Exclusionary Reactions to Foreign Cultures: Effects of Simultaneous Exposure to Cultures in Globalized Space

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In globalized economies, people often encounter symbols of dissimilar cultures simultaneously. Research on the psychological effects of simultaneous exposure to dissimilar cultures is therefore strategically located at the intersection of globalization, culture, and psychology. In seven experiments, we showed that exposure to a commercial product that embodies symbols of two dissimilar cultures can enhance perceptibility of cultural differences (Experiments 2, 5, and 6) and perceptions of cultural incompatibility (Experiment 1). Furthermore, following simultaneous exposure to two dissimilar cultures, individuals may display defensive responses to “cultural contamination” of an iconic cultural brand when mortality concerns are salient (Experiments 3, 4, and 7). Finally, although we obtained a robust

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bicultural exposure effect across experiments, thoughtful elaboration about cultural complexities can attenuate this effect and its attendant defensive responses to “cultural contamination” (Experiments 5–7).

Globalization has resulted in experiential compression of time and space (Giddens, 1985). In globalized societies, symbols of different cultural traditions are often found in the same location or product (Starbucks in Beijing’s Forbidden City; Batman toys with a “Made in China” label). Increased cultural contacts attending globalization has also increased the tension between accepting foreign cultural influence and preserving the heritage culture (Fu & Chiu, 2007). Such tension is evident in the marketplace, where contrastive cultural meanings and messages of global and local brands interact to jointly influence consumer perceptions (Robertson, 1995).

Recent research (Chiu, Mallorie, Keh, & Law, 2009) has shown that simultaneous exposure to two cultures in globalized space draws the perceivers’ attention to the stereotypic qualities of the respective cultures, and hence enhances the perceived distance between the two cultures and the permanence of their boundaries. These perceptual phenomena are referred to as the bicultural exposure effect. The objectives of this research are three-fold. First, we seek to replicate and further clarify the nature of the bicultural exposure effect. Second, we examine the implications of this effect on exclusionary reactions to foreign culture, defined as emotional, reflexive responses evoked by perceived threats to the integrity and vitality of one’s heritage culture (Chiu, Gries, Torelli, & Cheng, 2011). Finally, we attempt to identify the boundary of the bicultural exposure effect.

As an overview, we propose that simultaneous exposure to two dissimilar cultures or their symbols (hereafter referred to as bicultural exposure) will draw the perceivers’ attention to the defining characteristics of the two cultures. In turn, this will enhance the perceived incompatibility of the two cultures. This perception, when coupled with a situation-induced cultural defense mindset (as when the individual is under the influence of mortality salience), can lead to defensive resistance of ideas from foreign cultures. Finally, the effect of bicultural exposure, despite its robustness, will be attenuated when the perceiver is motivated to engage in thoughtful elaboration about cultural complexities (either situation-induced or driven by chronic tendencies). In this article, we report evidence from seven experiments for this proposal.

Bicultural Exposure Effect

According to the dynamic constructivist theory of culture (Hong, Morris, Chiu, & Benet-Martinez, 2000), people with some direct or indirect experiences with a certain culture will develop a cognitive representation of the culture. Upon
seeing an iconic symbol of the culture, people automatically retrieve from memory their cognitive representation of the culture.

When symbols of two cultures are present in the environment, which is often the case in globalized space, the cognitive representations of both cultures will be activated (Chiu et al., 2009). For example, Americans may experience bicultural activation when they see Mattell toys (e.g., Batman action figures) with a made-in-China label. When two cultural representations are activated simultaneously, the perceiver will attend to the defining characteristics that distinguish the two cultures, which in turn enlarges the perceived differences and incompatibility of the two cultures. These processes are less likely to occur when only one cultural representation is activated, even when that representation is one of a foreign culture.

Results from two experiments (Chiu et al., 2009) supported the hypothesized perceptual effects of bicultural exposure. For example, in one experiment (Chiu et al., 2009, Experiment 1), Beijing Chinese undergraduates were asked to evaluate a McDonald’s hamburger advertisement that was placed either next to another McDonald’s hamburger advertisement (i.e., single culture exposure condition) or next to a Chinese moon cake (a traditional Chinese confection) advertisement (i.e., bicultural exposure condition). Following the manipulation, the participants were presented with two commercial messages for Timex, one appealing to individualist values, and one to collectivist values. The participants rated how likely a Chinese student would choose the individualist and collectivist messages for designing a Chinese website for Timex. In previous research (Aaker & Schmitt, 2001), the individualist message was found to be more popular in individualist cultures (e.g., U.S. culture) than in collectivist cultures (e.g., Chinese culture), whereas the collectivist message was found to be more popular in collectivist cultures. Thus, a high estimation for the collectivist (vs. individualist) message would indicate a greater tendency to attribute a culture-typical quality to a Chinese. As expected, compared to those in the single culture exposure condition, those in the bicultural exposure condition believed that the Chinese student was more likely to choose the collectivist message. Similar results were obtained among European Americans (Chiu et al., 2009, Experiment 2).

However, questions concerning the bicultural exposure effect’s generality, underlying mechanisms, behavioral consequences, and boundaries remain. To address the generality of the effect, we seek to replicate and extend Chiu et al.’s (2009) results. Specifically, we examine whether exposure to commercial products that embody symbols of two cultures, such as a British brand (with an English brand name) of Tequila (icon of Mexican culture), would also produce the bicultural exposure effect. Like other symbols, a consumer brand or product can be a cultural icon or a vehicle for cultural meaning (Ortner, 1973). Iconic brands and products are loaded with cultural meanings; they are strongly associated with the culture’s values, needs, and aspirations (Torelli, Keh, & Chiu, 2010). For brands
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loaded with cultural meanings, incidental exposure to these brands may spontaneously evoke its attendant cultural meanings (e.g., Marlboro can activate the value of rugged individualism in U.S. culture). Exposure to an iconic brand made in a foreign country should then elicit the bicultural exposure effect on perceptions of cultural incompatibility. This was tested in experiment 1.

Second, we submit that the bicultural exposure effect is a perceptual effect: Seeing symbols of the ingroup culture and an outgroup culture simultaneously can evoke a perceptual contrast. Nonetheless, bicultural exposure may also evoke a self-categorization process that reinforces categorical perceptions of cultures (Hogg, 2004) and promotes intergroup comparison (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), one consequence of which is self-stereotyping—the tendency to attribute the ingroup’s defining features to its members. To clarify the underlying mechanism of the bicultural exposure effect, we investigated the extent to which self-categorization processes are involved in the effect. If a self-categorization process drives the effects, individuals with high cultural identification (a chronic tendency to self-categorize as a member of the local culture) should be particularly prone to the dual cultural activation effect when exposed to juxtaposed local and foreign icons. However, the effect should dissipate when these individuals are exposed to juxtaposed icons of two outgroup cultures. If the bicultural exposure effect is found among individuals both high and low in cultural identification (Experiment 1), as well as when both stimuli cultures are outgroup cultures (Experiment 2), the effect should be primarily driven by a perceptual contrast, and self-categorization is not necessary for the occurrence of the bicultural exposure effect.

