The diversity of cultural diversity : psychological consequences of different patterns of intercultural contact and mixing

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1 RUNNING HEAD: Psychological consequences of culture mixing

8 **The diversity of cultural diversity: Psychological consequences of different patterns of**
9 **intercultural contact and mixing**

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Abstract

Culture mixing is a critical consequence of globalization. Thus, predicting the effects of globalization on individual psychology requires understanding the effects of exposure to culture mixing on cognition, attitudes, and behaviors. Prior research has demonstrated that perceiving the mixing of own and foreign cultures can trigger subsequent shifts across a wide range of psychological processes. This paper proposes that the psychological consequences of culture mixing can be understood through consideration of the specific form of culture mixing involved and the fundamental psychological functions that cultures (particularly heritage cultures) fulfill. Culture mixing itself is a diverse, heterogeneous phenomenon, and different forms of culture mixing (e.g., simultaneous co-presence, superimposition, fusion) may activate different psychological outcomes. Furthermore, heritage cultures serve critical psychological functions by providing guides and normative standards for behavior, acting as markers that facilitate differentiation of ingroup members from outgroups, and buffering against psychological threats. The frustration or disruption of these functions by culture mixing may serve as a basis for predicting psychological responses to mixing. Finally, this paper will suggest key areas for future study in culture mixing and how studying diverse patterns of culture mixing may be critical for enriching cognition and behavior in response to reminders of globalization.

Although contact and exchanges between cultures are ancient processes, intercultural contact is accelerating with globalization and advancements in media, communication, and information technology (Steger, 2013). Such intersections of cultures, peoples, and the diverse practices and values they endorse presents exciting opportunities for sharing and learning different perspectives and worldviews. Yet rather than excitement and open-mindedness at the prospect of intercultural contact, some may react with increased closed-mindedness, xenophobia, and rejection of such opportunities (Chiu, Gries, Torelli, & Cheng, 2011; Hong & Cheon, 2017). What are the factors that determine how people will respond psychologically to one of the hallmark features of a globalizing landscape: cultural diversity and intermixing between cultures?

Culture represents a system of knowledge, meanings and practices that are shared and transmitted across groups of interconnected individuals (Barth et al., 2002). Based on this conceptualization of culture, cultural diversity reflects the tendency for a plurality of systems of knowledge, meanings and practices that vary in content and structure to coexist across human populations, as well as within societies and organizations. Importantly, cultural diversity and intercultural contact is itself heterogeneous and may manifest in different ways (Berry, 1997; Hao, Li, Peng, Peng, & Torelli, 2016). Distinct cultures may coexist within a society, yet segregated and with limited contact. Distinct systems of cultural knowledge may also exist within an individual, who may rely on different cultural frames of cognition and behavior based on situational demands (Hong, Morris, Chiu, & Benet-Martinez, 2000). Or, different cultures may simultaneously be found together within the same context or situation while maintaining their distinguishing features and identities. Such variations in how cultural diversity is conceptualized and managed has been represented in prior research focusing on different frameworks and ideologies regarding the structure and consequences of cultural diversity, such as biculturalism (Chen, 2015; Hong et al., 2000), multiculturalism (Verkuyten, 2007; Wolsko, Park, Judd, & Wittenbrink, 2000), polyculturalism (Morris, Chiu, & Liu, 2015), and strategies for managing acculturation (Berry, 1997).

With accelerating globalization, traditional demarcating boundaries of both nation-states and the corresponding cultures and identities within them are becoming more porous to foreign cultural inflows. Given the dynamic nature of culture, and how readily its contents are transmitted and shared, even elements from seemingly distinct cultures are becoming intermixed

and hybridized. In particular, polyculturalism reflects a framework or ideology of culture and its diversity that critically recognizes the dynamic, plural, and mutually influencing properties of cultures (Bernardo, Rosenthal, & Levy, 2013; Morris et al., 2015). Cultures do not exist in vacuums. As such, the polycultural perspective proposes that a defining feature of cultures are their plurality and mixtures, and navigating a culturally diverse environment ultimately involves encountering and reconciling cultural mixtures (Cho, Morris, Slepian, & Tadmor, 2017; Hao et al., 2016; Hong & Cheon, 2017). Consistent with this perspective, the aim of this paper is to examine the different ways and patterns that mixtures and contact between cultures may manifest and their respective psychological and potential societal consequences.

