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Polycultural Psychology

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culture, pluralism, multicultural, intercultural, cognition, identity, acculturation, assimilation, integration

Abstract

We review limitations of the traditional paradigm for cultural research and propose an alternative framework, polyculturalism. Polyculturalism assumes that individuals' relationships to cultures are not categorical but rather are partial and plural; it also assumes that cultural traditions are not independent, sui generis lineages but rather are interacting systems. Individuals take influences from multiple cultures and thereby become conduits through which cultures can affect each other. Past literatures on the influence of multiple cultural identities and cultural knowledge legacies can be better understood within a polyculturalist rubric. Likewise, the concept elucidates how cultures are changed by contact with other cultures, enabling richer psychological theories of intercultural influence. Different scientific paradigms about culture imply different ideologies and policies; polyculturalism's implied policy of interculturalism provides a valuable complement to the traditional policy frames of multiculturalism and colorblindness.

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CULTURALIST VERSUS POLYCULTURALIST PERSPECTIVES

Once a peripheral topic in psychology, culture is now recognized as a major determinant of social cognition, motivation, and behavior (Lehman et al. 2004). Psychologists look for culture in differences across groups, such as nations, or broad regions, such as East Asia versus the West. Social judgment biases reliably differ. Westerners such as Italians describe acquaintances primarily with decontextualizing adjectives ("P is studious"), whereas Easterners such as Japanese favor contextualized verb phrases ("P studied hard at school") (Maass et al. 2006). Similarly, motivational responses differ: Japanese students persist longer in a task after failure feedback, whereas Canadian students persist longer after success feedback (Heine et al. 2001). A constellation of such East-West differences have been explained in terms of factors such as individualistic versus collectivistic institutions, independent versus interdependent self-construals, and analytic versus holistic mindsets, and these different factors have been found to reinforce each other (Oyserman et al. 2009). Some contend that these Eastern and Western patterns are homeostatic systems that trace back thousands of years to the different ancestral ecologies of rice paddy farming versus pastoral herding, to outlooks that were refined and crystallized in the relational ethics of Confucius versus the analytic logic of Aristotle (Nisbett 2003). Although origins and carriers of culture are much debated in psychology, there is no disagreement that the resurgence of research on culture has yielded exciting questions, compelling findings, and far-reaching theories while also opening the field to more non-Western researchers, students, and participants.

Culture: a loosely integrated system of ideas, practices, and social institutions that enables coordination of behavior in a population

Like anthropologists before them, cultural psychologists have hoped that scientific evidence about cultural differences would supplant erroneous stereotypes. However, the success of cultural research in this regard is far from clear. Although anthropologists originally introduced the culture construct to replace overtly essentialist racial explanations, critics in their ranks maintain that cultural explanations similarly reify and freeze differences (Abu-Lughod 1991). Consistent with this, international business scholars describe the effect of training in research on cultural differences as developing "sophisticated stereotypes" (Osland & Bird 2000). A recent study compared the effects of taking a cultural psychology class with taking an unrelated psychology class and observed

increased cultural awareness and moral relativism, yet also increased stereotyping (Buchtel 2014). Given that cultural psychologists assume and observe within-country variation, why does cultural psychology training give rise to homogenizing stereotypes?

We have to ask what comes across to students. The espoused theories and fine details of results are likely less salient than the premises about culture that are implied by the method. Country comparisons treat culture as a categorical, independent variable. "Categorical" suggests that cultures are bounded groups defined by shared distinctive traits; "independent" suggests that societies develop their own norms sui generis rather than through contact and interchange. These assumptions, which can be called culturalism, are close to commonsense understandings of culture or ethnicity. When textbooks (and probably also teachers) strive to make culture intuitively accessible they describe it this way, as a lens distinctive to a group that all of its members share:

Culturalism: a categorical conception in which individuals are shaped by one primary culture and the world's cultural traditions are separate and independent

> Culture influences just about everything we do—from how we perceive lines to how long we will stand in them (Schacter et al. 2010, p. xix).
>
> Culture lies inside people in that everything that happens to them is viewed through a cultural lens—a way of thinking—that cannot be put aside (Weiten 2012, p. 26).

This notion of culture as general-purpose mental lens, which members of a group cannot help but see through, is illustrated in **Figure 1**. We argue that culturalism resonates with intuitive ways of cognizing groups, because categorical thinking about groups is an evolved human propensity (Caporael 2007) that is dominant in intuitive processing (Crisp & Meleady 2012) and undergirds essentialist beliefs (Morris 2014). Perhaps it is not a coincidence that the most popularly influential culture theories tend to be the ones that hew most closely to culturalism. Hofstede (1984) defined culture as "the collective programming of the mind which distinguishes the members of one group or society from another" (p. 82). Huntington, in *The Clash of Civilizations* (1996) and "The Hispanic Challenge" (2004), reads contemporary politics in terms of inherent tensions between age-old, unchanging cultural impulses.

The popular appeal of the categorical influence assumption is unfortunate because the facts don't support it. Early researchers assumed that the "lenses" distinguishing cultures consist of general values, such as individualism and collectivism (Triandis 1994). However, there is no consensus in value endorsements; values vary more within countries than between countries (Schwartz 2014). Even cultures highly individualistic or collectivistic in their social institutions lack consensus on these values; different subpopulations (latent classes) endorse distinct value profiles (Eid & Diener 2001). Likewise, there is no correlation within countries among different measures of independence/interdependence (Kitayama et al. 2009) or measures of analyticism/

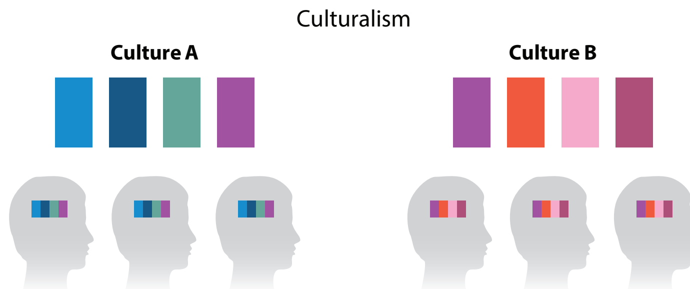

Figure 1

Categorical image of individuals with unitary cultural affiliations and uniform cultural lenses.

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holism thinking (Na et al. 2010). Different members of society enact different aspects of the cultural pattern. Rather than uniform cultural programming, these findings support Allport's (1961) view that members select their values, beliefs, and habits from the cultural menu in an à la carte fashion. Each person's repertoire of cultural proficiencies is a slight but a small subset of the collective-level cultural register. The person's engagement with his or her primary culture is partial, and the culture's imprint or influence on the individual is correspondingly partial.

Exotic stone: archeological discoveries of tools in early *Homo sapiens* settlements made from stones quarried hundreds of kilometers away, indicating exchange across populations

Polyculturalism: a network conception of culture in which cultural influence on individuals is partial and plural and cultural traditions interact and change each other

Acculturation: changes as a result of contact with a new culture

Dynamic constructivist: a model of cultural influence on cognition grounded in construct activation theory and learning theory, emphasizing the role of primes and reinforcement and the moderating role of epistemic and social motivations

Partiality enables plurality—an individual engages with and gets shaped by more than one culture. Social psychology traditionally portrays outgroups as targets of prejudice and hostility, perhaps because the field developed in response to World War II and American racial segregation. This portrayal is only half the story. Humans seek contact with outgroups, as is recognized in emerging research on allophilia (Pittinsky et al. 2011) and xenophilia (Stürmer et al. 2013). Although Japanese and Italian students exhibit biases reflective of their respective traditions, they also exhibit some tastes, styles, and proficiencies related to other cultures. Japanese involvement with Western music is sufficiently strong that rock bands tour Japan after their careers end in the West, just as jazz greats did a generation ago. Italian campuses show more signs of yoga than Greco-Roman wrestling, more strains of Fela than Verdi. Such intercultural contact is an age-old aspect of human social experience. Records of life in ancient cities—whether Rome or Xi'an—describe foreign ideas brought by visitors, traders, and returning soldiers, sometimes embraced as fashions to be emulated, sometimes reviled as barbarisms to be avoided.[1] Greek writers showed interest in other cultures: Herotodus studied Persia and Egypt; Diogenes declared himself a cosmopolitan. And much earlier origins of intercultural exchange come from exotic stone evidence in paleoarcheology: Early *Homo sapiens* sites reveal tools made from stones quarried more than 300 kilometers away, indicating interactions and trade with foreign populations, whereas Neanderthal sites from the same era yield tools made solely from local materials, along with evidence of cannibalism and combat (Ambrose 2010). In short, sapiens may have won out because trading with outgroups proved a better strategy than eating them. The impulse to engage with other cultural groups and take influences from them seems to be a basic part of human nature.

To capture the plurality of cultural influence, we propose a network view (rather than categorical view) of cultural influence. As **Figure 2** illustrates, individuals engage with some elements of their primary culture and some elements of other cultures. This conception is called polyculturalism by historians who trace the borrowings and differentiations through which traditions have shaped each other (Kelley 1999; Prashad 2001, 2003). In psychology, polyculturalism focuses on how people live coherent lives informed by multiple legacies, how they borrow from or react against foreign ways, with ripple effects within their communities. Some long-standing research programs in psychology, such as immigrant acculturation, already touch upon how people negotiate dual engagements (Berry 1990), and some emerging research programs have explicitly adopted polyculturalist concepts (e.g., Rosenthal & Levy 2010). Our view is that much of contemporary cultural psychology fits the paradigm of polyculturalism better than culturalism. Examples of these polyculturalist concepts include dynamic constructivist research on the activation of cultural schemas (Weber & Morris 2010) and studies of how people use their knowledge of the norms of several cultures to guide their behavior (Tam et al. 2012, Zou et al. 2009). **Table 1** contrasts the culturalist premise of categorical influence with the polyculturalist premise of partial, plural, and dynamic influences.

The other culturalist assumption—independent traditions—also runs aground on historical facts. Although traditions of thought and practice can be traced back centuries in societies such as

[1]Numerous sources document the historical facts presented as examples, including Wikipedia.

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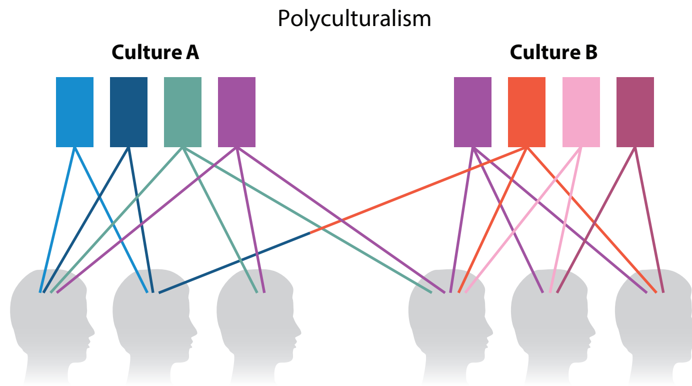

Figure 2

Network image of individuals with partial and plural cultural affiliations, each with a different combination of cultural influences. Note that individuals can be influenced by another culture assimilatively or contrastively.

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Japan or Italy, their ultimate provenance is often interplay with the foreign. Accounts of Japan's distinctiveness often point to *sakoku*, the penalty of death for foreign travel or foreign visitors that reigned for centuries; however, the Tokugawa shogunate devised this policy in reaction to the alarming earlier spread of ideas such as Christianity from earlier Portuguese missionaries. Other seemingly Japanese traditions come not from reaction formation but adaptation—tempura, for example, is a subtle refinement of Portuguese fried fish, *peixinhos da horta*. Even the quintessentially Japanese idea of Zen is borrowed from Chinese Chán Buddhism (∼1200). (Interestingly, Chán itself was imported to China's Shaolin temple centuries before, along with the practice of martial arts, by the wandering Indian monk Bodhidharma.)

For its part, Italy has traditions in design that can be traced back to Renaissance figures such as Leonardo da Vinci and Fibonacci, but some of their ideas were not invented so much as borrowed from the Arab intellectual world that had flourished during Europe's Dark Ages. Italian cuisine is justly renowned, but its central flavor of tomatoes came from the Aztecs courtesy of Cortés. Christianity is associated with Rome, but of course it was imported from further East (Armenia was the first state to adopt it), just as the old Roman gods were mostly borrowed from the Greeks. In sum, even the most central and celebrated elements of national cultures are often not autochthonous. Cultures are shaped by defensive efforts to differentiate from the foreign and by assimilative acts of borrowing and adaptation.