Exclusionary Reactions to Foreign Culture

Chiu (2007) proposed that attending to the differences between local and foreign cultures—a perceptual consequence of bicultural exposure—can under some circumstances alert individuals to the potential contamination effects of foreign cultures on the local culture, leading to exclusionary behaviors. The second objective of this research is to identify when bicultural exposure would lead to exclusionary reactions to foreign cultures.

Past research has shown that thoughts of one’s own death may evoke a culture defense mindset. According to the Terror Management Theory (Greenberg, Solomon, & Pyszczynski, 1997), when reminded of their mortality, people would experience existential anxiety. To manage existential anxiety, people would adhere to and defend their cultural worldview. They do so because a cultural worldview confers a sense of symbolic immortality—when the self is seen as a part of an imperishable culture, the self seems immortal. For instance, when mortality is made salient, people tend to endorse punitive reactions toward those who violate conventional standards in the society (Rosenblatt, Greenberg, Solomon, Pyszczynski,
& Lyon, 1989), and encourage aggression against those who violate the cultural worldview (McGregor et al., 1998). The defensive reactions that mortality salience evokes also include intolerance of using cultural icons in an inappropriate way (e.g., using the crucifix as a hammer; Greenberg, Porteus, Simon, & Pyszczynski, 1995). Accordingly, we hypothesize that participants would be particularly intolerant of cultural contamination of their culture’s iconic brand when they are under the joint influence of bicultural exposure and mortality salience. We tested this hypothesis in Experiments 3, 4, and 7.

Boundary Condition: Thoughtful Elaboration

The third objective is to identify the boundary of the bicultural exposure effect and its attending exclusionary reactions. Cultural priming effects are largely automatic processes that occur without conscious elaboration about cultural implications (Hong et al., 2000). As a result, culture’s influence on judgments and behaviors is often stronger when people process information in a cursory, spontaneous manner, but dissipates when people engage in more deliberative thought processes (Briley & Aaker, 2006). By extension, engaging in thoughtful elaboration about cultural complexities can attenuate the bicultural exposure effect and hence its attendant exclusionary reactions. Elaborate thoughts on cultural similarities and differences could interfere with ‘schematic’ processing of cultures and diminish perceived incompatibilities between cultures. Need for cognition is an individual difference variable reflecting the extent to which people engage in and enjoy effortful cognitive activities (Cacioppo & Petty, 1982). Because individuals high in need for cognition engage in thoughtful elaborations, they are likely to think deeply about cultural similarities and differences and correct the spontaneous cultural inferences produced by the dual activation of cultures. Consistent with this idea, research shows that the correlation between automatic associations toward an ethnic minority and explicit judgment of the ethnic group decreases as need for cognition increases (Florack, Scarabis & Bless, 2001), suggesting that individuals high (vs. low) in need for cognition can more effectively correct their spontaneous impression of an ethnic group. Thus, we hypothesize that thoughtful elaboration about cultural complexities (either measured as a chronic individual difference or induced in the experimental setting) can attenuate the effect of bicultural exposure on perceptions of cultures and its attendant exclusionary reactions to foreign culture. We tested this hypothesis in Experiments 5, 6, and 7.

In summary, seven experiments were conducted to test the hypotheses advanced in this research. Experiment 1 sought to extend the bicultural exposure effect to the domain of commercial products that embody symbols of two cultures. Experiments 1 and 2 tested whether cultural identification would moderate the bicultural priming effect. Experiments 3 and 4 were carried out to investigate the hypothesized joint effect of bicultural exposure and mortality salience
on American participants’ exclusionary reactions to incorporating foreign symbols into an iconic (vs. non-iconic) brand. The last three experiments examined whether thoughtful elaboration about cultural complexities attenuate the bicultural exposure effect and its attendant exclusionary reactions.

Experiment 1

Experiment 1 tested the hypothesis that simultaneous exposure to symbols of American and Chinese cultures would increase attribution of stereotypic American values to other Americans and perceived incompatibility of American and Chinese cultures. As noted, previous research has found robust cognitive and cultural effects of bicultural priming in both American and Asian contexts (Chiu et al., 2009), suggesting that these effects are not culture-dependent. For the sake of convenience in data collection, we sampled American participants in most of the studies reported in this article. Nonetheless, in Experiment 5, to establish the generality of our results in Asian contexts, we tested our hypotheses in Hong Kong.

Method

In a study described as a survey of new products introduced by global companies, participants (125 European American introductory business students; 51.2% male; mean age = 20.69 years) were asked to review three new product names. We manipulated exposure to Chinese and/or American culture by manipulating the cultural associations of the products and country of origin. Half of the participants evaluated three products that were icons of U.S. culture: Running shoes, jeans, and breakfast cereal. The remaining participants reviewed three products that were not icons of U.S. culture: Table lamps, bread toasters, and umbrellas. We selected these products based on pretest results. In the pretest, 46 participants from the same participant pool ranked 12 products (the other six products were: film, cars, software, microwave ovens, washers, and sodas) according to the extent to which the products were icons of U.S. culture. Umbrellas, table lamps and toasters received the lowest ranks (mean ranks ≥ 9.15; M = 9.75, SD = 1.32). Jeans, breakfast cereal and running shoes received much higher ranks and matched the non-iconic products in prices (mean ranks ≤ 6.11, M = 5.12, SD = 1.64). The average rank of the three iconic products was higher than that of the three non-iconic ones, t(45) = 15.06, p < .001.

Half of the participants in each cultural iconicity condition were told that the products were China-made products (“products manufactured in China by Chinese corporations”). To make the cover story believable, and to increase the products’ associations with Chinese culture, we used novel Chinese brand names for the products: CHENXIAO for breakfast cereal, QINJIN for running shoes,
XENSHI for jeans, BEIHUA for bread toaster, ZHONGYAN for table lamps, and WUFENG for umbrellas. For comparison purpose, the remaining participants were presented with U.S.-made products with novel English brand names (breakfast cereal: UNCLE BOB; running shoes: ASPIRE; jeans: NINE ZERO; table lamp: SCHONBEK; bread toaster: ROBIN; umbrella: MURRAY) that looked real but conveyed little meaning. Note that participants in the Chinese Brands/Iconic U.S. Products Condition were exposed to both Chinese culture (through country of origin) and American culture (through the product category), whereas participants in the remaining conditions were exposed to one culture only.

Following the manipulations, the participants rated each product on three dimensions (bad-good, unappealing-appealing, and unfavorable-favorable) on a scale from 1 (very bad/unappealing/unfavorable) to 9 (very good/appealing/favorable). An evaluation index was computed by averaging the responses to the three items for the three products (α = .90).

**Dependent measures.** Next, in an “unrelated” social perception study, participants completed a measure of cultural perception and a measure of perceived incompatibility of cultures previously used in the Chiu et al. (2009) studies. The cultural perception measure was designed to assess participants’ expectation that other Americans possess value preferences characteristic of American culture. Participants learned that an American student was redesigning a web page for Timex and was considering two commercial messages for Timex, with one appealing to individualist values and the other to collectivist values. The messages were taken from Aaker and Schmitt (2001). The individualist message was as follows: “The Timex watch. It embodies so much. It’s like a person. It has an impressive personality, very individualistic, and with a strong focus and concern for oneself—in a positive way.” The collectivist message matched the individualist message in writing style and social desirability but focused on social connectedness: “The Timex watch. It embodies so much. It’s like a person. It’s an impressive social being, very connected to others, and with a strong focus and concern for others—in a positive way.” Participants were asked to estimate, using an 11-point scale (from very unlikely to very likely), how likely the American student would use each message for Timex. The tendency to attribute culture-characteristic value preference to Americans would be reflected in the tendency to estimate strong preference for the individualist message and weak preference for the collectivist message.