Culture Mixing as Cultural Diversity

What is culture mixing?

Culture mixing refers to a pattern of intercultural contact resulting in representations and elements of distinct cultures occupying the *same space* at the *same time* (Chiu, Mallorie, Keh, & Law, 2009). Importantly, culture mixing can involve the synthesis of any dimension or representation of a culture, and is not limited to core values or norms that are perceived as deeply defining or embraced by a particular culture. Consequently, culture mixing may manifest in seemingly more incidental cultural representations and products, such as languages, practices, foods, fashion, icons and symbols. Given that even minimal exposure to such symbols and representations of a cultural group are sufficient to activate culturally congruent or stereotypical mindsets, values, and cognitions (Guéguen, Martin, & Stefan, 2017; Hong et al., 2000; Wong & Hong, 2005), exposure to culturally mixed stimuli may simultaneously activate more than one set of cultural knowledge, which may be incongruent and require reconciliation.

Diverse manifestations of culture mixing

Culture mixing itself is a heterogeneous process, and can vary in the magnitude or degree of overlap and blending between distinct cultural elements (for an overview and descriptions of various forms of culture mixing, see Hao et al., 2016). This can range from simultaneous co-presentation of distinct cultural elements (without actual contact between them), to actual overlap between them (superimposition), in which two cultural representations are occupying the

same space or entity, yet maintain their distinct and identifiable characteristics (e.g., a McDonald's restaurant at the Great Wall of China) (Yang, Chen, Xu, Preston, & Chiu, 2016). The most complete and integrated form of culture mixing is reflected by *culture fusion*, in which features of distinct cultural representations are mixed together to create a new entity simultaneously possessing features of its different cultures of origin (Cheon, Christopoulos, & Hong, 2016; Cui, Xu, Wang, Qualls, & Hu, 2016). Possibly the most widely studied form of culture mixing to date has been simultaneous presentation, which has also been referred to as joint presentation, side-by-side presentation, or cultural co-presence (Chen et al., 2016; Cheng, Leung, & Wu, 2011; Chiu et al., 2009; Morris, Mok, & Mor, 2011; Peng & Xie, 2016; Torelli, Chiu, Tam, Au, & Keh, 2011). This manifestation of mixing involves the simultaneous presentation of two independent cultural items or images next to one another, and has been conceptualized as a representation of a multicultural ideology (the coexistence of multiple, yet distinctive and pure cultures) (de Keersmaecker, Van Assche, & Roets, 2016).

Given that culture mixing can be encountered in diverse forms, there is no single form of mixing that is inherently more important, central, or representative of intercultural contact than others. Yet, a key distinguishing feature of these diverse patterns of cultural mixing is their perceived *intrusiveness*. Some forms of mixing imply relatively little intrusiveness or risk of one culture changing another in an unwelcomed manner, such as simultaneous/joint presentation or sequential presentation, in which elements of different cultures are presented individually yet interspersed with one another. Because these forms of mixing retain the original and unique identity of each of the participating cultures, they are more likely to generate attention and cognition about the differences and contrasting characteristics of the cultures involved. This is evidenced by the *bicultural exposure effect* (Torelli et al., 2011), in which simultaneous exposure to disparate cultures increases perceived differences and incompatibility of the cultures on stereotypic features. While these low-intrusion forms of culture mixing can still lead to exclusionary responses, they hold promise for producing more integrative psychological consequences (e.g., enhanced creativity), especially when they are encountered with reflective, open-minded, or learning-oriented mindsets (Chen et al., 2016; Fu, Zhang, Li, & Leung, 2016; Leung, Qiu, & Chiu, 2014; Leung, Maddux, Galinsky, & Chiu, 2008; Torelli et al., 2011). Other patterns of culture mixing more explicitly imply an intrusive presence or 'invasion' of one culture by another, such as superimposition and fusion. Compared to less intrusive forms of

culture mixing (e.g., simultaneous presentation), superimposition and fusion may risk predominantly more exclusionary reactions to culture mixing based on perceptions of symbolic threat and contamination of one's own culture by foreign or outgroup elements (Cheon et al., 2016; Cui et al., 2016; de Keersmaecker et al., 2016; Yang et al., 2016)