The cultural interaction assumption of polyculturalism follows from its cultural plurality premise: The individuals who interlink two cultures are bridges or conduits for intercultural influence. An emerging body of research identifies how individuals are affected by their exposure to and engagements with foreign cultures (Chiu et al. 2011). Individuals' reactions can seed macro-level cultural shifts when they are imitated by others (Boyd & Richerson 2004) or when

Table 1 Two paradigmatic assumptions and their implications

	Culturalist paradigm	Polyculturalist paradigm
Cultural influence	Categorical Constant, steady, general	Partial and plural Dynamic, intermittent, situated
Determinants of culture	Independent, ancient origins Historically stable	Intercultural interactions Continually evolving

they initiate social movements (van Zomeren & Iyer 2009). An implication of cultural interaction, then, is that cultures change rather than reproduce the same patterns for centuries and millennia. **Table 1** (lower row) contrasts the culturalist view of independent, ancient traditions and the polyculturalist view of interacting and changing patterns.

Colorblindness: policy of disregarding racial, ethnic, or cultural characteristics

Multiculturalism: policy of honoring differences with the goal of preserving different cultural communities within a society or organization, valuing purity of traditions

In this review, we articulate the polyculturalist paradigm as an alternative framework for understanding past research and guiding future research. It implies less focus on the effects of a national culture as a whole or of general traitlike orientations and more focus on effects of specific engagements with cultural ideas and institutions. It brings alternative methods for identifying influences, such as priming or learning manipulations, into focus in place of exclusive reliance on country comparisons. The first two sections review research relevant to cultural plurality in selves and minds. Next we turn to intercultural influence, developing novel theoretical arguments about contrast and assimilation responses to the foreign.

In the final section, we consider the link between cultural paradigms and policies. As we discuss below, some of the same questions that hobble culturalism as a research paradigm also limit it as a guide to social policies. Are cultures categorical as opposed to overlapping, static as opposed to historically evolving, unified as opposed to disjointed? At a time of increasing dissatisfaction with the traditional frameworks of colorblindness and multiculturalism, polyculturalism suggests new frameworks for managing diverse societies and organizations.

POLYCULTURAL SELVES: PLURAL CULTURAL IDENTITIES

Extant research on multiple cultural identifications focuses on biculturals, people with broad competence in two cultures, such as immigrants, exchange students, expatriates, refugees, ethnic minorities, mixed-ethnic individuals, and those in cross-cultural relationships (Berry et al. 2006, Padilla 2006). But biculturalism is just one of many forms of plural identification and engagement (see Kang & Bodenhausen 2015). Statistics about language, ethnicity, and migration provide some indications of the prevalence of biculturalism. The fraction of humankind that can communicate somewhat in more than one language (multilingualism) is estimated at up to 80%, although it is more like 50% in Europe and lower still in the United States (Erard 2012). In officially multilingual nations such as Switzerland and Belgium and provinces such as Quebec and Catalonia, the rate is much higher. In the United States, 34% of people are non-white, and by 2050, non-Hispanic whites will constitute less than half the population (US Census Bureau 2009). These identifications are somewhat fluid: Six percent of Americans reported a different ethnicity or race in 2010 than they did in 2000, many of them Hispanics (Cohn 2014). The proportion of foreign-born individuals in the United States is 13%, but counting their children (second-generation immigrants) nearly doubles that number; in cities such as New York and Los Angeles, the rate is more than 33%. In other countries that draw immigrants, such as Canada, Australia, and the Netherlands, the proportion of foreign-born individuals is over 20%, and in cities such as Singapore and Dubai, the percentage is much higher.[2] Many parts of the world are highly diverse in terms of language, ethnicity, and country of origin.

Past theories assumed a unitary cultural identity to be normal and taking on a second culture to be a traumatic process, akin to the medical condition of shock that accompanies accidents or surgery (e.g., Sussman 2000). However, evidence does not support the notion that learning a new culture creates enduring stress. In 42 samples of immigrant adolescents in 13 nations, Berry et al.

[2] Data are from **http://www.worldcitiescultureforum.com/indicators/foreign-born-population**.

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(2006) found that immigrant youth were equal to, or better than, their nonimmigrant peers in psychological well-being (life satisfaction, self-esteem, mental health) and school well-being (school adjustment, school behavior). The surprisingly positive outcomes of first-generation immigrants decline across subsequent generations [the so-called immigrant paradox (Nguyen 2006)]. The dual engagement of first-generation immigrants may be as much empowering as stressful.

Settler societies: societies populated mainly by immigrants, such as Australia, Canada, Israel, New Zealand, and the United States

Could it be that first-generation immigrants draw strength from dual cultural identities? Hong et al. (2013) argue that a strong heritage-culture identity provides a "secure base" that emboldens expatriates to reach out to the host culture, and they found that implicit measures of heritage-culture attachment predict exchange students' host-culture adjustment. Fu and colleagues (J.H.Y. Fu, M.W. Morris & Y. Hong, unpublished manuscript) found that exchange students feel more adjusted to their host culture after exposure to primes of their heritage culture. Results of several studies imply that these reminders of home bolster feelings of relational security, which exchange students can lose once removed from familiar supports. The attachment theory analysis helps us understand this ironic effect. Reminders of home do not make exchange students want to go home; instead, they embolden students to reach out to host locals. The benefit could even be seen in their post-stay evaluations of the study abroad experience, months later.

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Acculturation Configurations

Building on sociological studies of immigrant acculturation, Berry (1974) developed self-report measures of four configurations of immigrant acculturation—assimilation (high host-culture engagement, low heritage-culture engagement), separation (low host, high heritage), integration (high host, high heritage), and marginalization (low host, low heritage). Early evidence supported his theory that psychological adjustment is best with integration and worst with marginalization (Berry 1990).

Immigrants' path depends on the "welcome" provided by the host country's policies and attitudes. Berry et al. (2006) compared three types of host countries: settler societies with policies encouraging immigration (Australia, Israel), former colonial societies with less encouraging policies (Germany, the Netherlands), and recent recipient societies lacking explicit policy commitments (Portugal, Sweden). Settler societies, highest in immigration and support for diversity, induce the highest rates of integration. Nguyen & Benet-Martínez (2013) conducted a meta-analysis of 83 studies of identity and engagement configurations, finding a strong and positive association between integration and adjustment (both psychological and sociocultural). This link was stronger in the United States than elsewhere, suggesting that settler policies not only encourage biculturalism but catalyze their positive effects on adjustment.

Studies of the identifications of managers in globalized settings find positive associations of psychological and work outcomes with integration but also with marginalization (Gillespie et al. 2010, Tadmor et al. 2009). Low identification with both cultures may reflect cultural independence or cosmopolitanism (Bougie & Bourhis 1996). Rather than needing one strong cultural identity, individuals can thrive with several strong identifications or several weak identifications.

Cultural identifications can be further parsed into many subdimensions, including being, feeling, and doing (Deaux 2006). Subjective thoughts and feelings about membership in a group have to be backed up by practices and relationships. But how individuals "do" their ethnicity evolves across different chapters of their lives. Ethier & Deaux (1994) found that strongly identified Hispanic students entering elite colleges had extensive family and neighborhood involvements, but that many "remoored" their identities to involvement in Hispanic campus organizations and activities.

Managing Identity Conflicts

Frame switching: shifts between different interpretive constructs in response to cues in the environment, assimilatively or contrastively, depending on the person's identity-related motivations

Bicultural identity integration: the extent to which a bicultural individual experiences her two cultural identities as compatible and integrated versus oppositional and conflicted

How do biculturals deal with conflicts between their two identities? One approach, compartmentalizing, involves different identification in different contexts, such as immigrants who adhere to host-culture norms at work and heritage-culture norms at home (Arends-Tóth & van de Vijver 2004). Lau-Gesk (2003) measured compartmentalizing by asking Asian Americans whether they speak their heritage language and English in the same settings or in separate settings and found that the latter compartmentalized group disliked messages that blended themes from both cultures.

Frame switching refers to biculturals' experience of switching cultural lenses from one transitory situation to the next. Hong et al. (2000) proposed that cultural identities are made salient through priming and found that bicultural Hong Kong students could be induced to endorse Chinese values and attribute behavior to situations, or they could be induced to endorse American values and attribute behavior to persons. Priming was implemented through prior tasks that activate Chinese or Western identities, such as exposure to iconic Chinese images (a dragon) or iconic American images (a cowboy).[3] Verkuyten & Pouliasi (2002) replicated this with Greek immigrants in Holland, priming them with iconic Dutch (windmills) and Greek (the Acropolis) images. Asian Americans primed with Asian images switched to person description using contextualized verb phrases, whereas those primed with American images switched in the direction of decontextualized adjectives (Morris & Mok 2011). Likewise, cultural priming can shift memory performance (Sui et al. 2007) and decision making, inducing more cooperation in prisoner's dilemma games (Wong & Hong 2005) and more patient choices in intertemporal dilemmas (Benjamin et al. 2010, Chen et al. 2005).

By manipulating cognitive load, Briley et al. (2005) found evidence for frame switching through both automatic and deliberate processes. Fu et al. (2007) found that subtle Chinese cultural references automatically speed processing of Asian stimuli for Asian Americans but not for outsiders to Asian culture. However, Alter & Kwan (2009) found that the yin/yang symbol cues even non-Asians to exhibit some characteristically Asian biases, as seen in studies of stereotype priming and performance (Shih et al. 2002). In sum, primes can evoke culture-related habits by triggering insiders' identities and outsiders' stereotypes, in both cases shifting the frame of reference that guides the person's processing.

Other priming research finds that some types of biculturals respond to primes contrastively. Benet-Martínez et al. (2002) introduced the dimension of bicultural identity integration, which distinguishes individuals who experience their two cultures as close/compatible versus distant/conflicting. Conflicted biculturals are more likely to respond to cultural cues in a contrastive manner, enacting the identity that was not primed. Conflicted biculturals tend to feel disidentified with one of their cultures and are motivated to distance themselves from it (Zou et al. 2008). They are also motivated to defend the nonprimed identity against neglect (Mok & Morris 2009, 2010, 2012a,b). Conflicted biculturals frame switch contrastively even with subliminal primes (the words Asian or American), which suggests that these identity-related motives are implicit processes (Mok & Morris 2013).

Overall, research treating cultural identifications as plural elucidates otherwise puzzling phenomena, such as that reminders of home help expatriates adjust to the host culture, that first-generation immigrants do better than their grandchildren on some adjustment outcomes,

[3] Although prior research had primed the concept of collectivism and observed an effect on judgments related to collectivism (see Oyserman & Lee 2008), Hong et al. (2000) captured the frame-switching process through priming visual images and observing semantically unrelated shifts in adherence to cultural norms.

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and that conflicted Asian Americans act most American in Asian situations and most Asian in American situations.

POLYCULTURAL MINDS: PLURAL CULTURAL LEGACIES

Cultural plurality pertains to knowledge as well as identity, mind as well as self. If cultural knowledge is mental software, then culturalism assumes that it is like an operating system—the underlying architecture such as Windows or OS X. Installing a new and different operating system is a complicated process that generally requires removing the first one. For example, Gudykunst & Kim (2003) argue that second-culture learning and acculturation require first-culture unlearning ("deculturation") through avoiding heritage-culture contact.

For polyculturalists, cultural knowledge is more like a set of specific "apps" that users select or even download unwittingly in the course of exploring the web. Apps are not constantly activated, they guide the device's processing when they have been launched, either deliberately or as a by-product of the activation of linked programs. Polyculturalism directs attention to how people pick up proficiencies from multiple cultures throughout their life span through a range of different learning processes, some explicit and some implicit.

The image of cultural knowledge as a set of loosely integrated apps fits with the accumulating evidence that people's representations of social norms steer their cultural conformity. Cross-national differences in social judgment are carried less by individuals' personal values and beliefs than by their assumptions about the values, beliefs, and behaviors that are widespread in their society or community (Zou et al. 2009). Adherence to cultural patterns increases under the condition of need for cognitive closure (NFCC) (Chiu et al. 2000, Fu et al. 2007, Leung et al. 2012). Although stereotypes about creativity portray Westerners as innately more original and East Asians as more practical, such differences appear under some conditions but not others—for example, under high NFCC and in team tasks rather solo tasks—which suggests they arise from norms rather than values or abilities (see Morris & Leung 2010). Parents inculcate not only their personal values but also the different values that they perceive that the society values, and this is especially true for immigrants and those high in NFCC and conformity motives (Tam et al. 2012).

Need for cognitive closure (NFCC): a desire for quick and firm answers that varies dispositionally and situationally (e.g., as factor of time pressure)

Acquiring Knowledge of Another Culture

Traditional ways of training expatriates to function in a new culture have focused on explicit learning processes. Trainees study "do" and "don't" rules of etiquette. They are drilled in correct attributions for puzzling "critical incidents" in intercultural interactions that might otherwise beget misunderstandings (Bhawuk & Brislin 2000, Yamazaki & Kayes 2004).