Another dependent measure was designed to assess participants’ perceived incompatibility of cultures. Based on past research in cross-cultural psychology (Chiu & Hong, 2006), we identified six values or beliefs that are widely held in East Asia (holism, collectivism, belief in fixed world, situationism, duties, and the importance of impression management) and four that are widely held in North America (individualism, individual agency, dispositionism, and individual rights).
Next, we formed 14 items by pairing culturally incompatible East Asian and North American values and beliefs. More specifically, each item required the participants to estimate the extent to which another American would endorse one of the six East Asian values or beliefs given that the same American also endorsed one of the four American values or beliefs, or vice versa. A sample item combining a belief in holism (East Asian) with one in individual rights (North American) was: “Assuming that he agreed strongly with the statement, ‘It is not possible to understand the pieces without considering the whole picture,’ how likely would he be to agree with the statement, ‘I feel that I have the right to refuse to help my relative?’” All estimations were made on a percentage scale (0–100%). Arithmetic means of the 14 estimations of simultaneous endorsement of values/beliefs was computed to form a measure of perceived cultural incompatibility ($\eta^2_p = .68$), with low scores indicating higher levels of perceived incompatibility of North American and East Asian cultures.

For the European American participants, U.S. culture is the ingroup culture and Chinese culture is an outgroup culture. To test whether self-categorization moderates the bicultural exposure effect, toward the end of the experiment, we measured the participants’ level of American identification with the Patriotism/Nationalism Questionnaire (Kosterman & Feshbach, 1989). The questionnaire consists of 11 items (e.g., “The fact that I am an American is an important part of my identity”; $\alpha = .88$). Respondents rated how much they agreed or disagreed with each item on a 5-point scale (1 = Strongly disagree; 5 = Strongly agree).

Results and Discussion

As expected, reviewing products that embodied symbols of U.S. culture (iconic products of the United States) and Chinese culture (the products’ origin in China) increased the perceived incompatibility of American and Chinese cultures and strengthened the expectancy that Americans do not prefer collectivist values. First, a Product Iconicity X Brand Culture analysis of variance (ANOVA) was performed on the likelihood of adopting the collectivist message, controlling for product evaluation. The result revealed a significant interaction, $F(1,117) = 6.55, p = .01, \eta^2_p = .053$. Participants expected other Americans to be less likely to adopt a collectivist message after evaluating Chinese brands of iconic U.S. products (after being exposed to two cultures simultaneously; $M = 4.32, SD = 2.27$) than after evaluating U.S. brands of iconic U.S. products (after being exposed to the U.S. culture only; $M = 5.78, SD = 2.43$), $F(1,59) = 5.61, p < .05, \eta^2_p = .087$. The simple main effect of brand culture was not significant for non-iconic products ($M_{China} = 5.50, SD = 2.65; M_{US} = 5.09, SD = 2.19$), $F(1,62) = 0.43$, ns. The product iconicity and brand culture manipulations did not influence the estimated likelihood of adopting the individualist message; all $F$s in the Product
Iconicity X Country of Origin ANOVA < 1, ns. In short, following exposure to cues of U.S. and Chinese cultures, the European American participants expected an American not to choose the collectivist message.

In addition, on the measure of perceived cultural incompatibility, the Product Iconicity X Brand Culture interaction was significant, $F(1,121) = 4.32, p < .05$, $\eta^2_p = .035$. Participants expected another American not to simultaneously hold both American and Chinese beliefs or values; the overall mean was below 50% ($M = 38.5$), $t(124) = 11.91, p < .001$. This expectancy was lower after the participants had reviewed Chinese brands of iconic U.S. products ($M = 32.76$, $SD = 9.82$) than after they did U.S. brands of iconic U.S. products ($M = 40.41$, $SD = 10.75$), $F(1,59) = 8.01, p < .01$, $\eta^2_p = .120$. The simple main effect of brand culture was not significant for non-iconic products ($M_{\text{China}} = 40.63$, $SD = 9.58; M_{\text{US}} = 40.25$, $SD = 10.47$), $F(1,62) = 0.12$, ns.

Finally, American Identification did not moderate these results. When we performed a Product Iconicity X Brand Culture X American Identification (mean-centered) General Linear Model (GLM) on the likelihood of adopting the collectivist message and the probability of holding both American and Chinese beliefs or values, all effects involving American identification were nonsignificant, highest $F = 2.48$, ns. There was also no significant effects of Product Iconicity and Brand Culture on the identification measure, highest $F = 2.24$, ns.

In summary, consistent with past findings (Chiu et al., 2009), simultaneous exposure to symbols of the U.S. culture (iconic products of the United States) and Chinese culture (Chinese brands) in commercial products increased American participants’ tendency to attribute culture-typical characteristics to other Americans and the perceived incompatibility of American and Chinese cultures. Furthermore, contrary to the self-categorization theory, these effects do not depend on the perceivers’ level of cultural identification, suggesting that self-categorization is not necessary for the occurrence of the bicultural exposure effect.

**Experiment 2**

Experiment 2 was designed to provide further evidence for and to clarify the nature of the effect of bicultural exposure on perception of cultural distance. To further demonstrate that the bicultural exposure effect is not identity-dependent, we had European American participants review British brands of iconic Mexican products and responded to a measure of perceived cultural distance. To the participants, both British and Mexican cultures are outgroup cultures. Accordingly, self-categorization should not influence perception of cultural distance here.

This new bicultural exposure manipulation also addressed another interpretive issue in Experiment 1. In Experiment 1, we manipulated bicultural exposure by having American participants review Chinese brands of iconic American products. This manipulation could have evoked a realist threat (the competition of Chinese
brands with American products), which could in turn increase perceived cultural distance. This account did not explain why the perceptual effect was absent when American participants reviewed Chinese brands of non-iconic American products. Nonetheless, in this experiment, because both British and Mexican cultures are outgroup cultures, reviewing British brands of iconic Mexican products should not present a realist threat to the American participants. Replication of Experiment 1 results would suggest that realist threat is not a primary driver of the bicultural exposure effect.

Finally, to test whether the bicultural exposure effect generalizes beyond perceptions of the two cultures implicated in the product evaluation task, aside from the perceived distance between British and Mexican cultures, we also measured the perceived distance between Puerto Rican and Canadian cultures following the manipulation.

**Method**

Participants (42 European American business students; 40% male; mean age = 21.3 years) were presented with a new product evaluation task, in which they evaluated British products likely to be introduced in the Mexican market. Half of the participants, randomly selected, evaluated two British brands (with novel British names: ‘Williams’ and ‘Jones’) of products that were icons of Mexican culture (Tequila and Taco’s corn tortilla; Bicultural Exposure Condition). The remaining participants evaluated two products (with the same British names) that were not Mexican icons (backpack and bread toaster; Single Culture Exposure Condition). Participants evaluated the products on the same scale ($\alpha = .91$) used in Experiment 1.