Real-world reflections of culture mixing

Although experimental research into the psychological responses to culture mixing (particularly culture fusion) may sometimes appear unnatural or to possess low ecological validity in order to present unambiguously mixed stimuli and maintain experimental control (Cheon et al., 2016; Cui et al., 2016; Yang et al., 2016), examples of cultural mixing abound in the real world. New languages that emerge based on the mixtures and fusion of originally distinct languages, such as Creole and pidgin languages, are one prominent. Real-world evidence for culture mixing can also be abundantly observed in food and the popularity of fusion foods, in which meticulous blending of culinary styles and ingredients produces novel dishes that harmoniously synthesize complementary flavors from different cultures.

Yet, cultural mixing may not always be perceived as so harmonious, and may lead to exclusionary responses, such as hostility and disgust. Modern globalization provides a backdrop for many instances of culture mixing as a source of controversy and outrage. Corporations explicitly associated with one country of origin operate across international markets at a massive scale. For instance, McDonald's is an iconic corporate symbol of America (as well as one of the most recognizable brands in the world) and serving stereotypically American food. Yet, the presence and profits of McDonald's are stronger internationally than within the United States (Schlosser, 2012). But the increased penetration of foreign companies and products into local markets can often be perceived as a threat or contaminant when they mix with local cultural representations. For example, while protesting a Starbucks shop operating from within Beijing's Forbidden City, one Chinese news anchor blogged, "The Forbidden City is a symbol of China's cultural heritage. Starbucks is a symbol of lower middle class culture in the west. We need to embrace the world, but we also need to preserve our cultural identity. There is a fine line between globalization and contamination" (Rui, 2007). These responses to cultural mixing also operate bidirectionally, with Americans also expressing similar distaste for reminders of Chinese culture or identity on iconic American representations. For instance, symbolically American

products are even manufactured or outsourced for production abroad, even to the point that American flags are imported in the United States from China (Berman, 2013), creating an impression of some Chinese essence or signature on this prototypical representation of America. Analogous to the case of Starbucks in the Forbidden City, American flags imported from abroad have also been banned from American military installations (Macias, 2014) – spaces where a salient shared American national identity may be especially sacred.

Why is it that culture mixing can produce such varying reactions? What features of culture mixing and contextual factors determine the psychological outcomes of culture mixing? Ultimately, culture mixing involves changing the identity or meaning of representations of one's culture, particularly in relation to other cultures. Thus, understanding the psychological consequences of culture mixing also requires appreciating the psychological functions that representations of one's culture may fulfill. When the meanings of heritage cultural representations become altered or perceived through the frame of another culture, then individuals may engage in systematic shifts in cognition, motivation, and emotion to reconcile or compensate potentially unmet or frustrated needs. In the next section, we will explore three fundamental psychological needs fulfilled by heritage cultures, and how the disruption of these needs by different forms of culture mixing may produce such shifts in psychological processes.

Culture Mixing and the Functions of Heritage Cultures

Culture as a Guide for Behavior

Support for this function of culture

One contributing factor to the emergence of cultural diversity is different opportunities, challenges, and threats that groups are exposed to in their local environments and contexts. Based on the magnitude and quality of opportunities and threats within an environment, groups may prioritize different social behaviors (e.g., cooperation versus self-interest) and social institutions (e.g., maintaining security versus promoting growth), as well as promoting the values, norms, and meanings that support them (Cohen, 2001; Gelfand et al., 2011; Hong & Cheon, 2017; Oishi & Graham, 2010).