The polyculturalist picture of cultural ideas and practices as apps suggests that most cultural learning happens implicitly through immersion and interaction in the cultural setting. This may be why visitors to a cultural setting sometimes pick up its characteristic ways of thinking, feeling, and behaving (Kitayama et al. 1997). McCrae et al. (1998) found that immigrants from Hong Kong to Canada increase in extraversion (by both self- and peer reports), presumably because it is more prevalent and more socially rewarded in the individualistic society of Canada. Expatriates after half a year in Japan or the United States begin to exhibit attentional tendencies and related performance characteristics on perception tasks, which people would not be aware of picking up (Kitayama et al. 2003). Several implicit learning processes probably contribute to learning a new culture.

First, people update their norm representations continually based on what they are exposed to. When people are frequently exposed to a name in the lab, they later judge that it is the name of someone famous (Jacoby & Kelley 1987). Kwan and colleagues (2014) found that incidental

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exposure to names or songs increased judgments of their popularity. Given that people form perceived ingroup norms from exposure, expatriates likely form implicit representations of local cultural norms on the basis of what they encounter day to day in the local environment.

Second, implicit acculturation likely occurs through social learning (Bandura 1977). Vicarious learning requires perceiving the outcomes that others experience. Savani et al. (2011, study 4) found that Indian and American participants exposed to interpersonal situations from each other's cultures could guess which decisions produce positive outcomes. Moreover, when participants were exposed to many interpersonal decision situations from the other culture, their decision biases began to evolve toward the characteristic biases of the other culture (study 5).

Third, expatriates may also learn through first-hand conditioning. Interpersonal interactions provide outcomes: instrumental success/failure and sanctioning from other people for norm adherence/violation (e.g., smiling or frowning, approaching or withdrawing). Savani and colleagues (K. Savani, M.W. Morris, B.S. Kaufman, and N.V.R. Naidu, unpublished manuscript) studied how people learn foreign norms from feedback after interpersonal interactions. Rates of learning were not predicted by IQ but by implicit processing aptitudes. In addition, feedback delay sharply disrupted learning, consistent with conditioning rather than explicit hypothesis testing.

Comparing the three implicit learning processes, each requires progressively more immersion in the local culture—exposure to what locals see for norms, exposure to locals' behaviors for social learning, and interaction with locals for conditioning. Does exposure to one's heritage culture interfere with mastering the local culture? Birman et al. (2005) compared adolescent Russian immigrants in an ethnic enclave with an ethnically mixed community. The effect of time in the United States differed by community: American linguistic and behavioral acculturation was slower in the enclave community. But does this reflect different incentives or does it truly reflect interference? Experiments by Zhang et al. (2013) found that newly arrived Chinese immigrants to the United States exhibited more dysfluency in English when speaking in a simulated teleconference to a photo of a Chinese face than a Caucasian face, even though they felt more socially comfortable with the Chinese face. Another study found that fluency declined upon exposure to Chinese images (The Great Wall) as opposed to American images (Mount Rushmore). In other studies, image primes induced participants to name objects with literal translations from Chinese and made these anomalous phrases cognitively accessible. In sum, interference comes not from possession of heritage-culture knowledge but from its accessibility, implying a need for immersive learning environments but not for unlearning of the heritage culture.

Using Knowledge of Another Culture

Knowledge of another culture is used to adapt one's behavior to local norms and to interpret locals' behavior.

Acting local. Accommodating one's behavior to local norms can facilitate trust and positive interactions. For many task situations, biculturals know the norms of both of their reference groups and can use either norm as their guide. Hong Kong biculturals make person attributions that correlate with their perceptions of typical American beliefs when they have an American audience and make contextual attributions that correlate with their perceptions of typical Hong Kong beliefs when they have a Hong Kong audience (Zou et al. 2009, study 4). This flexibility gives biculturals an advantage in cross-cultural competence. Compared with European Americans, Asian Americans have more accurate knowledge of how Taiwanese and Americans weigh gains versus losses in decision making and can better tailor messages to resonate with each audience: gain-focused messages for Americans and loss-avoidance messages for Taiwanese (Leung et al. 2013). Among exchange

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students, more accurate assumptions about the host culture's norms correlate with higher-quality, more satisfying interactions with locals (Li & Hong 2001). Nevertheless, accommodation by newcomers also carries risks, including internal dissonance (Molinsky 2007), appearing manipulative to locals (Thomas & Ravlin 1995), and appearing a traitor to one's ingroup (Tong et al. 1999).

The degree to which people accommodate the norms of a cultural setting depends on their motives and on the social context. Kosic et al. (2004) found that among Croatian immigrants to Italy who initially kept company with fellow Croats, higher NFCC gave rise to slower learning of Italian culture. But for those who initially fell into Italian social networks, higher NFCC gave rise to faster learning of Italian culture. Chao et al. (2010) found that, among Chinese MBA students, higher NFCC was associated with solving management problems in China in a characteristically Chinese manner as well as with solving a management problem in the United States in a characteristically American manner. The need for closure does love cultural conformity but it does not culturally discriminate—people satisfy this need by conforming to the norms of the salient group, whether of their heritage culture or another culture.

Cultural metacognition: epistemic self-evaluation in intercultural matters, such as in planning for interactions, monitoring one's assumptions, and updating one's knowledge from experience

Cultural genocide: the destruction of the cultures of racial, ethnical, religious, or national groups

Reading locals. Expatriates also use their second-culture knowledge to interpret locals' behavior. Again, this carries risks: Drawing inferences from generalizations can lead to erroneous conclusions and can make people feel unfairly stereotyped. The best resolution of this dilemma seems to be mindful use of cultural generalizations: The managers nominated by peers as most interculturally competent are not those who eschew generalizations entirely, nor those who apply stereotypes inflexibly, but rather those who actively update their generalizations on the basis of interactions (Ratiu 1983).

Research on intercultural competence has drawn attention to the dimension of cultural metacognition, individuals' strength in planning, monitoring, and acquiring assumptions about cultural patterns (Van Dyne et al. 2012). Higher cultural metacognition is associated with greater trust and creative collaboration in intercultural relationships (Chua et al. 2012). High cultural metacognizers make more accurate judgments about culturally traditional counterparts in international negotiations (Mor et al. 2013). Mor & Morris (2013) found that high cultural metacognizers apply cultural generalizations in a contingent manner, depending on the stereotype congruence of the target's initial behavior. When an outgroup target's initial behavior accords with a generalization-based expectancy, high cultural metacognizers become more likely to apply the generalization in their judgments. But when the target's initial behavior does not accord with the expectancy, then high cultural metacognizers become less likely to apply the generalization. The same pattern holds with regard to participants' updating of their generalizations.

Overall, new insights about cultural learning and intercultural adjustment and effectiveness have come from evidence that people learn norms of more than one culture, often through implicit learning processes, and apply this knowledge to guide actions and interpretations through dynamic, constructivist processes. This work fits the polyculturalist image of plural cultural influence, not the culturalist image of categorical cultural influence.

INTERCULTURAL INTERACTION AND CULTURAL CHANGE

Societies and their cultures can be affected from outside in many ways. Conquering armies have decimated peoples and terminated their traditions. Colonized groups who survive the soldiers and their diseases can nonetheless suffer cultural genocide at the hands of missionaries, teachers, and judges who follow. Aside from states, actions of corporations can also affect cultures, sometimes for the worse as when oil drilling in delicate ecologies disrupts indigenous traditions and livelihoods. Guns, germs, laws, and money are mechanisms of influence that have

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greatly shaped the cultural map, and it is a mistake to ignore these factors when understanding modern cultural patterns. However, the polycultural perspective best elucidates a softer form of intercultural influence—how individuals' foreign engagements change them and ultimately their culture.

Influential twentieth-century theories portrayed cultural change from contact as a highly regular group-level process. The anthropologist Herskovits (1938) proposed that groups in contact inexorably intermingle and lose their distinctive qualities, like diffusion of two gases in a chamber. Likewise, sociologists proposed that immigrant groups assimilate in a straight line, each generation irreversibly closer to the mainstream group (Gans 1973). Contemporary thinking departs from these portrayals in at least two major ways. First, cultural change from intercultural contact is not an automatically assimilative group process; it is a variable-speed and -direction process driven by psychological and political dynamics. Second, intercultural contact happens in many ways beyond the intermingling of neighboring communities.

Barber (1995) described two contrary responses to intercultural contact: the globalist trend toward cosmopolitan lifestyles and supranational identifications, and the tribalist response of differentiating one's group from the foreign influences by hardening the boundaries. Examples of differentiation inspired by contact are reactionary anti-immigrant movements (e.g., the Carajillo party in Spain, the Tea Party in the United States) that are based on false nostalgia for a purer society of yore, or the response of Mexican immigrants in the United States who become more ethnically identified in the second generation as they get more exposure to mainstream derogatory discourse about their group (Portes & Rumbaut 2001). Adjustments, appropriations, and adaptations often spread from one person in a community to many others, but they also can be later contested, denied, or dissolved. Both tribalist divergence and globalist convergence movements are in evidence around the world (Cederman et al. 2010). We propose that they originate, respectively, in contrast and assimilation responses to foreign contact.

Exposure to another culture does not necessarily mean contact with its people. For instance, Stürmer et al. (2013) measured contact with the foreign not only by interactions with foreigners but also by engagement with foreign languages, media, cuisine, music, religions, cultural festivals, and even travel magazines. Such exposure to foreign artifacts and practices has increased with globalization; thus, increasingly, intercultural contact goes beyond intergroup contact.

In this section, we illustrate the generative potential of polyculturalism by proposing cognitive and emotional determinants of contrast and assimilation responses to foreign cultures.

Cognitive Dynamics

Contrastive responses. Social identity research has elucidated how outgroups serve as foils for understanding our own group. We think of the ingroup in terms of a prototypical member, not the average member but rather the member who maximizes a combination of ingroup similarity and outgroup difference (Turner 1987). For instance, early Americans held up frontiersmen like Daniel Boone as personifying the American type, perhaps because Boone's lifestyle contrasted so much with the outgroup, the British. Ingroup prototypes are distorted self-images but can become self-confirming because prototypical individuals tend to be chosen as role models and as political leaders (Hogg 2001). To wit, the rugged frontiersman prototype may have influenced many early Americans to migrate westward and helped individuals from western states (e.g., Lincoln) attain leadership roles.

This psychological process is perspicuous when the salient outgroup changes. Hong Kong is a culturally mixed society that was a British territory for most of the twentieth century. Research on its social identity revealed that for most people the ingroup prototype was a traditional Chinese

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person. However, after the 1997 handover to China, the ingroup prototype for many shifted to a modern cosmopolitan person in contrast to mainlanders (Lam et al. 1999). We propose that people's image of their culture shifts in a parallel way: Before the handover, icons of Hong Kong culture would have been traditional fish markets and jade sellers; afterward, fashion designers and democracy marches would seem more iconic.

Cognitive contrast is also evoked by exposure to cultural mixes and blends. Just as people respond to joint exposure to decision options by focusing on dimensions that differentiate them (Hsee et al. 1999), people respond to joint exposure to two cultures by focusing on their contrasting features (Chiu & Cheng 2007), leading to representations of the cultures that highlight differences (Torelli et al. 2011). This representation can evoke exclusionary behavior toward immigrants because it creates an image of the other culture as incompatible and impossible to integrate (Chiu et al. 2009). At the same time, consciousness of differences can be a springboard to creativity (Cheng & Leung 2013, Saad et al. 2013).

Cognitive contrast may help us solve the puzzle of why some immigrant communities buck the trend toward acculturation. Acculturation happens through individuals engaging with the mainstream culture. Encapsulated communities having little social and economic exchange with the mainstream community (Portes & Sensenbrenner 1993, Wilson & Martin 1982) would be less likely to converge toward the mainstream. Because of the role of outgroup contrast in identity construction, people in such communities sometimes grow more ethnically identified after immigrating.[4] As the immigrant owner of an ethnic shop in Miami observed, "The people who always wore American brands and European clothes in Nicaragua now come shopping for a *cotona* to wear to parties" (Veciana-Suarez 1983). Even religions can shift divergently: Over generations, the Parsi community in India evolved more restrictive rituals (e.g., barring non-Zoroastrians from fire temples) than ever existed in the homeland. This analysis of divergence implies that it would also occur among mainstream culture communities facing salient cultural outgroups with whom they scarcely interact. An example may be the cultural-political conservatism (e.g., English-only policies) in some American states along the Mexican border. In sum, cognitive contrast may explain the social dynamics of divergence from neighboring cultures.