Following the manipulation, the dependent measure was introduced in an “unrelated” study about “intercultural relationships.” To provide convergent evidence for the bicultural exposure effect, we used a different measure of perceived cultural distance. Specifically, we had the participants draw on a half-a-letter-sized sheet in any way they deemed appropriate a bubble to represent each of the following cultures: Mexican, Puerto Rican, Canadian and British cultures. We measured the distance, in millimeters, between each pair of cultures. To obscure the purpose of the measure, we did not ask the participants to draw the four bubbles to represent the extent of intercultural similarity or difference. Finally, the participants rated their familiarity with the four cultures using a 7-point scale (1 = Not familiar at all; 7 = Extremely familiar).

Pretest participants ($N = 22$) rated their familiarity with Mexican, Puerto Rican, Canadian and British cultures (on a 7-point scale, with 1 = Not familiar at all, and 7 = Extremely familiar) and the degree of similarity between each pair of cultures (on a 7-point scale, with 1 = Very dissimilar, and 7 = Very similar). Participants were moderately familiar with the four cultures (mean familiarity
ratings = 4.53 to 5.21). Participants perceived British and Canadian cultures to be very similar to each other \((M = 6.10, SD = 1.50)\), as they did Mexican and Puerto-Rican cultures \((M = 5.80, SD = 1.80)\). However, the participants perceived British and Canadian cultures to be very different from Mexican and Puerto-Rican cultures \((M_{B-PR} = 2.50, SD = 0.86; M_{B-M} = 2.60, SD = 1.00; M_{C-PR} = 2.60, SD = 1.00; M_{C-M} = 3.00, SD = 1.00)\). On average, the similar pairs were perceived to be more similar to each other than the dissimilar ones \((M_{similar} = 5.90, SD = 1.30 \text{ and } M_{dissimilar} = 2.70, SD = 0.80), t(21) = 11.77, p < .001\).

Pretest participants also rated the products used in the manipulation in terms of their cultural iconicity for Mexican culture on a 7-point scale \((1 = \text{not associated with Mexican culture in any way}; \text{definitely not an icon of Mexican culture}, \text{and } 7 = \text{very strongly associated with Mexican culture}; \text{definitely an icon of Mexican culture})\). The mean level of cultural iconicity was higher for Tequila and Taco’s corn tortillas than for backpacks and bread toasters \((M_{Icons} = 6.50, SD = 1.50 \text{ and } M_{Non-Icons} = 2.40, SD = 0.90), t(21) = 11.01, p < .001\). A second pretest \((N = 52)\) showed that none of the products were culturally significant to Americans (means cultural iconicity rating = 2.20 to 2.90 on a 7-point scale). Finally, in the main study, during debriefing, we checked and found that none of the participants connected the “intercultural relationship” study with the manipulation task.

Results and Discussion

We took the mean of the perceived distances between the two similar culture pairs to form a measure of perceived distance between similar cultures, and the mean of the perceived distances between the four dissimilar culture pairs to form a measure of perceived distance between dissimilar cultures. A Cultural Exposure X Cultural Similarity (within-subject factor) ANOVA revealed a significant main effect of cultural similarity, \(F(1,40) = 150.11, p < .0001, \eta^2_p = .79\): Participants drew the bubbles representing dissimilar cultures \((M = 267.62, SD = 108.63)\) farther apart than they did the bubbles representing similar cultures \((M = 81.79, SD = 51.58)\). More importantly, the Cultural Exposure X Cultural Similarity interaction was significant, \(F(1,40) = 6.33, p < .025, \eta^2_p = .137\). This interaction remained significant after controlling for participants’ familiarity with the cultures and their average evaluation of the products, \(F(1,38) = 5.31, p < .05, \eta^2_p = .123\). Participants in the Bicultural Exposure Condition \((M = 318.30, SD = 115.65)\) drew the bubbles representing dissimilar cultures farther apart than the participants in the Single Culture Exposure Condition \((M = 221.55, SD = 79.19), F(1,40) = 10.17, p < .005, \eta^2_p = .203\). The manipulation did not affect the distances between the bubbles representing similar cultures (for bicultural exposure, \(M = 92.10, SD = 64.52\); for single culture exposure, \(M = 72.41, SD = 35.13 \text{ respectively, } p > .2\)), indicating that the cultural exposure manipulation did not produce a generalized tendency to place the bubbles apart.
Additional analysis revealed that the bicultural exposure effect was equally strong in the participants’ perception of the distance between British and Mexican cultures (the two cultures involved in the product evaluation task) and that between Canadian and Puerto-Rican cultures (the two cultures not involved in the product evaluation task). Specifically, when we performed a Cultural Exposure X Culture Pair (British-Mexican or Canadian-Puerto-Rican; within-subject factor) ANOVA on perceived distances, the main effect of cultural exposure was significant, $F(1,40) = 7.78, p < .01, \eta^2_p = .163$, but the interaction was not, $F(1,40) < 1$, ns.

In summary, consistent with Experiment 1 results, bicultural exposure enlarged the perceived distances between dissimilar cultures. The finding that simultaneous exposure to two outgroup cultures (British and Mexican) enlarged perceived cultural difference suggests that bicultural exposure effect can occur without involving self-categorization. Because the new bicultural exposure manipulation did not pose a realist threat to the participants, replication of the bicultural exposure effect in this study suggests that realist threat is not the primary driver of the bicultural exposure effect, although self-categorization and realist threat may be implicated in other phenomena related to people’s reactions to globalization.

**Experiment 3**

Having documented the bicultural exposure effect and clarified its nature, we now turn to its psychological consequences. In Experiment 3, we examined the effect of simultaneous exposure to ingroup and outgroup cultures on Americans’ exclusionary reactions to foreign cultural influence. As mentioned, previous research has shown that making mortality concerns salient would increase people’s adherence of their cultural worldview and lower their tolerance of contamination of their cultural icons (McGregor et al., 1998). In this study, we tested the hypothesis that simultaneous exposure to ingroup and outgroup cultural symbols would increase the salience of cultural contrast and hence exacerbate the mortality salience effect.

**Method**

**Manipulations.** As a cover story, the participants (83 European American business students, 50% male; mean age = 20.9 years) were informed that they would complete several unrelated surveys during a 30-minute session. In the first survey, they were asked to complete a questionnaire that contained the mortality salience manipulation. Following standard procedures in inducing mortality salience (Arndt, Greenberg, Solomon, Pyszczynski, & Simon, 1997), participants in the mortality salient condition were instructed to answer two open-ended questions: “Please, briefly describe the emotions that the thought of your own death
arouses in you” and “Jot down, as specifically as you can, what you think will happen to you physically as you die and once you are physically dead.” Participants in the control condition answered parallel questions concerning the experience of dental pain. Next, all participants completed the Positive and Negative Affect Schedule (PANAS; Watson & Clark, 1992), which consists of a positive affect scale (10 items, e.g., interested, proud; $\alpha = .89$) and a negative affect scale (10 items, e.g., distressed, nervous; $\alpha = .83$). Participants rated each item on a scale from 1 to 5 (1 = very slightly or not at all; 5 = extremely) based on the strength of emotion they experienced at the time of the study.