As a result, cultures provide people with mandates or prescriptions for how they should properly behave and the norms they should adhere to. One mechanism for this may be the promotion of cultural tasks. Cultural tasks reflect specific patterns of cognition and action that can be followed to conform to norms or attain implicit goals mandated in a particular culture (Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009). For instance, in societies that require relatively greater levels of group cohesion and coordination, cultural tasks may include conformity, self-criticism, and processing information in a relational manner. Supporting this notion, among people living in ecologies that are exploited predominantly by farming, which requires more social coordination than fishing or herding, exhibit greater proficiency on tasks involving interdependent and holistic thinking (Uskul, Kitayama, & Nisbett, 2008). These cultural tasks may also be reflected by diverse patterns of neural responses to similar types of situations or problems among members of different cultures, such as during cognitive and perceptual tasks (Cheon, Tang, Chiao, & Tang, 2018; Hedden, Ketay, Aron, Markus, & Gabrieli, 2008), empathizing or reacting to the distress of others (Cheon et al., 2013), and self-relevant processing and social cognition more broadly (Chiao, Cheon, Pornpattananangkul, Mrazek, & Blizinsky, 2014; Chiao & Cheon, 2012; Chiao, Cheon, Pornpattananangkul, Mrazek, & Blizinsky, 2013).

Thus, one function of culture is to serve as a guide for how one is “supposed to behave.” Based on social categorization theory (Turner, 1991), such expectations and stereotypes about the behavior of typical members of one’s group serves as a normative standard for one’s own conduct and thinking. Given that social identification and reliance on ingroup stereotypes as a guide for regulating one’s thoughts and behavior is especially likely to occur in the face of uncertainty (Hogg & Abrams, 1993; Hogg, Adelman, & Blagg, 2010; Kruglanski, Pierro, Mannetti, & De Grada, 2006), representations of one’s heritage culture (e.g., symbols, icons, practices) may critically functions as a guide or reminder for adaptive behavior during epistemic insecurity and uncertainty.

Psychological consequences of disrupting this function by culture mixing

Culture mixing may disrupt these epistemic properties of heritage cultures, thereby undermining or loosening perceived norms or conventions about how one is supposed to think and behave. Representations of culture can serve as a signal or prime that activates appropriate

cultural knowledge and corresponding cultural tasks (Oyserman & Lee, 2008; Wong & Hong, 2005). Accordingly, encountering signals and representations of multiple cultures simultaneously may activate multiple implicit mandates or standards for cognition and behavior that may not necessarily be congruent, such as cues that implicitly promote both individualistic and collectivistic values. Another implication of a culturally-diverse environment is that people must navigate and enact cultural tasks that may be novel, unfamiliar, or even in opposition to those promoted by one's heritage culture. Consequently, culture mixing may create ambiguity and indecision regarding what to think, what to do, and about oneself, ultimately serving as a source of epistemic uncertainty that produces defensive or motivated rigidity in thinking and behavior.

The central relationship between culture mixing and such epistemic concerns is supported by a growing body of research linking culture mixing to the Need for Cognitive Closure (NFC). NFC reflects a desire for a firm and definitive answer or outcome compared to remaining in a state of uncertainty or ambiguity (Kruglanski et al., 2006). In studies of intercultural contact, maintaining a higher level of NFC has been associated with increased tendencies towards cultural rigidity and unwillingness to deviate from culturally-conventional patterns of behavior, such as solving problems in a manner that is characteristic of the immediate cultural context one is situated in (Chao, Zhang, & Chiu, 2010). Exposure to culture mixing, such as the juxtaposition of Chinese or English text with images from the other culture, has also been identified to heighten NFC among people with low identification with the other culture (e.g., perceiving it as more foreign or incompatible) (Morris et al., 2011).

Notably, NFC is among the most frequently examined moderators of responses to culture mixing, such that people who are more tolerant or open towards uncertainty, unpredictability, and ambiguity are less likely to exhibit exclusionary or aversive responses to various forms of culture mixing. For instance, people with higher levels of NFC are less tolerant of culture fusion and more motivated to categorize culturally-fused items into a single culture rather than as a hybrid (de Keersmaecker et al., 2016). NFC has also been associated with increased feelings of disgust towards culturally-fused items (Cheon et al., 2016). Individual differences in NFC may not only moderate immediate reactions to culture mixing itself, but also downstream psychological consequences of exposure to mixing. Exposure to culturally-diverse experiences has been associated with receptiveness to novel ideas and perspectives, yet this tendency for culturally-diverse experiences to open minds may be hampered by high NFC. For example, a

state of heightened NFC induced by time pressure can attenuate the effect of richer prior multicultural experiences on adoption of ideas from foreign origin (Leung & Chiu, 2010). Likewise, culture-mixing via superimposition promotes acceptance of policy changes in organizations (i.e., how salaries are determined), yet this open-mindedness resulting from mixing was only observed among those exhibiting low NFC (Fu & Chiu, 2007).