Assimilative responses. Other cognitive dynamics contribute to the opposite response of borrowing or adapting foreign ideas. Ideas learned from other cultures can enable novel or creative solutions to problems (Leung et al. 2008, Maddux et al. 2010). Learning and creativity gain is more likely under the conditions of foreign study and a chosen stay (Mor et al. 2012) and less likely under the conditions of NFCC or existential threat (Leung & Chiu 2010). When a person adopts a foreign technology or practice as a better solution to a problem, the innovation tends to spread because it works better for others as well. Tomatoes likely diffused in Italy because they were easy to grow and provided a bright new flavor. Zen likely spread in Japan because its emphasis on discipline and intuition fits the Samurai lifestyle better than earlier, more theoretical forms of Buddhism. New solutions bring success and prestige, so these practices are emulated by others, and as more people adopt the practices, they spread further through imitation and conformity (Richerson & Boyd 2005). Foreign ways that work better start to crowd out the heritage-culture practices. Antibiotics fade the aura of tribal healers. Pocket calculators reduce demand for abacus

[4]Hyperconservatism in encapsulated immigrant communities may reflect not just cognitive contrast but economic motivations as well, as informal capitalization practices such as rotating credit associations rely on signs of traditional moral character rather than credit ratings or collateral.

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lessons. All told, when an individual borrows a foreign practice that works, this can easily turn into a trend, changing the community and sometimes the society.

Perceived norms: a person's subjective representation of a group's behavioral regularities and expectations; different from the objective distribution of behaviors, beliefs, and values

Although taking on foreign ideas can spur creativity, innovation, and cultural development, it also can be a means of cultural hegemony. Through the aforementioned effect of mere exposure to perceived norms, large nations may affect the norms of smaller societies that consume their media and products (films, advertising, lifestyle goods, etc.). Consider research on stereotypes about national character: Although typically heterostereotypes diverge from a country's autostereotype, samples from 49 cultures around the world rated a typical American similarly to how Americans rated a typical American (intraclass correlation coefficient = 0.71) (Terracciano & McCrae 2007). In the same vein, Realo et al. (2009) found that ratings of the typical Russian from six smaller Baltic countries were similar and correlated with the Russian autostereotype—although not with Russians' actual self-ratings of personality. Hřebíčková & Graf (2013) studied five central European countries and found that heterostereotypes converged with the autostereotype most for Germans. Consistent with a role of media in creating these convergent heterostereotypes, there was more agreement among countries speaking the same or similar languages.

More worrisome is assimilation of another culture's view of one's own group. Du Bois (1989/1903, p. 3) described African Americans as double conscious, forced to know not only the black community's self-image but also the white community's pejorative or pitying view of them, resulting in "two souls, two thoughts, two unreconciled strivings, two warring ideals." Self-stereotyping refers to a process in which people from a stigmatized group describe themselves in terms of the dominant group's stereotype of them or even use pejorative labels from the dominant group to address each other. A study of Southern Italians, who are historically stigmatized by the rest of the country, found that although perceptions of prejudice have direct negative effects on psychological well-being, self-stereotyping increases ingroup identification, which in turn has a compensatory positive indirect effect on psychological well-being (Latrofa et al. 2009). Identification requires a shared category (Wan et al. 2007), so stereotypes can provide a needed frame for identification even if stigma is perpetuated as a result.

This is not to deny that historically dominated groups seek emancipation from "mental slavery" (Garvey 1938). Linguistic strategies include changing place names (Burma to Myanmar, Bombay to Mumbai) and reappropriating stigmatizing labels (Galinsky et al. 2013). Code switching is used to negotiate identities: For example, Dominican immigrants to the United States, who primarily identify as Spanish or Hispanic rather than as black, make tactical use of Spanish with their white Anglo peers (e.g., the greeting *Buenos dias*) to resist the essentializing racial categorization (Bailey 2000, Toribio 2004).

However, it is hard to shake all the traces of a longtime colonizer. For instance, the British Raj tried to understand Hinduism as like a Western religion, so they constructed a stylized version of its doctrine based on a narrow subset of its texts, missing most of the broader tradition, and they published and taught this formulation to several generations of Brits and Indians (Doninger 2013). In recent times, Hindu nationalists have sought to place "authentic" pure Hindu traditions above those of "foreign religions" such as Islam and Jainism. Some of their formulations of pure Hinduism, however, made use of frameworks developed by the former British colonizers (Doninger 2013).

Finally, colonizers also assimilate elements of the cultures they colonize (Licata 2012). Although the colonizer community controls the hegemonic apparatus of schools, mass media, and laws, it is outnumbered by the local society and dependent on it for many practicalities of life. Hence, colonizers pick up local habits and tastes and bring them back to their homelands. An

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obvious example is cuisine—to wit, Robin Cook's proclamation that chicken tikka masala is the contemporary British national dish.[5,6]

Emotional Dynamics

In addition to cognitive dynamics, emotions also affect contrast and assimilation responses. Intergroup research increasingly recognizes that outgroups evoke qualitatively different emotions—some negative, some positive, and some ambivalent. Fiske and colleagues (2002) synthesized these insights in a model that draws two dimensions of social perception: warmth and competence. Low warmth/high competence (e.g., bankers) evokes envy, but low warmth/low competence (e.g., junkies) evokes contempt. High warmth/high competence (e.g., doctors) evokes admiration, but high warmth/low competence (elderly people) evokes pity. We propose that these forms of emotional prejudice are also evoked by cultures—artifacts, practices, and ideas. Although emotional prejudice toward cultures has not been studied to our knowledge, some clues come from evidence about prejudices toward immigrants. Americans perceive immigrants from Africa as low competence, Eastern Europe as medium competence, and Asia as high competence (Lee & Fiske 2006).

Secular/stylistic/sacred content: secular practices serve practical ends such as medicine and transportation; stylistic practices express personal or collective identity such as arts or sports; sacred practices involve moral domains such as family, divinity, and nationality

Emotional responses may further depend on the domain of culture involved. Lal (2000) distinguishes material beliefs, related to practical ends, from cosmological beliefs, related to the meaning of life and relationships, and argues that people are more receptive to foreign ideas in the practical sphere than the cosmological sphere. Atran & Ginges (2012) propose that some norms and values are sacralized, such that they cannot be traded against other ends in decision making. Longitudinal data from the World Values Survey (Inglehart & Baker 2000) reveal that although nations with increased levels of economic development increase their emphasis on secular values (e.g., instrumental rationality, objectivity, and efficiency), their spiritual values remain structured by their historical religious-philosophical traditions (e.g., Protestantism, Confucianism). Purely practical artifacts and practices can be distinguished from spheres that have become institutionalized over time as symbols or icons of the culture—French bread, the Spanish bullfight, sumo in Japan. Identity-preserving concerns would make these domains more resistant to foreign input. Past theory suggests that, generally, borrowing is more likely in the secular (e.g., salami) or stylistic (e.g., origami) domains than in the sacred (e.g., polygamy) sphere. However, we propose that this is moderated by emotional prejudices toward the other culture as a whole.

Finally, emotions likely depend on the direction of cultural influence. Feelings evoked by the outflow of one's culture's practices to a foreign society may be different from the feelings evoked by the inflow of foreign cultural practices into one's own community. Wu and her colleagues (2014) studied how Hui Muslims in China felt about inflows or outflows of their sacred halal diet. Witnessing a fellow Hui eating halal did not evoke any emotions, and seeing a Han Chinese eating halal elicited slightly positive emotions.[7] More important, witnessing a Hui eating nonhalal evoked disgust and anxiety about cultural contamination along with increased support for separatist ethnic policies to preserve Hui traditions. Given that inflows are more volatile, that is the type of cultural

[5]Chicken tikka masala is a highly popular dish in the United Kingdom that is generally credited to a Pakistani chef in Glasgow who added a can of Campbell's tomato soup to a tikka dish to adapt it to local customer tastes.

[6]Colonizing cultures were also influenced by the need to justify their colonial practices. Stoler (1989, 2010) traced how Dutch ingroup/outgroup boundaries, instantiated in informal norms as well as legal codes, changed in response to their colonial predicaments in Sumatra. Here the psychological process is less cognitive assimilation than cognitive dissonance reduction.

[7]Some positive reactions to outflows would be tempered by concerns about appropriateness; for example, most religions restrict outsiders from some of their rituals.

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mixing we focus on in theorizing about critical emotions involved in contrast and assimilation responses to foreign contact in different domains.

Contrast responses. The Fiske framework tells us that low-warmth/high-competence cultures evoke envious prejudice. Envy involves recognizing the other culture's achievement yet also resenting it—a mix of admiration and anger, an impulse to borrow and also to attack. How the ambivalence resolves itself may depend on the domain of cultural inflow.

To illustrate, consider Saudi responses to American culture.[8] As a traditional Islamic monarchy, Saudis would be naturally wary of a progressive Judeo-Christian democracy. However, to benefit from US oil exploration skills, Saudi Aramco was allowed into the Kingdom in the 1940s and eventually discovered huge fields. The House of Saud publicly distanced itself from the United States after the Yom Kippur war, yet expanded economic and military cooperation soon after. As the accumulation of oil wealth in the 1970s brought inflows of other Western artifacts, such as shopping malls and cinemas, conservative Saudis became increasingly worried about Westernization. After suppressing several extremist Islamic uprisings, the government responded by closing cinemas, imposing stricter religious rules about public behavior, and granting more power to clerics. Saudi clerics began aggressively promoting their conservative Wahhabi beliefs across the Islamic world. In the 1990s the scale tipped further, from resistance to attack, when the United States maintained an ongoing military base in Saudi Arabia after the first Gulf War. For some Saudis, including leaders of al-Qaeda, this violated a sacred rule against infidel armies in the holy land. This foreign influx was the stated reason for their terrorist attacks against the United States. To summarize, in the context of envious prejudice, secular inflows evoke wary acceptance, stylistic inflows produce anxiety and resistance, and inflows violating sacred norms evoke angry attacks.

Similar responses can be seen in US feelings about Ground Zero. Outcry by out-of-state visitors about the "sacrilege" of halal food carts operating near the construction site evoked more laughter than concern in New York. However, a planned Islamic community center including a Mosque largely funded by an Arab foundation (read: Saudi Arabia) evoked stronger concerns. Jia et al. (2011) studied the roots of this response by varying American participants' sense of the superiority of US status and power. In a group led to believe that the United States was suffering from lowered international stature, participants responded to a description of the center with anger and support for blocking it, whereas in a group induced to believe that US stature was very high, participants expressed less anger and fewer intentions to block the project. Construals of the other culture as powerful set the tone of envy in which the anger/attack response occurred.

An example of exchanges between mutually envious communities is documented in Flint's (2006) study of interactions between Indian immigrants and Zulu native doctors in South Africa's Natal province. In the early twentieth century, Ayurvedic practitioners established themselves in Natal as traveling healers in the Indian community and beyond. These healers became aware of the therapeutic techniques and ingredients used by their Zulu competitors and began substituting local ingredients. However, they did not adopt local attire or rituals, keeping to Ayurvedic models. Similarly, African healers began appropriating Indian ailments and remedies as well as other Hindu materials. For example, their colored cleansing potions *imikhando* may derive from the brightly colored powders used in Hindu religious ornamentation. In recent decades, both groups have opened *muthi* shops selling herbal remedies in forms that are an amalgam of the two traditions.

[8] Case facts come from **http://en.wikipedia.org/wiki/Saudi_Arabia**.

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Fiske's framework holds that low-warmth/low-competence targets evoke contemptuous prejudice, characterized by disgust and the impulse to avoid. Evolutionary psychologists argue that disgust evolved for disease protection, keeping toxins away, but was exapted for moral psychology, regulating behavior and ingroup boundaries (Haidt 2001). Consistent with the link between disgust and group psychology, ethnocentrism is associated with disgust sensitivity and rises for mothers in the first trimester of pregnancy (Navarrete & Fessler 2006, Navarrete et al. 2007). Just like contagious diseases, some foreign cultures are treated as contaminants that need to be expelled or quarantined.

Cultural capital: cultural tastes, proficiencies, and practices that signal higher social status, sought out for goals of social access and social exclusion

Consider Americans' responses to the 1990s Haitian exodus that was spurred by a coup.[9] Refugees in small boats were intercepted by the US Coast Guard and brought to Guantanamo Bay. Some refugees were quarantined there for years; others were deemed economic migrants rather than political refugees and were returned to Haiti. A comparative study found that Haitian immigrants prospered in New York, where they blended into the broader African American community; in contrast, they experienced pariah status in Miami, where their national origins were salient (Foner 1998). Although Haiti is a neighboring, rich culture with a long history, Americans have not embraced its secular, stylistic, or sacred elements.