Next, participants were presented with the new product survey used in Experiment 1. They were randomly assigned to evaluate three Chinese brands of products that were icons of U.S. culture (Bicultural Exposure Condition) or three Chinese brands of products that were not U.S. icons (Single Cultural Exposure Condition), using the same scale used in Experiment 1 ($\alpha = .96$). The products and brand names were the same as those used in the respective conditions in Experiment 1.

**Dependent measure.** Following the manipulations, the participants were presented with an “unrelated” study about “perception of marketing managers,” where the dependent measure was introduced. To measure the participants’ evaluative reactions to cultural contamination of an American iconic brand, we had the participants respond to the following business case: The Marketing VP of Nike Inc. in the Middle East had developed an “out-of-the-box” marketing plan to “strengthen Nike brand’s connection to Arab values.” The plan included the following actions: (1) Launch a new line of products under a new brand name using Arabic characters without the “Swoosh” mark from the product, (2) Replace the “Nike” brand name that lacks a semantic meaning in Arabic with the Arabic word for “Sportsmanship,” (3) launch the new campaign in an alliance with local brand names that would further boost the connection between the new brand and traditional values of the Arab world, (4) use well-known local soccer players (soccer is a popular sport in the Middle East) as endorsers of the new line of products, (5) develop advertisements in which the endorsers wear traditional Islamic attire and a pair of “sportsmanship” running shoes, and (6) adopt the slogan “dress modestly, the Islamic spirit” (in Arabic). Participants were asked to evaluate the marketing plan by answering the following questions: (1) What would the impact of the news about the plan on Nike’s stock price in the New York Stock Exchange be? (1 = very negatively; 9 = very positively), (2) How much would the plan increase/decrease Nike’s percentage market share in the U.S. after the news about the plan are made public? (“-10% or more” to “+10% or more”; this item was re-scaled to a scale that ranged from 1 to 9), and (3) they were also asked to indicate their intentions to buy Nike’s products after hearing about the news (1 = very low intention; 9 = very high intention). An index of participants’
attitude toward the marketing plan was computed by averaging the responses to these three items ($\alpha = .72$).

**Results and Discussion**

We performed a Mortality Salience X Cultural Exposure ANOVA on positive and negative affect and found no significant effects on either measure; all $F$s < .55, ns, indicating that the manipulations did not affect the participants’ affect. As expected, a Mortality Salience X Cultural Exposure ANOVA performed on the evaluative reaction to the marketing plan revealed a significant interaction, $F(1,79) = 3.94$, $p < .05$, $\eta^2_p = .048$. This interaction remained significant after controlling for positive affect, negative affect and evaluation of the Chinese products, $F(1,76) = 4.61$, $p < .05$, $\eta^2_p = .057$. In the Bicultural Exposure condition, the simple main effect of mortality salience was significant, $F(1,40) = 5.69$, $p < .025$, $\eta^2_p = .125$; the participants evaluated the marketing plan less favorably in the Mortality Salient Condition ($M = 4.34$, $SD = .71$) than in the Control Condition ($M = 5.02$, $SD = 1.08$). In contrast, in the Single Culture Exposure Condition, the simple main effect of mortality salience was not significant, $F(1,39) = .16$, ns, $M_{MortalitySalient} = 4.92$ and $M_{Control} = 4.81$. Furthermore, evaluation of the marketing plan was also lower in the Bicultural Exposure-Mortality Salient Condition than in the other three conditions ($ps \leq .06$).

In short, consistent with our hypothesis, the participants displayed a significant worldview defense effect (evaluated cultural contamination of iconic brands of the United States unfavorably when they were under the influence of mortality salience) only after simultaneous exposure to ingroup and foreign cultures, which had rendered cultural contrast salient in the condition. Because the dependent measure was European Americans’ evaluative reaction to an iconic American brand’s attempt to increase its market competitiveness in a foreign market, realist threat to the U.S. market competitiveness cannot account for the bicultural exposure effect.

Interestingly, mortality salience did not lead to an unfavorable evaluation of the plan in the single culture exposure condition. This result seems to contradict past finding that mortality salience itself is enough to increase people’s reluctance to use cultural icons in an inappropriate way (Greenberg et al., 1995). However, the dependent measure used in this study differs from those used in the past research. Past studies have examined reactions to clearly inappropriate use of cultural icons (e.g., using a crucifix as a hammer, see Greenberg et al., 1995). In this study, the marketing plan can be seen as an act of cultural contamination or as a marketing-savvy effort to increase the brand’s appeal among foreign consumers. Past findings have shown that ambiguous marketing scenarios are typically not interpreted as threats to one’s worldview (Nelson, Moore, Olivetti, & Scott, 1997). Instead, participants in the single culture exposure condition might have interpreted the marketing plan from a marketing perspective as opposed to a “cultural” perspective.
(see Tong, Pam, Kwan, & Peng, 2011), and hence did not react defensively to the plan following the mortality salience manipulation.

Although the pretest result in Experiment 1 indicated that running shoes are considered an iconic product in the United States, it can be argued that the reactions we observed in Experiment 3 are not specific to iconic U.S. products. Awareness of cultural contrast and mortality salience may lead to a blanket rejection of any attempts to incorporate foreign cultural elements in global marketing. To address this alternative interpretation, we conducted the next experiment to show that the effects we obtained in Experiment 3 resulted from participants’ concern about the contamination effect of global marketing on American culture vis-à-vis iconic American brands.

**Experiment 4**

*Method*

The procedures were similar to those in Experiment 3, with the following exceptions. First, all participants (63 European American business students; 71.9% male; mean age = 20.7 years) rated the Chinese brands of products that are U.S. icons in the first part of the experiment. That is, all participants were put under the influence of bicultural exposure. Second, participants in the High Target Brand Iconicity Condition were presented with the Nike marketing plan in Experiment 3, whereas those in the Low Target Brand Iconicity Condition were presented with a marketing plan of Proctor-Silex (an American brand of bread toaster). The Proctor-Silex marketing plan was similar to the Nike plan, except for the following changes: (1) no mention about the “Swoosh,” which is a Nike-specific feature, (2) the new brand name was changed from “Sportsmanship” to “Crusty” (in Arabic), (3) the endorsers in the advertisements sat in traditional Islamic kitchens and had breakfast using a “Crusty” bread toaster, and (4) the slogan used in the advertisement was changed from “Dress modestly, the Islamic spirit” to “Eat with family, the Islamic spirit” (in Arabic). A separate group of participants (N = 22) rated Nike and Proctor-Silex in terms of how much the brands were icons of American culture on a 7-point scale (see Experiment 2 pretest). Nike was rated as an icon of American culture (M = 6.09) and Proctor-Silex was not (M = 1.91), t(21) = 14.34, p < .001.

To extend the generality of our findings to actual behaviors, we used a new dependent measure. Instead of evaluating the plan, participants were asked to write a message supporting the new marketing plan, highlighting in the message all the potential benefits from the plan as if they were to convince the local allies in the Middle East. Two raters, who were blind to the participants’ experimental condition, independently rated the essays in terms of its level of enthusiasm.
(1 = very unenthusiastic, 7 = very enthusiastic). The two raters’ ratings were highly correlated ($r = .91$) and were averaged to form the dependent measure.