Yet exposure to culture mixing may not always produce defensive rigidity or conventionalism. Under more integrative or open-minded contexts, the disruption of culturally consistent or normative cues for cognition and behavior conversely stimulate styles of thinking that may be less normative or culturally-constrained. Further supporting the notion that heritage cultures provide self-guides for thought and behavior, encountering cultural mixtures may also enhance creativity. Given that culturally-relevant situations and representations prime cultural values, goals, and tasks (Hong et al., 2000; Oyserman & Lee, 2008), simultaneous exposure to multiple cultures through mixing may signal a need or pressure to operate beyond the mandates and norms conventional to one's culture. Thus, one consequence would be a pattern of information-processing and problem-solving that may be less constrained by existing schemas or self-stereotypes linked to one's heritage culture, and its corresponding cultural tasks. Prior research has suggested that exposure to foreign peoples and cultures does indeed engender creativity, by fostering opportunities to deliberate and reconcile differences between own- and foreign cultures (Leung et al., 2008; Maddux & Galinsky, 2009). Analogous to these effects of intercultural contact, exposure to diversity during intergroup contact with people that could be categorized in multiple ways or counter-stereotypic behaviors has also been linked to increased processing to reconcile inconsistencies, avoid simple structures and stereotypes, and enhanced cognitive flexibility (Crisp & Meleady, 2012; Crisp & Turner, 2011; Hall & Crisp, 2005).

Likewise, exposure to culture mixing can also enhance creative thinking and performance. Culture mixing in the form of sequential presentation, simultaneous presentation, superimposition, and fusion between heritage and foreign cultural elements have all been associated with heightened creativity on diverse outcomes, such as semantic tasks, storytelling, generating novel uses for mundane items, and increased acceptance of organizational policy changes (Cheng et al., 2011; Fu et al., 2016; Leung & Chiu, 2010). Conversely, perceived creativity may also be a determinant of acceptance of culturally-mixed products (Peng & Xie, 2016).

Although most of the prior research on culture mixing and creativity has revealed a positive relationship, these findings are at odds with studies suggesting that reminders of culture mixing should increase exclusionary responses, perceptions of cultural incompatibility, and preferences for monocultural categorization and cultural conventionalism (Chiu et al., 2009; de Keersmaecker et al., 2016; Morris et al., 2011; Torelli et al., 2011). One factor that may reconcile these discrepant responses to mixing is open-mindedness. Individuals who are willing to approach culture mixing with a less reflexive, less defensive, but a more contemplative and learning-oriented mindset may be likely to experience more integrative responses that engender creativity and versatility in knowledge in response to mixing (Chiu et al., 2011; Chiu & Cheng, 2007; Leung et al., 2014). Similarly, exposure to diversity during intergroup perception and contact is more likely to generate cognitive flexibility and creativity when the motivation and ability to reconcile stereotypic inconsistencies are available (Crisp & Turner, 2011). Supporting this idea, encountering cultural mixing (simultaneous presentation or superimposition) can undermine the benefits to creativity typically resulting from mixing when concerns about foreign intrusion and contamination are salient. Yet, creative performance of individuals exhibiting higher levels of openness to experience are less disrupted by even intrusive forms of culture mixing (Chen et al., 2016).

Culture as Social Identity Marker

Support for this function of culture

Another critical function of culture is as a marker or identifier of group membership. Humans are characterized by obligatory interdependence – relying on cooperation, sharing, and coalitions with ingroup members as a primary adaptation for survival (Brewer, 2004). Managing cooperation and coordination with other group members was contingent on effective ability to categorize and distinguish ingroup from outgroup members, given that indiscriminate prosociality and cooperation would have made the ingroup susceptible to confusion with and exploitation by outsiders (Brewer, 1999; Kurzban & Leary, 2001).