Faulkner and colleagues (2004) proposed that disease and social disgust are connected: People at risk of disease avoid unfamiliar groups (a response that may have evolved because unfamiliar people could carry diseases to which one has no immunity). When Canadian students felt at risk of contagious disease, they expressed more negative attitudes toward "foreign" and not "familiar" immigrant groups. However, "foreign" was usually operationalized as African and "familiar" as East Asian or Eastern European, so subjective foreignness may be confounded with perceived competence. Our current analysis raises the question of whether the perceived competence and warmth of a foreign group triggers the exclusionary response.[10]

Assimilation responses. Cultures construed as high warmth/high competence would evoke admiration and attraction. The adoption of secular practices from admired cultures may be illustrated by the worldwide diffusion of American fast food and American medical innovations (the former ensuring demand for the latter). Yang et al. (2011) asked Chinese participants to evaluate foreign brands and found that American brands such as McDonald's were perceived as both warm and competent. Such brands are more respected abroad than at home. Kentucky Fried Chicken (KFC) has approximately 6,000 outlets across China, more than it has in the United States, and plans to quadruple that number.

Stylistic artifacts from high-warmth/high-competence cultures would be sought for their cachet. Cultural capital theory holds that individuals who evince highbrow cultural tastes and proficiencies (e.g., opera, foreign languages) gain social and economic advantages. DiMaggio & Mohr

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[9]Case facts come from **http://en.wikipedia.org/wiki/Camp_Bulkeley**.

[10]Although our focus is on cultural inflows, disgust reactions also have been observed in responses to outflows under certain conditions. Torelli et al. (2011) studied how American consumers responded to a hypothetical attempt by Nike to localize its brand image to appeal to consumers in the Middle East by incorporating Islamic cultural elements into its marketing campaign. According to this plan, the reference to the Greek god "Nike" would be replaced by an Arabic name and the brand's swoosh logo changed. As expected, Americans responded to this campaign with disgust: They indicated reduced preference to buy Nike and predicted the campaign would fail, Nike's US market share would shrink, and its stock price would drop. More important, these reactions were observed only after participants were primed to think about mortality, a manipulation that induces a cultural worldview defense, specifically impulses to protect symbols of one's culture (Greenberg et al. 1995). Furthermore, these rejecting responses did not surface at all when the brand was replaced by a less iconic brand (e.g., Proctor Silex). Mortality-salient participants sensitive to icons of American culture construed the Nike shoe as a sacred artifact that shouldn't be altered for economic gain and rejected the idea of doing so. However, even for mortality-salient participants, a Proctor Silex toaster was just a toaster, not a sphere of life that must be defended against cultural contamination.

(1985) examined historical data from a panel of gifted students who were tested for ability and surveyed about their extracurricular interests and found that cultural capital (controlling for ability and high-school grades) predicted educational attainment and marital selection a decade later. An initial theory of the reproduction of social class has led to recent research on social mobility that examines how working class parents and children pick up the behavioral repertoires that find greater favor from teachers and employers (Lareau & Calarco 2012). Although some emulation of a high-status group or culture's style may win over teachers, suitors, and bosses, it also carries risks. The group may try to protect its cultural turf, and one's own group may sanction perceived disloyalty or pretense.

Assimilating foreign practices in sacred domains would happen for similar reasons but would be more contested, especially when the sacredness is made salient. Fu & Chiu (2007) asked Hong Kong students to list Chinese and Western role models that they looked up to. They spontaneously listed Chinese role models in the moral domain (Confucius) and Western role models in the achievement domain (Edison). Defense of one's heritage culture in the sacred sphere helps to explain when popular protest against foreign businesses is likely to arise. In 2004, Mexicans angrily campaigned to stop Wal-Mart from opening a store near an Aztec site. In 2007, a newscaster's blog (Rui 2007) sparked a popular campaign to eject Starbucks from the Forbidden City, stating, "We need to embrace the world, but we also need to preserve our cultural identity. There is a fine line between globalization and contamination."

Such responses likely depend on the political tensions in the background, which change over time. A KFC outlet in the Beijing's Imperial Park operated throughout the 1990s without evoking popular protest. At Israel's iconic Masada, the desert fort where Jewish soldiers held out to the death against foreign (Roman) imperialists, one of the two restaurant options is a McDonald's (and not even a kosher McDonald's). For Israelis, American culture is warm because it is more of a protector than rival or threat, but Chinese and Mexicans may be shifting toward more envious prejudice. Yang et al. (2011) probed this sensitivity in an experiment that presented a hypothetical ad for McDonald's in China, varying the presence of a tagline highlighting its American origin and the presence of a background image of the Great Wall. Chinese participants reacted negatively only when both McDonald's American origin was emphasized and its intrusion on Chinese culture was suggested. In a replication, American participants saw an ad for a hypothetical Chairman Mao exhibition in New York, varying whether or not the image was superimposed on the background of the Statue of Liberty. Americans responded negatively only if they construed Mao as a Chinese symbol *and* his image intruded on the sacred icon. An acceptable import becomes anathema when the framing of intrusion on sacred ground is cued.

Finally, we turn to perceived high-warmth/low-competence cultures. Foreign cultures construed this way would evoke pity—ambivalence between positive moral regard yet low expectations. Kashima et al. (2011) find that high-warmth/low-competence construal is associated with underdeveloped societies; development is assumed to bring prosperity but also industrialization, less communal sharing, and more market pricing and competitiveness. Assimilating goods and practices from cultures construed as high warmth/low competence would be motivated by the desire to help. Researchers who examine helping find that perceived lower-power groups that are also perceived as similar receive empathy-motivated help (Stürmer et al. 2006).

Here we propose an effect of content domain that is opposite that of the aforementioned ambivalent construal of envious prejudice. People feeling the pity-based paternalistic prejudice would assimilate ideas and practices in the secular sphere less than in the stylistic or sacred spheres. Purely practical artifacts and methods from pitied cultures would hold little appeal. But taking on their styles and spiritual practices would be a means of expressing sympathy, humanitarianism,

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and solidarity. For instance, Tibetans have exported meditation techniques and paintings around the world but not tractors or teakettles. Tourists seek out Peruvian music and historical sites but not Peruvian dentistry.

Invention of tradition: cultural rituals and artifacts, often state sponsored and state serving, forged relatively recently and falsely imputed to have long histories and ancient origins

Cultural Change and Invention of Tradition

The polyculturalist image of intercultural influence through contrastive and assimilation responses suggests that cultures are shifting, labile systems. How much do cultures change? Characters in the Chinese language can be traced back to records from antiquity showing the persistence of tradition. However, social patterns in China shifted radically several times within the twentieth century. Longitudinal studies of Chinese self-concepts have noted changes with the institution of the single-child policy (Wang et al. 1998). Another useful longitudinal method is the content analysis of books to tally the frequency of the use of concepts over time. Greenfield (2013) found that since 1800, English Readers in topics related to obligations, giving, acting, obedience, authority, belonging, and praying have been gradually replaced by those related to choices, getting, feeling, the individual, the self, uniqueness, and childhood, which she sees as increased individualism related to urbanization. If people's self-concepts and social priorities in the East and the West have shifted dramatically in the last century, then does it make sense to explain our contemporary social habits as vestiges of worldviews forged in ancient China or ancient Greece?

When present practices are celebrated as continuous with the past, historians warn us to be wary of the invention of tradition. Hobsbawm & Ranger (1983) documented that many national-culture practices to which great antiquity is ascribed, such as the pageantry that surrounds ceremonies of the British monarchy, were devised after the industrial revolution. The kilts and tartan plaids of Scottish clans were invented by apocryphal historians and promoted by clothiers, but later revelations of this fraud did not much diminish enthusiasm for these practices among the Scots. The national folk songs of Switzerland are not old and not folksongs; they were written on the template of old religious songs after the recent coalescence of a nation state. The holiday of Thanksgiving, with a mythical Pilgrim past, was invented after the American civil war as a ritual to bolster the fractured national identity (Siskind 1992). National traditions are mostly novel solutions to novel problems, historians tell us, masquerading as ancient traditions.

The early modern era was a fertile season for the forging of cultures as institutions such as the ideological apparatus of the nation state—compulsory schooling, standing armies, and nationwide radio and newspapers—enabled transmission of beliefs about the past and of perceptions that these beliefs were shared by the entire population, an imagined community (Anderson 2006). The invention of tradition reveals something about the intersection of psychology and culture: People celebrate that which they were led to believe is their tradition, perhaps because of evolved propensities for learning and enacting culture. However, cultural researchers must avoid being duped by invented traditions and ignoring the recent forces shaping cultures in favor of ancient ones. Although the culturalist paradigm has guided great discoveries and insights, the polyculturalist paradigm complements it by directing our attention to cultural interaction and change.

LAY BELIEFS AND IMPLIED IDEOLOGIES, POLICIES, AND BEHAVIORS

Heretofore we have made the case for polyculturalism as a scientific paradigm. But paradigms about culture—such as universalism, culturalism, and polyculturalism—also matter because of the ideologies, policies, and behaviors they support.

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Table 2 Ideologies and policies associated with the three paradigms

Paradigm	Universalism	Culturalism	Polyculturalism
Ideology	Colorblindness	Multiculturalism	Interculturalism
Policy	Establish equality through uniform criteria and treatment	Preserve multiple cultures, side by side, with no group most central	Stimulate intercultural contact and dialogue
As a perceiver	Suppress thoughts about ethnicity	Acknowledge the other's culture	Recognize the other's plurality
As an actor	Drop ethnic habits	Act authentically through hewing to pure traditions	Recombine strands of culture to renew them

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Universalism and Colorblind Policies

Psychology's stance toward culture for most of the twentieth century was universalism: "...that there is a great uniformity among the actions of men, in all nations and ages, and that human nature still remains the same, in its principles and operations" (Hume 1894/1784, p. 358). Universalism holds that cultural, ethnic, and racial identities are superficial and unimportant to understanding inner psychology. This scientific paradigm guided research programs that disproved prior scientific and lay beliefs about racial differences.

Universalism carries ethical implications for policy and personal conduct. If people are the same inside then one ought not to discriminate on the basis of nationality, ethnicity, race, and so forth (see **Table 2**). The imperative that laws, schools, and organizations should be colorblind greatly expanded civil rights and inclusiveness.

However, colorblindness proved not to be a panacea. Perceivers who avoid discrimination in their conscious decisions (hiring an employee) can nonetheless be prejudiced in their implicit judgments (assigning credit or blame for everyday outcomes). In fact, Correll et al. (2008) found that when perceivers actively suppress ethnic categorizations in an explicit decision, these concepts and associated prejudices rebound into activation later. Also, colorblind regimes are often tone deaf. They hold up one standard and seem to devalue the expression of one's culturally based characteristics, which is demotivating. Colorblind means that everyone is held to one standard, but the standard is often that of the dominant ethnic group (e.g., France's policies toward immigrants) or of a strong organizational culture that fits more comfortably for people of some ethnic backgrounds than others. In addition, colorblindness reduces opportunities for cultural learning and leveraging of diverse perspectives for innovation.

Culturalism and Multiculturalist Policies

Culturalism holds that people are deeply molded by their culture of origin and that the major cultures of the world are legacies passed down from antiquity. The implied policy and ideology is multiculturalism.[11] One ought to study, acknowledge, and affirm the cultural traditions in one's society, as it damages a person's self-respect not to be recognized in terms of his or her cultural identity. Similarly, one ought to behave in line with one's cultural traditions rather than fronting other identities. Cultural customs should be revered and preserved, with no one group treated as more central than any other. These policies were first articulated and institutionalized in Canada in the 1970s and spread to other Anglophone countries and Northern European nations, as well

[11]We recognize that "multicultural" is a term used in different ways to label many different ideas, including some of the assumptions of polyculturalism. Our usage, shown in **Table 2**, is one of the major ways the term multicultural is used. We also are well aware that "poly" and "multi" are synonyms, but we follow prior usage to contrast the terms here.

as to the policies of many private sector organizations. In the past decade, however, support for multiculturalism has dramatically receded in Europe as unassimilated ethnic communities increasingly become sites of discontent and violence (Brubaker 2001). Ideals of cultural authenticity and policies of cultural preservation are increasingly seen as threats to liberal dialogue and civic identity.