**Results and Discussion**

We performed separate Mortality Salience X Target Brand Iconicity ANOVAs on positive affect ($\alpha = .85$), negative affect ($\alpha = .81$), and the number of words in the message. All $Fs \leq 1.18$, ns. Next, we performed a Mortality Salience X Target Brand Iconicity ANOVA on the essays’ level of enthusiasm and obtained a significant main effect of target brand iconicity, $F(1,63) = 5.22$, $p < .05$, $\eta^2_p = .076$; participants wrote more enthusiastic essays about the marketing plan of Proctor-Silex ($M = 4.58$, $SD = 1.31$) than that of Nike ($M = 3.72$, $SD = 1.79$). More importantly, the predicted interaction was significant, $F(1,63) = 4.58$, $p < .05$, $\eta^2_p = .068$. This interaction remained significant after controlling for positive affect, negative affect, and number of words in the essay, $F(1,60) = 6.82$, $p < .001$, $\eta^2_p = .186$. Consistent with our hypothesis, the essays supporting Nike’s marketing plan were less enthusiastic in the Mortality Salient Condition ($M = 3.09$, $SD = 1.58$) than those in the Control Condition ($M = 4.35$, $SD = 1.80$), $F(1,32) = 4.73$, $p < .05$, $\eta^2_p = .129$. Also as predicted, the essays supporting Proctor-Silex’s plan were similarly enthusiastic in Mortality Salient Condition ($M = 4.74$, $SD = 1.45$) and in the Control Condition ($M = 4.41$, $SD = 1.17$), $F(1,31) = 0.51$, ns. Furthermore, the level of enthusiasm in the Iconic Brand-Mortality Salient Condition was significantly lower than that in the remaining three experimental conditions ($ps < .05$).

Experiment 4 replicated the results of Experiment 3. After having evaluated foreign brands of iconic American products (and hence became more cognizant of cultural contrast), the participants displayed the mortality salience effect—when mortality was salient (vs. not salient), they were more concerned about the potential contamination of American culture vis-à-vis Nike (an iconic U.S. brand), and were less enthusiastic in supporting Nike’s plan to incorporate foreign cultural elements to enhance its global competitiveness. However, when the target brand was not an iconic U.S. brand (Proctor-Silex), the mortality salience effect was not found.

**Experiment 5**

The primary objective of this study is to test the hypothesis that individuals high in need for cognition will think deeply about cultural similarities and differences, and correct the spontaneous cultural inferences produced by the bicultural exposure. A secondary objective is to further establish the generality of the bicultural exposure effect. Thus far, we have focused on the effects of bicultural exposure among European Americans. In Experiment 5, we recruited Hong Kong Chinese individuals as research participants and examined how simultaneous
exposure to American and Chinese cultures would influence their perceptions of American and Chinese cultures. We hypothesized that bicultural exposure would increase the perceived differences between the two cultures, such that the participants would expect Chinese to hold stronger Chinese beliefs and Americans to hold stronger American beliefs.

Method

The participants were 117 Hong Kong Chinese undergraduates (28.2% male; mean age = 21.14 years) who received US$6.5 for their participation. We used the materials in the Chiu et al. (2009) to manipulate bicultural exposure. The participants were randomly assigned to one of the three experimental conditions. Participants in the American Culture Exposure Condition reviewed two print advertisements of McDonald’s Hamburger and those in the Chinese Culture Exposure Condition reviewed two print advertisements of Chinese moon cake. Finally, participants in the Bicultural Exposure Condition viewed a McDonald’s Hamburger advertisement and a moon cake advertisement. The participants indicated their evaluation of the advertisements on a scale from 0 (extremely dislikable) to 10 (extremely likable).

Next, the participants were given an “unrelated” social perception study. They were presented with descriptions of lay dispositionism and lay situationism taken from Norenzayan, Choi, and Nisbett (2002). The lay dispositionism item argues that personality determines and reliably predicts behaviors. Moreover, behaviors are remarkably stable across time and consistent across situations. In contrast, the lay situationism item argues that the situation determines behaviors and is a powerful predictor of behaviors, and that behaviors of the same person can vary drastically across situations. For each item, the participants estimated the extent to which European Americans in general and Hong Kong Chinese in general would agree with it. Previous research has shown that compared to each other, Asians believed more strongly in situationism and European Americans believed more strongly in dispositionism (Norenzayan et al., 2002). The participants recorded their estimations on a 9-point scale (1 = strongly disagree; 9 = strongly agree). The order of the American and Chinese estimations was counterbalanced. Because the goal of this study was not to replicate Norenzayan et al.’s (2002) cross-cultural results, we did not include measures of personal beliefs in dispositionism and situationism. Our key prediction here is that bicultural exposure (compared to single culture exposure) would increase the perceived difference between American and Chinese cultures, as evidenced by the beliefs attributed to members of each culture.

Toward the end of the study, the participants completed the 18-item Need for Cognition Scale (Cacioppo, Petty, & Kao, 1984; α = .87 in this study), which measures the extent to which individuals enjoy and engage in effortful cognitive activities. Sample items of the scale are: “I find satisfaction in deliberating hard and
for long hours,” and “I only think as hard as I have to” (reverse scored). Participants indicated their extent of agreement with each item on a 5-point scale (1 = extremely unlike me; 5 = extremely like me). The culture exposure manipulation did not influence the need for cognition score, $F(2,114) = 1.54$, ns.

Results and Discussion

We performed a Culture Exposure (American, Chinese, or Bicultural) X Belief (Dispositionism or situationism; within-subject factor) X Target (Americans or Chinese; within-subject factor) X Question Order ANOVA on the participants’ estimated responses to the belief items. The predicted Culture Exposure X Belief X Target interaction was significant, $F(2,111) = 3.25$, $p < .05$, $\eta^2_p = .055$. Question order did not qualify these interactions, $F_{s} < 1.28$, ns. After controlling for evaluation of the advertisement, the Culture Activation X Belief X Target interaction remained significant, $F(2,109) = 3.21$, $p < .05$, $\eta^2_p = .055$.

To understand the nature of the Culture Activation X Belief X Target interaction, we performed a Belief X Target within-subject ANOVA separately for each cultural exposure condition. As predicted, the Belief X Target interaction was significant in the Bicultural Exposure Condition, $F(1,38) = 12.78$, $p < .001$, $\eta^2_p = .252$. Under the influence of bicultural exposure, participants perceived stronger agreement with dispositionism among Americans than Chinese [$M_{\text{Americans}} = 6.03$, $M_{\text{Chinese}} = 4.92$; $t(38) = 2.99$, $p < .01$], stronger agreement with situationism among Chinese than Americans [$M_{\text{Americans}} = 5.31$, $M_{\text{Chinese}} = 6.10$; $t(38) = 2.27$, $p < .05$], stronger agreement with dispositionism (vs. situationism) among Americans [$t(38) = 1.92$, $p = .06$], and the opposite pattern among Chinese [$t(38) = 2.90$, $p < .01$].