Markers of shared group membership (even arbitrary ones) are critical for facilitating categorization of ingroup members from outgroups (Brewer, 1999; Efferson, Lalive, & Fehr, 2008). Given that knowledge of shared group membership is key for generating expectations of

favorable treatment and reciprocation (Yamagishi, Jin, & Kiyonari, 1999), social identity markers also promote favoritism and coordination with those who share or display similar markers (Efferson et al., 2008; Richard, Boyd, & Richerson, 2003). As such, cultural symbols, products, and practices such as language, dress, food, and adherence to proscribed boundaries of conduct also function as essential indicators or reinforcers of shared social identities and motivations to advance the welfare/standing of one's cultural group.

This is clearly reflected in studies demonstrating the effect of incidental exposure to one's flag, a simple yet unambiguous representation of shared (national or regional) identity and culture, on cohesion and prosociality. Exposure to such cultural symbols have been associated with increased nationalism/regionalism, helping behaviors towards the ingroup, and preferences for cultural products (e.g., food) of the ingroup relative to foreign ones (Butz, 2009; Guéguen et al., 2017). Similarly, collective threats from hostile outside forces can also bolster use of these makers of shared group membership and solidarity, such as increased public displays of the American flag after the 9/11 terrorist attacks in the United States (Skitka, 2005).

Psychological consequences of disrupting this function by culture mixing

What happens when a cultural identity marker is intermixed with elements of a foreign one? When such culture mixing occurs, the integrity and fidelity of the marker will be compromised, rendering it less useful as a reminder or reinforcer of shared social identity. Immediate reactions include negative affective responses, such as aversion and feelings that generate rejection (Yang et al., 2016). One response that seems especially pronounced for culture fusion compared to other forms of culture mixing is disgust. Consistent with the perspective that representations of heritage culture function as identity markers, the direct fusion and blending of elements of ingroup and outgroup identity markers (rather than their simultaneous, yet separate presentation) should create the greatest threat of confusion and potential exploitation of the ingroup by outsiders. Thus, culture fusion should be most likely to be perceived as a form of social contamination, which like physical contamination, should also activate the disgust evaluation system (Rozin, Haidt, & Fincher, 2009; Tybur, Lieberman, Kurzban, & DeScioli, 2013).

This hypothesis was tested in a series of studies by Cheon and colleagues (2016), which presented participants with images that involved representations of their heritage national culture

(i.e., symbolic and historic of the United States), thematically-matched representations of a foreign culture (i.e., China), side-by-side presentation of heritage and foreign cultural representations, or single pure monocultural versions of the images. Across all studies, the authors observed that participants exhibited the greatest levels of disgust for the culturally-fused images, even when compared to images that fused two distinct representations from one's heritage culture (monocultural fusion), which ruled out the possibility that disgust elicited from culture fusion is simply a response to improper alterations or defacing of cultural/historical icons.

Further supporting the relationship between social identity concerns and aversion towards culture fusion, one's magnitude of identification with heritage relative to other cultures is a major determinant of how people react to culture mixing. Although culture fusion elicited stronger perceptions of contamination than other presentations of cultural images (e.g., side-by-side, monocultural), this response was especially pronounced among individuals who identified more strongly with their heritage national culture (patriotism) (Cheon et al., 2016). Likewise, stronger identification with one's culture is also associated with greater implicit prejudice against cultures that intrusively mix with one's heritage culture (Shi, Shi, Luo, & Cai, 2016).

Furthermore, viewing the fusion of two foreign cultural icons elicited more disgust than seeing the two foreign icons presented simultaneously, yet participants' level of identification with host culture was irrelevant for moderating disgust with fusion involving foreign cultures (Cheon et al., 2016). This suggests that identification with one's heritage culture is a determinant of aversion to forms of mixing that alter the integrity of markers of one's own social identity rather than an aversion to more generalized confusion about the purity of markers that distinguish social groups. Given that culture fusion may be perceived as a violation of purity of identity makers and as a form of contamination, one method to increase tolerance of fusion may be to mitigate defensiveness about protecting the purity of cultures. Indeed, when concerns about maintaining the purity or authenticity of cultural experiences are reduced, participants exhibited heightened willingness to be exposed to the fusion of cultures (Cho et al., 2017).