Interculturalism: policy of encouraging interaction and dialogue between the different cultural communities in a society, valuing cross-pollination

Just as colorblind ideologies played an important role in legal reform, multiculturalist ideology has played a useful role in garnering resources and changing norms to make life more comfortable for cultural minority communities. However, multiculturalist policies are not always comfortable; they require drawing ethnic boundaries that do not always clearly exist, and not every group can be recognized. Subgroup identities are discouraged because they threaten the power of a group. From an activist perspective, celebrating cultures as authentic categories with independent origins in antiquity has several political limitations. First, it ignores the political character of cultural patterns, the way that a group's habits and ways of life have been shaped by interactions with other groups such as colonialism, slavery, war, and institutional discrimination. Second, fetishizing contemporary habits as an integrated cultural system enshrines cultures to a museum rather than seeing within them the potential for change. It occludes histories of dissent over norms that favor some categories of society more than others and can mean accepting sexism, racism, classism, and homophobia. In reality, people from one culture may not genuinely value some aspects of another culture, but in an ideology where judging other cultures is forbidden, the only solution is keeping one's distance. In many cases, multiculturalism has resulted in separate, unequal, and noninteracting communities.

Psychological research on multiculturalist policies finds that they provide a favorable context for the self-esteem of strong ethnic identifiers, albeit not for weak ethnic identifiers (Verkuyten 2009). Whereas colorblindness is premised on the diagnosis that prejudice comes from categorizing people, multiculturalism is premised on the diagnosis that it comes from lack of understanding of differences. But research suggests that even when multiculturalism decreases prejudice, it may increase stereotyping. Wolsko et al. (2000) showed that multiculturalist primes (as opposed to colorblind primes) increased positivity toward ethnic outgroup members but also increased stereotyping and use of category information. Further evidence suggests that positivity depends on the type of target person. Multiculturalist (compared with colorblind) perceivers like stereotypical targets more than counterstereotypical targets (Gutiérrez & Unzueta 2010). They dislike foreigners who accommodate their behavior to the local culture, judging them as sellouts who are unfaithful to their heritage (Cho et al. 2014).

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Polyculturalism and Interculturalist Policies

Polyculturalism concurs with culturalism that human hearts and minds are guided by cultural identities and legacies; however, people have partial and plural engagements with cultures and, in part for this reason, cultures interact and change. Prashad (2001) argues that polyculturalism implies an endorsement of cultural learning and adaptation. The policy implied is termed "interculturalism." This ideology recognizes individuals as culturally complex, dynamic, and malleable. It is suspicious of claims to cultural authenticity that are based on purity and critical of ethnic chauvinism. Whereas multiculturalism involves policies to preserve "traditional" cultures, interculturalist policies celebrate hybridity as a generator of culture. Appreciation of authenticity and merit need not be based on purity claims; for example, syncretic religions are celebrated for their historical uniqueness (e.g., the elasticity of Sri Lankan Buddhism; Spencer et al. 1990) or the ways that they connect traditions (ancient Greek pagan rites in Greek Orthodox rituals confer prestige through their connection to antiquity; Stewart 1994).

The Intercultural Cities program sponsored by the European Commission is a project in which 29 cities committed to intercultural policies share best practices and benchmark progress against each other. These cities have developed plans to promote intercultural dialogue through positive interaction of different cultural groups in the public spaces, welcoming programs for immigrants, culture-based recruitment into civil services, educational programs focusing on immigrant cultures, public arts events that integrate strands from different traditions, and so forth.[12] A theme in these programs is that more interaction between cultures is needed to preserve a city's identity, even if it carries risks of occasional misunderstandings and conflicts.

An organization that has reassessed its mission through the intercultural lens is UNESCO (the United Nations Educational, Scientific and Cultural Organization). Decreeing world heritage sites is not the only way to support cultures; at worst, it can amount to sanctifying reconstructions of history that legitimize current regimes. State-sponsored sites of "cultural preservation" often reduce the complexity of the past to exaggerate its continuity with the present, legitimizing current regimes and practices. UNESCO has recently developed exhibitions about historical interactions among peoples, such as focusing on routes of the slave trade, events that shaped today's cultures on several continents. It sees its mission as supporting intercultural dialogue and competences.[13]

Different research programs have revealed consequences of the two key assumptions of polyculturalism. First, a program of research has contrasted multiculturalist beliefs and the polyculturalist belief that cultures interact. Though this polyculturalist belief is positively correlated with multiculturalist belief, the polyculturalist belief is more associated with willingness to criticize one's own cultural tradition (Rosenthal et al. 2012), eagerness for intergroup contact (Rosenthal & Levy 2012), and positive attitudes toward people from different cultures (Bernardo et al. 2013). Cho et al. (2014) found that Americans primed with this polyculturalist belief positively evaluate a Chinese visitor who adapts to American customs, and these evaluations are mediated by positive judgments of the visitor's ability.

Second, evidence about the polyculturalist belief in categorical versus plural influences comes from research on beliefs in ethnoracial essentialism—that ethnicity/race is innate and highly determinative. Hong and colleagues found that Asian Americans who believe in essentialism are less identified with the United States, perceive more differences between the typical Asian American and white American, and respond to primes of American culture in a more contrastive manner (No et al. 2008). They are less able to switch rapidly between American and Chinese modes of processing and show more skin conductance (indicating emotional reactivity) when discussing Chinese and American cultural experiences (Chao et al. 2007). Chao et al. (2013) discovered that Asian essentialism increases race-based categorization and sensitivity in discerning racial group membership. Tadmor et al. (2013) found that priming ethnic essentialism reduces creativity, with the relationship mediated by closed-mindedness, a subscale of NFCC. Lowered creativity among believers in essentialism/singularity is consistent with Appiah's (2006) arguments that multiculturalist injunctions to act ethnically authentic can limit people from more creative cosmopolitan lifestyles. However, a difference from interculturalists is that cosmopolitans crave "authentic experiences" of foreign cultures (Woodward et al. 2008).

Although interculturalism promotes many desirable policies and personal behaviors, we cannot advocate that this ideology entirely supplant multiculturalism and colorblindness. Colorblind ideology is a necessary tool for dismantling discrimination in law or policies. Multiculturalism is a useful framework for fostering solidarity and collective action. Verkuyten & Brug (2004) have

[12] See, for example, Barcelona's plan: **http://www.bcn.cat/novaciutadania/pdf/en/PlaBCNInterculturalitatAng170510_en.pdf**.

[13] See **http://unesdoc.unesco.org/images/0021/002197/219768e.pdf**.

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extensively studied the correlates and consequences of essentialist beliefs in Holland and found that essentialist beliefs about minorities are endorsed most by minorities and are used effectively in political discourse to garner resources, a case of "strategic essentialism." It is not clear that interculturalism can replace the political functions served by multiculturalism in mobilizing collective action and garnering resources for cultural communities (Meer & Modood 2012). So just as the three scientific paradigms have guided valuable research programs, all three ideologies—colorblindness, multiculturalism, and interculturalism—are valuable political frameworks that advance valuable ends. Culturally diverse liberal societies need all three.

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LITERATURE CITED

Abu-Lughod L. 1991. Writing against culture. In *Recapturing Anthropology*, ed. RG Fox, pp. 137–62. Santa Fe, NM: Sch. Am. Res. Press

Allport GW. 1961. *Pattern and Growth in Personality*. New York: Holt

Alter AL, Kwan VSY. 2009. Cultural sharing in a global village: evidence for extracultural cognition in European Americans. *J. Personal. Soc. Psychol.* 96:742–60

Ambrose SH. 2010. Coevolution of composite-tool technology, constructive memory, and language: implications for the evolution of modern human behavior. *Curr. Anthropol.* 51:S135–47

Anderson B. 2006. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso

Appiah A. 2006. *Cosmopolitanism: Ethics in a World of Strangers*. New York: Norton. 1st ed.

Arends-Tóth J, van de Vijver FJR. 2004. Domains and dimensions in acculturation: implicit theories of Turkish-Dutch. *Int. J. Intercult. Relat.* 28:19–35

Atran S, Ginges J. 2012. Religious and sacred imperatives in human conflict. *Science* 336:855–57

Bailey B. 2000. Language and negotiation of ethnic/racial identity among Dominican Americans. *Lang. Soc.* 29:555–82

Bandura A. 1977. Self-efficacy: toward a unifying theory of behavioral change. *Psychol. Rev.* 84:191–215

Barber BR. 1995. *Jihad vs. McWorld: How Globalism and Tribalism Are Reshaping the World*. New York: Crown

Benet-Martínez 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

Benjamin DJ, Choi JJ, Strickland AJ. 2010. Social identity and preferences. *Am. Econ. Rev.* 100:1913–28

Bernardo AB, Rosenthal L, Levy SR. 2013. Polyculturalism and attitudes towards people from other countries. *Int. J. Intercult. Relat.* 37:335–44

Berry JW. 1974. Psychological aspects of cultural pluralism: unity and identity reconsidered. *Top. Cult. Learn.* 2:17–22

Berry JW. 1990. Psychology of acculturation. In *Nebraska Symposium on Motivation, 1989: Cross-Cultural Perspectives*, ed. J Berman, pp. 201–34. Lincoln: Univ. Neb. Press

Berry JW, Phinney JS, Sam DL, Vedder P. 2006. Immigrant youth: acculturation, identity, and adaptation. *Appl. Psychol.* 55:303–32

Bhawuk D, Brislin R. 2000. Cross-cultural training: a review. *Appl. Psychol.* 49:162–91

Birman D, Trickett E, Buchanan RM. 2005. A tale of two cities: replication of a study on the acculturation and adaptation of immigrant adolescents from the former Soviet Union in a different community context. *Am. J. Community Psychol.* 35:83–101

Bougie E, Bourhis R. 1996. *Vers la construction d'une échelle d'acculturation des communautés d'accueils.* Affiche présentée au XIX e congrès annuel de la Société Québécoise pour la Recherche en Psychologie (SQRP), Trois-Rivieres, Quebec

Boyd R, Richerson PJ. 2004. Culture, adaptation, and innateness. In *The Innate Mind: Culture and Cognition*, ed. P Carruthers, S Laurence, S Stich, pp. 23–38. New York: Oxford Univ. Press

Briley DA, Morris MW, Simonson I. 2005. Cultural chameleons: biculturals, conformity motives, and decision making. *J. Consum. Psychol.* 15:351–63

Brubaker R. 2001. The return of assimilation? Changing perspectives on immigration and its sequels in France, Germany, and the United States. *Ethn. Racial Stud.* 24:531–48

Buchtel EE. 2014. Cultural sensitivity or cultural stereotyping? Positive and negative effects of a cultural psychology class. *Int. J. Intercult. Relat.* 39:40–52

Caporael LR. 2007. Evolutionary theory for social and cultural psychology. In *Social Psychology: Handbook of Basic Principles*, ed. AW Kruglanski, ET Higgins, pp. 3–18. New York: Guilford. 2nd ed.

Cederman L-E, Wimmer A, Min B. 2010. Why do ethnic groups rebel? New data and analysis. *World Polit.* 62:87–119

Chao MM, Chen J, Roisman G, Hong Y. 2007. Essentializing race: implications for bicultural individuals' cognition and physiological reactivity. *Psychol. Sci.* 18:341–48

Chao MM, Hong Y, Chiu C. 2013. Essentializing race: its implications on racial categorization. *J. Personal. Soc. Psychol.* 104:619–34

Chao MM, Zhang ZX, Chiu C. 2010. Adherence to perceived norms across cultural boundaries: the role of need for cognitive closure and ingroup identification. *Group Process. Intergroup Relat.* 13:69–89

Chen H, Ng S, Rao AR. 2005. Cultural differences in consumer impatience. *J. Mark. Res.* 42:291–301

Cheng CY, Leung AK. 2013. Revisiting the multicultural experience-creativity link: the effects of perceived cultural distance and comparison mindset. *Soc. Psychol. Personal. Sci.* 4:475–82

Chiu C, Cheng SYY. 2007. Toward a social psychology of culture and globalization: some social cognitive consequences of activating two cultures simultaneously. *Soc. Personal. Psychol. Compass.* 1:84–100

Chiu C, Gries P, Torelli CJ, Cheng SYY. 2011. Toward a social psychology of globalization. *J. Soc. Issues* 67:663–76

Chiu C, Mallorie L, Keh HT, Law W. 2009. Perceptions of culture in multicultural space: joint presentation of images from two cultures increases ingroup attribution of culture-typical characteristics. *J. Cross-Cult. Psychol.* 40:282–300

Chiu C, Morris MW, Hong 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

Cho J, Morris MW, Dow B. 2014. When in Rome, what do Romans think about newcomers? Locals perceptions of a newcomer's cultural adaptation. In *Trans-Atlantic Dr. Consort.* London: London Bus. Sch.

Chua RY, Morris MW, Mor S. 2012. Collaborating across cultures: cultural metacognition and affect-based trust in creative collaboration. *Organ. Behav. Hum. Decis. Process.* 118:116–31

Cohn D. 2014. Millions of Americans changed their racial or ethnic identity from one census to the next. *Pew Res. Cent.*, May 5. **http://www.pewrsr.ch/1g2TU7W**

Correll J, Park B, Smith JA. 2008. Colorblind and multicultural prejudice reduction strategies in high-conflict situations. *Group Process. Intergroup Relat.* 11:471–91

Crisp RJ, Meleady R. 2012. Adapting to a multicultural future. *Science* 336:853–55

Deaux K. 2006. *To Be an Immigrant.* New York: Russell Sage Found.