In the Chinese Culture Exposure Condition, the only significant effect was the main effect of belief, $F(1,38) = 5.07$, $p < .03$, $\eta^2_p = .118$. The participants expected stronger endorsement of dispositionism than situationism for both Americans [$M_{\text{dispositionism}} = 6.05$, $SD = 1.79$; $M_{\text{situationism}} = 5.26$, $SD = 1.57$] and Chinese [$M_{\text{dispositionism}} = 6.08$, $SD = 1.56$; $M_{\text{situationism}} = 5.74$, $SD = 1.62$]. In the American Culture Exposure Condition, no effects in Belief X Target ANOVA were significant, $F_{s} < 1.50$, ns.

Next, we examined whether need for cognition attenuated the perceptual effects of dual cultural activation. We performed a Culture Exposure X Belief X Target X Need for Cognition (continuous predictor, mean-centered) General Linear Model (GLM) on the estimated responses to the belief items. The four-way interaction was significant, $F(2,111) = 3.88$, $p < .05$, $\eta^2_p = .065$. This interaction remained significant after controlling for evaluation of the advertisement, $F(2,110) = 3.87$, $p < .05$, $\eta^2_p = .066$.

To understand the nature of this interaction, we performed a separate Belief X Target X Need for Cognition GLM on the estimated responses to the belief items
for each cultural exposure condition. The Belief X Target X Need for Cognition interaction was significant in the Bicultural Exposure Condition, \( F(1,37) = 7.18, p = .01, \eta_p^2 = .161 \), but not in the other two cultural exposure conditions, \( F_s < 1.39, \text{ns} \). Simple slope analysis was performed to understand the nature of the Belief X Target X Need for Cognition interaction in the Bicultural Exposure Condition. The Belief X Target interaction was significant when Need for Cognition was low (one standard deviation below the mean), \( F(1,37) = 21.10, p < .001, \eta_p^2 = .363 \), but not when it was high (one standard deviation above the mean), \( F(1,37) = 1.04, \text{ns} \). This result indicates that Need for Cognition attenuated the bicultural exposure effect on perceived cultural contrast, possibly because participants high in Need for Cognition had elaborated on cultural similarities and differences. In the next study, we tested this possibility more directly by manipulating the degree of elaboration on cultural complexities.

Experiment 6

Method

The procedures were similar to those in Experiment 2, with the following exceptions. First, all participants (49 European American business students; 40% male; mean age = 21.1 years) rated the British brands of iconic Mexican products in the first part of the experiment. This procedure put all participants under the influence of bicultural exposure. Second, the elaboration manipulation, developed on the basis of the need for cognition construct (Cacioppo & Petty, 1982), was introduced after the product evaluation task to engage half of the participants in the type of thoughtful elaboration driven by the need for cognition. All participants performed the same drawing task in Experiment 2. Whereas those in the Elaboration Condition completed the task while prompted to think carefully about the complexity of intercultural relationships, those in the Control Condition performed the drawing task without this instruction.

Results and Discussion

A Cognitive Elaboration (Elaboration or Control) X Cultural Similarity (similar or dissimilar cultures; within-subject factor) ANOVA performed on the two cultural distance measures revealed a significant main effect of cultural similarity, \( F(1,38) = 134.73, p < .001, \eta_p^2 = .78 \). Participants drew the bubbles representing dissimilar cultures (\( M = 275.28, SD = 105.13 \)) farther apart than they did the bubbles representing similar cultures (\( M = 84.88, SD = 50.91 \)). More importantly, the Cognitive Elaboration X Cultural Similarity interaction was significant, \( F(1,38) = 4.55, p < .05, \eta_p^2 = .107 \). This interaction remained significant after
controlling for participants’ familiarity with the cultures and their average evaluation of the products, $F(1,36) = 4.96, p < .05, \eta^2_p = .121$. Participants drew the bubbles representing dissimilar cultures farther apart in the Control Condition ($M = 319.75, SD = 107.05$) than they did when prompted to elaborate on cultural complexities ($M = 230.80, SD = 84.04$), $F(1,38) = 8.54, p < .01, \eta^2_p = .184$. There were no differences in the distance between the bubbles representing similar cultures in the two elaboration conditions (for the Elaboration Condition: $M = 75.40, SD = 33.93$; for the Control Condition: $M = 94.35, SD = 63.09, p > .2$).

Results from this experiment again showed that exposure of products that embody symbols of two outgroup cultures enlarged perceived distances of dissimilar cultures. The results also confirmed the hypothesis that engaging in thoughtful elaboration on cultural complexities attenuates the bicultural exposure effect on perceived cultural contrast. In the next experiment, we tested whether need for cognition also moderates the consequence of the joint effect of bicultural exposure and mortality salience on subsequent judgments.

### Experiment 7

#### Method

One hundred and twelve European-American business students (44.6% males; mean age = 20.9 years) participated in the experiment for course credit. The procedures were similar to those in Experiment 4, with the following exceptions. First, to ensure that realist threat is not the primary driver of the bicultural exposure effect, we used a bicultural exposure procedure that did not present a realist threat to the American participants. Specifically, we put all participants under the influence of bicultural exposure by means of presenting them with an “artsy collage” depicting symbols of the United States and China side-by-side. The participants were asked to write down anything that came to mind while seeing the collage. Second, we further standardized the stimulus materials in the two brand iconicity conditions by changing the slogans of both the Nike and Proctor-Silex marketing plans to: “Do it your way, the Islamic spirit” (both plans had the same slogan). This change ensured that the participants would respond to the same slogan in both conditions. Third, instead of writing an essay supporting the plan, participants evaluated the marketing plan on the same items used in Experiment 3 ($\alpha = .78$). Finally, at the end of the questionnaire, participants completed the 18-item need for cognition scale ($\alpha = .84$).

#### Results and Discussion

We performed separate Mortality Salience X Brand Iconicity ANOVAs on positive affect ($\alpha = .73$) and negative affect ($\alpha = .76$). All $Fs \leq .97$, ns.
Fig. 1. Evaluation of marketing plan as a function of brand iconicity, mortality salience, and need for cognition (Experiment 7).

To test our hypothesis, we performed a Mortality Salience X Brand Iconicity X the average Need for Cognition score (mean-centered) GLM on the evaluation of the marketing plan. The predicted Mortality Salience X Brand Iconicity X Need for Cognition interaction was significant, $\beta = .86$, $t(104) = 2.85$, $p < .005$.

As depicted in Figure 1, when Need for Cognition was low (one standard deviation below the mean), participants in the Mortality Salient Condition ($M = 4.21$) evaluated Nike’s marketing plan more negatively than those in the Control Condition ($M = 5.27$), $t(104) = 2.26$, $p < .05$. In contrast, when Need for Cognition was high (one standard deviation above the mean), participants evaluated Nike’s plan similarly in the Mortality Salient condition ($M = 4.86$) and the Control condition ($M = 4.57$), $p > .5$. For Proctor-Silex’s marketing plan, participants evaluated the plan similarly in the Mortality Salient condition and Control condition regardless of whether Need for Cognition was low ($M = 5.44$ and 4.53, respectively, $p > .1$) or high ($M = 4.38$ and 5.04, respectively, $p > .2$).

