rather, individuals create the environments and practices that reflect their important values and beliefs; these environments and practices themselves reify and perpetuate cultural values and practices. Valuing health and well-being, for example, can give rise to gymnasiums, health food stores, and advertisements featuring fit individuals, which themselves make value-consistent behaviors more likely while increasing the accessibility of the cultural value. Thus, while the current analysis focuses at the level of the individual, it is also important to recognize that culture operates at multiple, interacting levels (see Mendoza-Denton & Mischel, 2007, for a more in-depth discussion of this issue).

Information Processing and Cultural Differences

The C-CAPS approach proposes that cultural differences are in fact culturally specific manifestations of potentially universal dynamic information processing system – albeit manifestations that do not end up seeing eye to eye, and can lead to conflicting worldviews. As such, the C-CAPS approach may be brought to bear on our understanding of psychological processes associated with intergroup relations.

Nominal versus psychological situations

People perceive and experience situations differently. The same *nominal* situation may yield different *psychological situations* for different people. The same cafeteria lunch with classmates, for example, may be interpreted as an opportunity to make friends for one child and as an opportunity to be rejected by another (Downey & Feldman, 1996). At the level of groups, the differential availability and accessibility of constructs can similarly yield divergent interpretations and behavioral reactions to the same nominal situation (e.g., Hansen & Sassenberg, 2006; Sechrist, Swim, & Stangor, 2004). For example, systematic group-level differences in exposure to rejection based on skin color – that is, discrimination – lead to similarly systematic differences in the application of racism as an explanatory construct for various sociopolitical events.

The implications of such differences for intergroup relations are dramatically demonstrated, in the US context, by striking racial group differences in reactions to the O. J. Simpson 1995 criminal trial verdict (Mendoza-Denton et al., 1997). In this case, an African American athlete and celebrity (Simpson) was on trial for murder, but his trial was complicated by the actions of a white police officer who may have purposefully planted a bloody glove at the crime scene (a glove that did not in fact fit Simpson's hand). The suspicion of police bias made decades of judiciary injustice on the basis of race applicable to this trial for African Americans. At the same time, the applicability of such injustices to this trial was not recognized by many white Americans, who tended to discount the tainted evidence as stemming from one bad apple that did not change the 'mountain of evidence' against the accused. As a result of differences in the availability, accessibility, and applicability of racism as an explanatory construct, a black-white schism occurred, leading to great racial tension surrounding the verdict at the time. The defendant's lawyer, Johnny Cochran, understood these differences and crystallized them in his closing arguments with the phrase, 'If it doesn't fit, you must acquit.' The phrase cleverly made reference to the bloody glove while simultaneously making an understated call for unity among members of the African diaspora with a subtle allusion to an African tradition of emphasis through rhyme (see Mendoza-Denton et al., 1997, for an in-depth discussion of this trial and issue).

Another example comes from the interpretation of the US emergency corps' response following Hurricane Katrina, which slammed into the coast of New Orleans in August 2005. A poorly executed emergency response for the hurricane's poorest victims, who were overwhelmingly African Americans, seemed to lead to systematic differences in the activation of networks of meaning among African Americans and whites in the aftermath of the disaster. Again, whereas systematic discrimination was an applicable explanation for the federal response for African Americans, white Americans tended to favor a response that did not invoke racism per se but rather one that emphasized the magnitude of the disaster and the sheer difficulty of coordinating an effective response for anyone (Levy, Freitas, Mendoza-Denton, & Kugelmass, 2006). Importantly, these different interpretations had downstream implications for the two groups. Levy et al. (2006) demonstrated that following this hurricane, African Americans' endorsement of the belief that hard work pays off (the Protestant work ethic) was reduced during the months following the disaster whereas white Americans' endorsement of this particular cultural value was not affected, presumably due to a recognition among African Americans of broader structural/institutional forces negatively impacting one's outcomes no matter how hard one works. This finding is a good illustration not only of differences in accessibility and applicability of different constructs, but differences in the network of associated constructs

(in this case, the Protestant work ethic) that particular events and situations differentially activate among members of cultural groups.

Toward Intergroup Tolerance

The C-CAPS framework and its proposed properties provide a useful framework through which to understand how knowledge activation processes that are shared can readily lead to differences in worldview and discord in cultural perspectives. The framework provides a first step toward making the world of the 'other' more understandable – less foreign and alien perhaps – by understanding how common principles in information processing can lead to such differences. As such, the C-CAPS framework may be one way through which different reactions to similar nominal events can be understood not as the irrational, baseless, thoughtless reactions of another culture, but rather as differences from individuals who are similarly subject to the same principles of knowledge activation. The differences remain, but it is our hope that the framework provides one positive step toward understanding alternative worldviews from our own.