DiMaggio P, Mohr J. 1985. Cultural capital, educational attainment, and marital selection. *Am. J. Soc.* 90:1231–61

Doninger W. 2013. *On Hinduism*. New York: Oxford Univ. Press

DuBois WEB. 1989/1903. *The Souls of Black Folk*. New York: Penguin

Eid M, Diener E. 2001. Norms for experiencing emotions in different cultures: inter- and intranational differences. *J. Personal. Soc. Psychol.* 81:869–85

Annu. Rev. Psychol. 2015.66:631-659. Downloaded from www.annualreviews.org
Access provided by Columbia University on 05/08/15. For personal use only.

Erard M. 2012. Are we really monolingual? *New York Times*, Jan. 14, p. SR12
Ethier KA, Deaux K. 1994. Negotiating social identity when contexts change: maintaining identification and responding to threat. *J. Personal. Soc. Psychol.* 67:243–51
Faulkner J, Schaller M, Park JH, Duncan LA. 2004. Evolved disease-avoidance mechanisms and contemporary xenophobic attitudes. *Group Process. Intergroup Relat.* 7:333–53
Fiske ST, Cuddy AJC, Glick P, Xu J. 2002. A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *J. Personal. Soc. Psychol.* 82:878–902
Flint K. 2006. Indian–African encounters: polyculturalism and African therapeutics in Natal, South Africa, 1886–1950s. *J. South. Afr. Stud.* 32:367–85
Foner N. 1998. Towards a comparative perspective on Caribbean migration. In *Caribbean Migration: Globalized Identities*, ed. M Chamberlain, 3:46–59. London: Routledge
Fu JHY, Chiu C. 2007. Local culture's responses to globalization: exemplary persons and their attendant values. *J. Cross-Cult. Psychol.* 38:636–53
Fu JHY, Chiu C, Morris MW, Young MJ. 2007. Spontaneous inferences from cultural cues: varying responses of cultural insiders and outsiders. *J. Cross-Cult. Psychol.* 38:58–75
Galinsky AD, Wang CS, Whitson JA, Anicich EM, Hugenberg K, Bodenhausen GV. 2013. The reappropriation of stigmatizing labels: the reciprocal relationship between power and self-labeling. *Psychol. Sci.* 24:2020–29
Gans HJ. 1973. Introduction. In *Ethnic Identity and Assimilation: The Polish Community*, ed. NC Sandberg. New York: Praeger
Garvey M. 1938. Editorial. *Black Man* 3:10
Gillespie K, McBride JB, Riddle L. 2010. Globalization, biculturalism and cosmopolitanism: the acculturation status of Mexicans in upper management. *Int. J. Cross-Cult. Manag.* 10:37–53
Greenberg J, Porteus J, Simon L, Pyszczynski T. 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.* 21:1221–28
Greenfield P. 2013. The changing psychology of culture from 1800 through 2000. *Psychol. Sci.* 24:1722–31
Gudykunst WB, Kim YY. 2003. *Communicating with Strangers: An Approach to Intercultural Communication*. Boston: McGraw-Hill. 4th ed.
Gutiérrez AS, Unzueta MM. 2010. The effect of interethnic ideologies on the likability of stereotypes vs. counterstereotypic minority targets. *J. Exp. Soc. Psychol.* 46:775–84
Haidt J. 2001. The emotional dog and its rational tail: a social intuitionist approach to moral judgment. *Psychol. Rev.* 108:814–34
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
Herskovits MJ. 1938. *Acculturation: The Study of Culture Contact*. New York: Augustin
Hobsbawm E, Ranger T. 1983. *The Invention of Tradition*. New York: Cambridge Univ. Press
Hofstede G. 1984. *Culture's Consequences*. Newbury Park, CA: Sage
Hogg MA. 2001. A social identity theory of leadership. *Personal. Soc. Psychol. Rev.* 5:184–200
Hong Y, Fang Y, Yang Y, Phua DY. 2013. Cultural attachment: a new theory and method to understand cross-cultural competence. *J. Cross-Cult. Psychol.* 44:1024–44
Hong Y, Morris MW, Chiu C, Benet-Martínez V. 2000. Multicultural minds: a dynamic constructivist approach to culture and cognition. *Am. Psychol.* 55:709–20
Hřebíčková M, Graf S. 2013. Accuracy of national stereotypes in central Europe: Outgroups are not better than ingroup in considering personality traits of real people. *Eur. J. Personal.* 28:60–72
Hsee CK, Loewenstein GF, Blount S, Bazerman MH. 1999. Preference reversals between joint and separate evaluations of options: a review and theoretical analysis. *Psychol. Bull.* 125:576–90
Hume D. 1894/1784. *Essays, Moral, Political and Literary*. London: Routledge
Huntington SP. 1996. *The Clash of Civilizations and the Remaking of World Order*. New York: Simon & Schuster
Huntington SP. 2004. The Hispanic challenge. *Foreign Policy* 141:30–46
Inglehart R, Baker WD. 2000. Modernization, cultural change, and the persistence of traditional values. *Am. Soc. Rev.* 65:19–50

Annu. Rev. Psychol. 2015.66:631-659. Downloaded from www.annualreviews.org
Access provided by Columbia University on 05/08/15. For personal use only.

Jacoby LL, Kelley CM. 1987. Unconscious influences of memory for a prior event. *Personal. Soc. Psychol. Bull.* 13:314–36
Jia L, Karpen SC, Hirt ER. 2011. Beyond anti-Muslim sentiment: opposing Ground Zero mosque as a means to pursuing a stronger America. *Psychol. Sci.* 22:1327–35
Kang SK, Bodenhausen GV. 2015. Multiple identities in social perception and interaction: challenges and opportunities. *Annu. Rev. Psychol.* 66:In press
Kashima Y, Shi J, Tsuchiya K, Kashima ES, Cheng SYY, et al. 2011. Globalization and folk theory of social change: how globalization relates to social perceptions about the past and future. *J. Soc. Issues* 67:696–715
Kelley RDG. 1999. The people in me. *Utne Read.* 95:79–81
Kitayama S, Duffy S, Kawamura T, Larsen JT. 2003. Perceiving an object and its context in different cultures: a cultural look at new look. *Psychol. Sci.* 14:201–6
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
Kitayama S, Park H, Sevincer AT, Karasawa M, Uskul AK. 2009. A cultural task analysis of implicit independence: comparing North America, Western Europe, and East Asia. *J. Personal. Soc. Psychol.* 97:236–55
Kosic A, Kruglanski AW, Pierro A, Mannetti L. 2004. The social cognition of immigrants' acculturation: effects of the need for closure and the reference group at entry. *J. Personal. Soc. Psychol.* 86:796–813
Kwan LYY, Yap S, Chiu C. 2014. Mere exposure affects perceived descriptive norms: implications for personal preferences and trust. *Organ. Behav. Hum. Decis. Process*. In press
Lal D. 2000. Does modernization require Westernization? *Independ. Rev.* 5:5–24
Lam S, Lau I, Chiu C, Hong Y, Peng S. 1999. Differential emphases on modernity and traditional values in social categorization. *Int. J. Intercult. Relat.* 23:237–56
Lareau A, Calarco JM. 2012. Class, cultural capital, and institutions: the case of families and schools. In *Facing Social Class: How Societal Rank Influences Interactions*, ed. ST Fiske, HR Markus, pp. 61–86. New York: Russell Sage Found. Press
Latrofa M, Vaes J, Pastore M, Cadinu M. 2009. "United we stand, divided we fall"! The protective function of self-stereotyping for stigmatised members' psychological well-being. *Appl. Psychol.* 58:84–104
Lau-Gesk LG. 2003. Activating culture through persuasion appeals: an examination of the bicultural consumer. *J. Consum. Psychol.* 13:301–15
Lee TL, Fiske ST. 2006. Not an outgroup, not yet an ingroup: immigrants in the stereotype content model. *Int. J. Intercult. Relat.* 30:751–68
Lehman D, Chiu C, Schaller M. 2004. Culture and psychology. *Annu. Rev. Psychol.* 55:689–714
Leung AKY, Chiu C. 2010. Multicultural experience, idea receptiveness, and creativity. *J. Cross-Cult. Psychol.* 41:723–41
Leung AKY, Kim YH, Zhang ZX, Tam KP, Chiu C. 2012. Cultural construction of success and epistemic motives moderate American-Chinese differences in reward allocation biases. *J. Cross-Cult. Psychol.* 43:46–52
Leung AKY, Lee S, Chiu C. 2013. Meta-knowledge of culture promotes cultural competence. *J. Cross-Cult. Psychol.* 44:992–1006
Leung AKY, Maddux WW, Galinsky AD, Chiu C. 2008. Multicultural experience enhances creativity: the when and how. *Am. Psychol.* 63:169–81
Li Q, Hong Y. 2001. Intergroup perceptual accuracy predicts real-life intergroup interactions. *Group Process. Intergroup Relat.* 4: 341–54
Licata L. 2012. Colonialism and postcolonialism: psychological dimensions. In *The Encyclopedia of Peace Psychology*, ed. DJ Christie. London: Wiley-Blackwell
Maass A, Karasawa M, Politi F, Suga S. 2006. Do verbs and adjectives play different roles in different cultures? A cross-linguistic analysis of person representation. *J. Personal. Soc. Psychol.* 90:734–50
Maddux WW, Adam H, Galinsky AD. 2010. When in Rome... learn why the Romans do what they do: how multicultural learning experiences facilitate creativity. *Personal. Soc. Psychol. Bull.* 36:731–41
McCrae RR, Yik MSM, Trapnell PD, Bond MH, Paulhus DL. 1998. Interpreting personality profiles across cultures: bilingual, acculturation, and peer rating studies of Chinese undergraduates. *J. Personal. Soc. Psychol.* 74:1041–55

Annu. Rev. Psychol. 2015.66:631-659. Downloaded from www.annualreviews.org
Access provided by Columbia University on 05/08/15. For personal use only.