In summary, Experiment 7 results showed that need for cognition, a chronic tendency to engage in thoughtful elaboration, can attenuate the joint effects of bicultural exposure and mortality salience. Following bicultural exposure, only participants low in need for cognition displayed the mortality salience effect; these participants reacted defensively to the potential contamination of American
culture vis-à-vis Nike (an iconic U.S. brand) when mortality was salient than when it was not. However, when the target brand was not an iconic U.S. brand (Proctor-Silex), the mortality salience effect was not found regardless of participants’ need for cognition scores.

**General Discussion**

Globalization is a complex process with many different facets. It also has far-reaching impacts on both nations and individuals. This research focuses on one small aspect of globalization: Simultaneous exposure to symbols of multiple cultures in a globalized economy. Because the globalizing space in many parts of the world is richly ornamented with symbols of multiple cultures, research on the social cognitive effects of multicultural exposure is strategically located at the intersection of globalization, culture, and psychology—an unexplored frontier in current social psychological investigations. In seven experiments, we showed that when a commercial product embodies symbols of two dissimilar cultures (as in the case of a Chinese brand of an iconic U.S. product or a British brand of a Mexican product), the product becomes a stimulus that can activate representations of both cultures simultaneously. Consistent with previous theoretical and empirical analyses of the effect of bicultural exposure (Chiu & Cheng, 2007; Chiu et al., 2009), we found that exposure to such products renders culture a salient organizing construct for perceiving culturally pertinent information. Such exposure also increases the perceiver’s tendency to attribute characteristic values and beliefs of the activated cultures to members of the respective culture and hence increases perceptions of cultural differences (Experiments 2, 5, and 6) and cultural incompatibility (Experiment 1).

Because initial evidence for the bicultural exposure effect came from studies comparing the perceptual effects of simultaneously presenting symbols of ingroup and outgroup cultures to the perceivers, it was unclear whether the effect always involves self-categorization. Evidence from Experiments 1, 2, and 6 showed that self-categorization is not necessary for the bicultural exposure effect to take place. First, having weak cultural identification does not weaken the bicultural exposure effect (Experiment 1). Second, exposure to two outgroup cultures also increases perceived cultural difference (Experiments 2 and 6).

Because bicultural exposure increases the perceived incompatibility of cultures, the perceiver under the influence of bicultural exposure is vulnerable to its psychological consequences. In Experiments 3 and 4, we found that only after bicultural exposure, participants were more likely to display defensive responses to “cultural contamination” of an iconic U.S. brand when they felt the need to manage their existential fear than when they did not. Finally, although we found a bicultural exposure effect across experiments, thoughtful elaboration about cultural complexities (due to chronic tendencies, Experiments 5 and 7, or situation-induced,
Experiment 6) ameliorates this effect on perceptions of cultures as well as its joint effect with mortality salience on reaction to cultural contamination.

Our results also show that exposure to foreign culture alone does not have the same effect as bicultural exposure. When the American participants in Experiments 1 and 3 were exposed to Chinese culture only, or when the Chinese participants in Experiment 5 were exposed to U.S. culture only, they did not exhibit the perceptual and defensive responses as the participants in the bicultural exposure condition did. In short, simultaneous exposure to two cultures seems to be an important aspect of globalization that has far-reaching cultural and psychological consequences.

**Implications for the Cultural Impacts of Globalization**

With the rapid progress of globalization, the possible consequences of cultural contacts have become a major issue in the heated debates in many public forums and the academia. Thus far, social psychologists have remained relatively silent on this issue (Chiu & Cheng, 2007). The research reported in this article is among the first few research endeavors in social psychology to systematically address this issue. By focusing on the social cognitive consequences of multicultural exposure, this research has shed some light on when exposure to foreign culture can incite exclusionary responses. As such, this research provides a new behavioral science perspective on the current debates that have arisen over the psychological impacts of intercultural contacts in the context of globalization.

Furthermore, previous research on the psychological effects of cultural exposure has relied heavily on qualitative research methods. This research suggests that it is possible to develop experimental paradigms to study the experiences of foreign cultural exposure in a laboratory setting. These paradigms will allow researchers to make precise observations on how exposure to two cultures simultaneously may affect an individual’s psychological processes in controlled experiments. The psychological principles derived from such observations will explain and predict variations in people’s psychological reactions to foreign cultures.

Our results have important policy implications on international relations and international business. For instance, in international business, our results draw attention to the importance of managing cultural symbolisms in cross-border business transactions, including introduction of new brands of culturally symbolic products, and merge and acquisition of culturally symbolic brands (Tong et al., 2011). Business practitioners can avoid evoking strong exclusionary reactions to foreign or global business in cross-border transactions by deepening understanding of cultural complexities rather than focusing local consumers on simplistic, essential differences between cultures. Our findings also draw attention to the effect of globalization via bicultural priming on increased political volatility. For example, our results can explain the surprising win by an anti-immigration party of its first parliamentary seat in Swedish election, after running political messages
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juxtaposing symbols of Muslim and Swedish cultures (i.e., women in black burqas along a frail blond pensioner).

Future Directions and Conclusion

Globalization increases the frequency of cultural contacts that can lead to integrative or exclusionary responses to foreign culture (Chiu et al., 2011). Thus, how individuals manage their reactions to the cultural impacts of globalization is a research topic that requires urgent research attention. It is important to identify the controlling stimuli and personality determinants of the exclusionary responses, as well as their downstream cognitive and motivational consequences. Our results suggest that the motivation to engage in thoughtful elaboration about cultural complexities can “cool down” exclusionary responses triggered by bicultural exposure. Although the need for cognition may be related to nationalism or political conservatism, Experiment 1 results show that American cultural identification measured with an established nationalism/patriotism scale, did not moderate the bicultural priming effect. Thus, it is unlikely that the cooling effect of need for cognition in Experiments 5–7 is ideologically driven. Nonetheless, we do not exclude the possibility that some ideological factors could moderate exclusionary responses through their associations with cognitive complexity (see Jost, Glaser, Kruglanski, & Sulloway, 2003). This possibility merits future research.

The over sampling of American college students is a limitation in this research. The robust bicultural priming effects obtained among Hong Kong Chinese in Experiment 5 and in past research (Chiu et al., 2009), including field studies conducted in the context of the 2008 Beijing Olympics (Cheng et al., 2011), indicates that our results may not be culture-dependent. In addition, field research that assessed the psychological effects of frequency of bicultural priming by comparing perceptions of foreign cultures of community samples in cosmopolitan cities and suburban environments (Chen & Chiu, 2010) have provided further evidence for the generality of our results beyond college samples.

Cultural contacts can also elicit integrative reactions to foreign culture by bolstering cognitive complexity. For example, through exposure to multiple cultures, individuals may develop complex understandings of cultural differences (Benet-Martinez, Lee, & Leu, 2006), and hence be less likely to exhibit the exclusionary responses triggered by bicultural priming. In addition, multicultural exposure may lead individuals to view the newly arrived foreign cultures as intellectual resources that complement their heritage culture for achieving valued goals. These individuals are willing to appropriate ideas from foreign cultures to generate creative solutions to a problem (Leung & Chiu, 2010). Nonetheless, mere exposure to foreign cultures does not always lead to creative benefits
Future research is needed to understand when multicultural experience will lead to empowering and constructive self-transformational experience.

References


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