Although only a first step in a direction toward understanding, the C-CAPS framework also provides a potential route toward rapprochement of different cultures and potential reconciliation of worldviews. The C-CAPS framing suggests that cultural novices can become cultural experts through exposure, experience, and the sharing of information. Indeed, anthropological work that describes groups in their own terms, or descriptions of culture that rely on 'thick description' (Geertz, 1973), are important routes toward the achievement of such rapprochement. We suggest here that such knowledge acquisition primarily operates by increasing the availability of otherwise foreign constructs. Immersion and continued exposure, however, are likely necessary to increase the accessibility of constructs that have been made newly available, and to approximate the organizational network of meaning that particular constructs are associated with.

This is not to say that the route to rapprochement does not need to overcome barriers. Members of different cultures hold stereotypes – shared beliefs about the characteristics of a different culture – about each other. Fiske and Neuberg (1990) have investigated the factors that determine whether people form a first impression of an out-group member on stereotypical versus individual information. The latter is a more elaborated impression formation process on the basis of individual information whereas choosing stereotypical/categorical information about an out-group member is the 'easier' way because it requires less effort, less motivation, and less thoughtfulness. Traumatic experiences, such as those that occur in war, can also lead people to quickly generalize negative emotion broadly. 'You want to scream out loud, you want to go home, ...'

a US soldier in Iraq told CNN recently after losing one of his best friends, 'you just hate seeing these people every day after one of your buddies dies' (CNN, 2007).

Increasing cultural understanding can be a daunting, difficult enterprise. We conclude with mention of one promising route toward increasing cultural competence: contact and friendship with members of a given culture. According to the *contact hypothesis* (Allport, 1954; Pettigrew, 1986), contact between different groups in society can reduce prejudice and, thus, improve intergroup relations. A long tradition of research supports the importance of contact as a principal route to positive intergroup relations (see Pettigrew & Tropp, 2006). As one example, research on the contact hypothesis has been conducted in different neighborhoods that differ in the composition of immigrants and Germans (Wagner, Christ, Pettigrew, Stellmacher, & Wolf, 2006; Wagner, van Dick, Pettigrew, & Christ, 2003). With an increased number of immigrants in a neighborhood, the chance for contact between immigrants and Germans increased as well, which in turn led to a reduction in prejudice on the German side. The more immigrants lived in the neighborhood, went into the same grade of school (Wagner et al., 2003), or were colleagues at work (Wagner et al., 2006), the more Germans had friends with an immigration background.

This last finding suggests that intergroup contact may be an important route to intergroup *friendship*, which has been identified as a particularly effective means of achieving positive intergroup attitudes (McLaughlin-Volpe, Mendoza-Denton, & Shelton 2005; Paolini, Hewstone, Cairns, & Voci, 2004). Research on the causal impact of cross-group friendship of Latino/a and white intergroup relations suggests that reductions in intergroup anxiety occur early in the development of intergroup friendship, and that such friendship can even benefit other intergroup interactions down the line (Page-Gould, Mendoza-Denton, & Tropp, forthcoming).

As Zayas, Shoda, and Ayduk (2002) have pointed out, during interpersonal (or intergroup) interaction, people can establish common ground by communicating their various goals, values, beliefs, and desires. Pettigrew (2006) has noted that the removal of threat is a first barrier in intergroup interaction that must be crossed before the development of positive affect can occur. We also view the removal of threat as also setting the groundwork for intercommunication of C-CAPS systems to occur, and potentially set the stage for cultural rapprochement and understanding coupled with positive affect.

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Short Biography

Rodolfo Mendoza-Denton was born in Mexico City. He lived with his family in Ivory Coast, Thailand, and the USA as a youngster, fostering an interest in culture and the different ways with which people understand the world. He enrolled at Yale University for his undergraduate studies, working with Letitia Naigles on language acquisition of Spanish and English speakers. He pursued graduate and postdoctoral study in social/personality psychology at Columbia University, where he worked with Walter Mischel and Geraldine Downey. Mendoza-Denton is currently Assistant Professor of Psychology at the University of California, Berkeley. His research focuses on stigma and intergroup relations.

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Endnotes

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