Meer N, Modood T. 2012. How does interculturalism contrast with multiculturalism? *J. Int. Stud.* 33:175–96
Mok A, Morris MW. 2009. Cultural chameleons and iconoclasts: assimilation and reactance to cultural cues in biculturals' expressed personalities as a function of identity conflict. *J. Exp. Soc. Psychol.* 45:884–89
Mok A, Morris MW. 2010. An upside to bicultural identity conflict: resisting groupthink in cultural ingroups. *J. Exp. Soc. Psychol.* 46:1114–17
Mok A, Morris MW. 2012a. Attentional focus and the dynamics of dual identity integration evidence from Asian Americans and female lawyers. *Soc. Psychol. Personal. Sci.* 3:597–604
Mok A, Morris MW. 2012b. Managing two cultural identities: the malleability of bicultural identity integration as a function of induced global or local processing. *Personal. Soc. Psychol. Bull.* 38:233–46
Mok A, Morris MW. 2013. Bicultural self-defense in consumer contexts: Self-protection motives are the basis for contrast versus assimilation to cultural cues. *J. Consum. Psychol.* 23:175–88
Molinsky A. 2007. Cross-cultural code-switching: the psychological challenges of adapting behavior in foreign cultural interactions. *Acad. Manag. Rev.* 32:622–40
Mor S, Morris MW. 2013. *The role of cultural metacognition in applying and updating cultural stereotypes in intercultural interaction. Presented at Acad. Manag. Annu.* Conf., Orlando, Fla.
Mor S, Morris MW, Cho J. 2012. Sense of control in multicultural environments promotes receptiveness and utilization of foreign cultural knowledge. In *NYU/Columbia Dr. Conf.*, New York, NY
Mor S, Morris MW, Joh J. 2013. Identifying and training adaptive cross-cultural management skills: the crucial role of cultural metacognition. *Acad. Manag. Learn. Educ.* 12:453–75
Morris MW. 2014. Values as the essence of culture: foundation or fallacy? *J. Cross-Cult. Psychol.* 45:14–24
Morris MW, Leung K. 2010. Creativity east and west: perspectives and parallels. *Manag. Organ. Rev.* 6:313–27
Morris MW, Mok A. 2011. Isolating effects of cultural schemas: Cultural priming shifts Asian-Americans' biases in social description and memory. *J. Exp. Soc. Psychol.* 47:117–26
Na J, Grossmann I, Varnum ME, Kitayama S, Gonzalez R, Nisbett RE. 2010. Cultural differences are not always reducible to individual differences. *Proc. Natl. Acad. Sci. USA* 107:6192–97
Navarrete CD, Fessler DM. 2006. Disease avoidance and ethnocentrism: the effects of disease vulnerability and disgust sensitivity on intergroup attitudes. *Evol. Hum. Behav.* 27:270–82
Navarrete CD, Fessler DM, Eng SJ. 2007. Elevated ethnocentrism in the first trimester of pregnancy. *Evol. Hum. Behav.* 28:60–65
Nguyen A-MD, Benet-Martínez V. 2013. Biculturalism and adjustment: a meta-analysis. *J. Cross-Cult. Psychol.* 44:122–59
Nguyen HH. 2006. Acculturation in the United Sates. In *Cambridge Handbook of Acculturation Psychology*, ed. DL Sam, JW Berry, pp. 311–30. Cambridge, UK: Cambridge Univ. Press
Nisbett RE. 2003. *The Geography of Thought: How Asians and Westerners Think Differently... and Why*. New York: Free Press
No S, Hong Y, Liao H, Lee K, Wood D, Chao MM. 2008. Lay theory of race affects and moderates Asian Americans' responses toward American culture. *J. Personal. Soc. Psychol.* 95:991–1004
Osland JS, Bird A. 2000. Beyond sophisticated stereotyping: cultural sensemaking in context. *Acad. Manag. Exec.* 14:65–77
Oyserman D, Lee SWS. 2008. Does culture influence what and how we think? Effects of priming individualism and collectivism. *Psychol. Bull.* 134:311–42
Oyserman D, Sorensen N, Reber R, Chen SX. 2009. Connecting and separating mind-sets: culture as situated cognition. *J. Personal. Soc. Psychol.* 97:217–35
Padilla AM. 2006. Bicultural social development. *Hisp. J. Behav. Sci.* 28:467–97
Pittinsky TL, Rosenthal SA, Montoya RM. 2011. Measuring positive attitudes toward outgroups: development and validation of the Allophilia Scale. In *Moving Beyond Prejudice Reduction: Pathways to Positive Intergroup Relations*, ed. L Mallett, pp. 41–60. Washington, DC: Am. Psychol. Assoc.
Portes A, Rumbaut RG. 2001. *Legacies: The Story of the Immigrant Second Generation*. Berkeley: Univ. Calif. Press
Portes A, Sensenbrenner J. 1993. Embeddedness and immigration: notes on the social determinants of economic action. *Am. J. Soc.* 98:1320–50
Portes A, Zhou M. 1993. The new second generation: segmented assimilation and its variants. *Ann. Am. Acad. Polit. Soc. Sci.* 530:74–96

Annu. Rev. Psychol. 2015.66:631-659. Downloaded from www.annualreviews.org
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Prashad V. 2001. *Everybody Was Kung Fu Fighting: Afro-Asian Connections and the Myth of Cultural Purity*. Boston: Beacon

Prashad V. 2003. Bruce Lee and the anti-imperialism of Kung Fu: a polycultural adventure. *Positions* 11:51–89

Ratiu I. 1983. Thinking internationally: a comparison of how international executives learn. *Int. Stud. Manag. Organ.* 13:139–50

Realo A, Allik J, Lonnqvist JE, Verkasalo M, Kwiatkowska A, et al. 2009. Mechanisms of the national character stereotype: how people in six neighboring countries of Russia describe themselves and the typical Russian. *Eur. J. Personal.* 23:229–49

Richerson PJ, Boyd R. 2005. *Not By Genes Alone: How Culture Transformed Human Evolution*. Chicago: Univ. Chicago Press

Rosenthal L, Levy SR. 2010. The colorblind, multicultural, and polycultural ideological approaches to improving intergroup attitudes and relations. *Soc. Issues Policy Rev.* 4:215–46

Rosenthal L, Levy SR. 2012. The relation between polyculturalism and intergroup attitudes among racially and ethnically diverse adults. *Cult. Divers. Ethn. Minor. Psychol.* 18:1–16

Rosenthal L, Levy SR, Moss I. 2012. Polyculturalism and openness about criticizing one's culture: implications for sexual prejudice. *Group Process. Intergroup Relat.* 15:149–65

Rui C. 2007. *Why Starbucks Needs to Get Out of The Forbidden City*. April 11. **http://sina.com.cn/u/4adabe27010008yg**

Saad CS, Damian RI, Benet-Martínez V, Moons WG, Robins RW. 2013. Multiculturalism and creativity: effects of cultural context, bicultural identity, and ideational fluency. *Soc. Psychol. Personal. Sci.* 4:369–75

Savani K, Morris MW, Naidu NVR, Kumar S, Berlia NV. 2011. Cultural conditioning: understanding interpersonal accommodation in India and the United States in terms of the modal characteristics of interpersonal influence situations. *J. Personal. Soc. Psychol.* 100:84–102

Schacter DL, Gilbert DT, Wegner DM. 2010. *Psychology*. New York: Worth. 2nd ed.

Schwartz SH. 2014. Rethinking the concept and measurement of societal culture in light of empirical findings. *J. Cross-Cult. Psychol.* 45:5–13

Shih M, Ambady N, Richeson JA, Fujita K, Gray HM. 2002. Stereotype performance boosts: the impact of self-relevance and the manner of stereotype activation. *J. Personal. Soc. Psychol.* 83(3):638–47

Siskind J. 1992. The invention of Thanksgiving: a ritual of American nationality. *Crit. Anthropol.* 12:167–91

Spencer J, Handler R, Kapferer B, Khare RS, McGilvray DB, et al. 1990. Writing within: anthropology, nationalism, and culture in Sri Lanka [and comments and reply]. *Curr. Anthropol.* 31:283–300

Stewart C. 1994. Syncretism as a dimension of nationalist discourse in modern Greece. In *Syncretism/Anti-Syncretism: The Politics of Religious Synthesis*, ed. C Stewart, R Shaw, 6:127–44. London: Routledge

Stoler AL. 1989. Rethinking colonial categories: European communities and the boundaries of rule. *Comp. Stud. Soc. Hist.* 31:134–61

Stoler AL. 2010. *Along the Archival Grain: Epistemic Anxieties and Colonial Common Sense*. Princeton, NJ: Princeton Univ. Press

Stürmer S, Benbow AEF, Siem B, Barth M, Bodansky AN, Lotz-Schmitt K. 2013. Psychological foundations of xenophilia: the role of major personality traits in predicting favorable attitudes toward cross-cultural contact and exploration. *J. Personal. Soc. Psychol.* 105:832–51

Stürmer S, Snyder M, Kropp A, Siem B. 2006. Empathy-motivated helping: the moderating role of group membership. *Personal. Soc. Psychol. Bull.* 32:943–56

Sui J, Zhu Y, Chiu C. 2007. Bicultural mind, self-construal, and recognition memory: cultural priming effects on self- and mother-reference effect. *J. Exp. Soc. Psychol.* 43:818–24

Sussman NM. 2000. The dynamic nature of cultural identity throughout the cultural transitions: why home is not so sweet. *Personal. Soc. Psychol. Rev.* 4:355–73

Tadmor CT, Chao MM, Hong Y, Polzer JT. 2013. Not just for stereotyping anymore: Racial essentialism reduces domain-general creativity. *Psychol. Sci.* 24:99–105

Tadmor CT, Tetlock PE, Peng K. 2009. Acculturation strategies and integrative complexity: the cognitive implications of biculturalism. *J. Cross-Cult. Psychol.* 40:105–39

Tam KP, Lee SL, Kim YH, Li Y, Chao MM. 2012. Intersubjective model of value transmission: parents using perceived norms as reference when socializing children. *Personal. Soc. Psychol. Bull.* 38:1041–52

Annu. Rev. Psychol. 2015.66:631-659. Downloaded from www.annualreviews.org
Access provided by Columbia University on 05/08/15. For personal use only.

Terracciano A, McCrae RR. 2007. Perceptions of Americans and the Iraq invasion: implications for understanding national character stereotypes. *J. Cross-Cult. Psychol.* 38:695–710

Thomas DC, Ravlin EC. 1995. Responses of employees to cultural adaptation by a foreign manager. *J. Appl. Psychol.* 80:133–46

Tong Y, Hong Y, Lee S, Chiu C. 1999. Language as a carrier of social identity. *Int. J. Intercult. Relat.* 23:281–96

Torelli CJ, Chiu C, Tam KP, Au AKC, Keh HT. 2011. Exclusionary reactions to foreign cultures: effects of simultaneous exposure to cultures in globalized space. *J. Soc. Issues* 67:716–42

Toribio AJ. 2004. *Linguistic Displays of Identity Among Dominicans in National and Diasporic Settings. English and Ethnicity*. New York: Palgrave

Triandis HC. 1994. *Culture and Social Behavior*. New York: McGraw-Hill

Turner JC. 1987. *Rediscovering the Social Group: A Self-Categorization Theory*. Oxford, UK: Blackwell

US Census Bureau. 2009. *United States Population Projections: 2000 to 2050.* **https://www.census.gov/population/projections/files/analytical-document09.pdf**

Van Dyne L, Ang S, Ng KY, Rockstuhl T, Tan ML, Koh C. 2012. Sub dimensions of the four factor model of cultural intelligence: expanding the conceptualization and measurement of cultural intelligence. *Soc. Personal. Psychol. Compass.* 6:295–313

Van Zomeren M, Iyer A. 2009. Toward an integrative understanding of the social and psychological dynamics of collective action. *J. Soc. Issues* 65:645–60

Veciana-Suarez A. 1983. Nicaraguan exiles begin to climb the ladder. *Miami Herald*, March 28, Bus. Sect.

Verkuyten M. 2009. Self-esteem and multiculturalism: an examination among ethnic minority and majority groups in the Netherlands. *J. Res. Personal.* 43:419–27

Verkuyten M, Brug P. 2004. Multiculturalism and group status: the role of ethnic identification, group essentialism and Protestant ethic. *Eur. J. Soc. Psychol.* 34:647–61

Verkuyten M, Pouliasi K. 2002. Biculturalism among older children: cultural frame switching, attributions, self-identification, and attitudes. *J. Cross-Cult. Psychol.* 33:596–609

Wan C, Chiu C, Tam KP, Lee S, Lau IY, Peng S. 2007. Perceived cultural importance and actual self-importance of values in cultural identification. *J. Personal. Soc. Psychol.* 92:337–54

Wang Q, Leichtman MD, White SH. 1998. Childhood memory and self-description in young Chinese adults: the impact of growing up an only child. *Cognition* 69:73–103

Weber EU, Morris MW. 2010. Culture and judgment and decision making. *Perspect. Psychol. Sci.* 5:410–19

Weiten W. 2012. *Psychology: Themes and Variations*. Belmont, CA: Wadsworth. 9th ed.

Wilson KL, Martin WA. 1982. Ethnic enclaves: a comparison of Cuban and black economies in Miami. *Am. J. Sociol.* 88:135–60

Wolsko C, Park B, Judd CM, Wittenbrink B. 2000. Framing interethnic ideology: effects of multicultural and color-blind perspectives on judgments of groups and individuals. *J. Personal. Soc. Psychol.* 78:635–54

Wong RY, Hong Y. 2005. Dynamic influences of culture on cooperation in the Prisoner's Dilemma. *Psychol. Sci.* 16:429–34

Woodward I, Skrbis Z, Bean C. 2008. Attitudes towards globalization and cosmopolitanism: cultural diversity, personal consumption and the national economy. *Br. J. Sociol.* 59:207–26

Wu Y, Yang Y, Chiu C. 2014. Responses to religious norm defection: the case of Hui Chinese Muslims not following the halal diet. *Int. J. Intercult. Relat.* 39:1–8

Yamazaki Y, Kayes DC. 2004. An experiential approach to cross-cultural learning: a review and integration of competencies for successful expatriate adaptation. *Acad. Manag. Learn. Educ.* 3:362–79

Yang DY, Chiu C, Chen X, Cheng SYY, Kwan LYY, et al. 2011. Lay psychology of globalization and its social impact. *J. Soc. Issues* 67:677–95

Zhang S, Morris MW, Cheng CY, Yap AJ. 2013. Heritage-culture images disrupt immigrants' second-language processing through triggering first-language interference. *Proc. Natl. Acad. Sci. USA* 110:11272–77

Zou X, Morris MW, Benet-Martínez V. 2008. Identity motives and cultural priming: cultural (dis)identification in assimilative and contrastive responses. *J. Exp. Soc. Psychol.* 44:1151–59

Zou X, Tam KP, Morris MW, Lee S, Lau IY, Chiu C. 2009. Culture as common sense: perceived consensus versus personal beliefs as mechanisms of cultural influence. *J. Personal. Soc. Psychol.* 97:579–97

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