Besides one's level of identification with heritage culture, one's conceptualization and identification with the intruding foreign culture, or the relationship between cultures more broadly, may also shape reactions to culture mixing. Among members of an Asian society with historically strong Western influences, such as Hong Kong, exposure to mixing of Western and Eastern cultural representations is especially likely to elicit the need for closure among

participants expressing low identification with Western culture (Morris et al., 2011), which may increase the perceived incompatibility between the cultures. Similarly, experiencing balance (versus conflict) between one's local/regional cultural identity and identity as a member of a broader globalized culture is proposed to promote more positive and inclusionary responses to culture mixing (Harush, Lisak, & Erez, 2016). Supporting this proposal, salience of polycultural ideologies that portray intercultural influences as a key element of culture has been associated with increased preferences for culturally-mixed experiences (Cho et al., 2017)

Investigations into the relationship between culture mixing and intergroup processes also contribute to the proposal that culture fusion disrupts the social categorization and identity reinforcing functions of culture. If culture mixing poses the threat of blurring the boundaries demarcating the ingroup from potentially exploitative outgroups, then exposure to culture mixing should subsequently increase attempts to differentiate members of distinct cultural groups and heighten intergroup biases. Supporting this prediction, endorsing a polycultural ideology of culture and intercultural relations is associated with more tolerant and positive attitudes towards people of foreign origin, even when adjusting for the role of other potentially confounding individual differences (e.g., national identification, social dominance orientation) (Bernardo et al., 2013).

Culture mixing has indeed been shown to influence intergroup bias. Yet this relationship appears to be especially dependent on the type of mixing occurring. Intrusive forms of culture mixing in which a foreign cultural element 'invades' a heritage cultural element through superimposition or fusion may be the particularly disruptive to the identity bolstering function of cultural icons (Cheon et al., 2016; Hong & Cheon, 2017; Yang et al., 2016), leading to increased intergroup bias. For instance, exposure to superimposition of foreign representations on heritage ones accompanied by slogans that increased the cultural salience of the stimuli was associated with increased implicit prejudice against the intruding cultural group, an effect enhanced by greater identification with one's heritage culture (Shi et al., 2016).

On the other hand, more harmonious and integrative forms of culture mixing may produce a different pattern of intergroup responses. A key requirement for harmonious mixing may be the maintenance of the original meanings and identities associated with manifestations of heritage culture. For instance, in the context of culture mixing based on linguistic translations, brand name translations that maintain the original semantic meaning from one culture, yet

phonetically resemble the language of another culture (phonsemantic translation), may be favored over exclusively semantic or phonetic translations (Keh, Torelli, Chiu, & Hao, 2016). Accordingly, culture mixing in the form of sequential presentation of thematically similar elements from two separate cultures, which implies less intercultural incompatibility or intrusion than simultaneous or fused presentation, can subsequently lead to reduced intergroup bias in the form of stereotyping and discrimination (Tadmor, Hong, Chao, Wiruchnipawan, & Wang, 2012).

As mentioned earlier, one notable consequence of exposure to the juxtaposition of two distinct cultures is heightened attention towards contrasting features of the two cultures, perceived cultural incompatibility, and increased expectations that people from these respective cultures will think and behave in a culturally-stereotypic manner (Chiu et al., 2009; Peng & Xie, 2016; Torelli et al., 2011). Although this phenomenon is typically described as operating through cognitive mechanisms, it may potentially involve motivational processes as well, given that perceived compromise in the usefulness of markers for social categorization may produce compensatory heightening of needs or goals to identify differences between people presumed to originate from different cultural groups. Future research is needed to test for such motivational contributions to perceived cultural incompatibility and stereotypicality following exposure to culture mixing.

Culture as a Buffer against Psychological Threats

Support for this function of culture

Finally, culture serves as a powerful buffer against diverse psychological threats and insecurities. Much of human social cognition and behavior can be conceptualized as ultimately striving to fulfill basic psychological needs, such as belonging, control, purpose, meaning, or epistemic security (Baumeister & Leary, 1995; Dunning, 2001; Greenberg et al., 1990; Heine, Proulx, & Vohs, 2006). Identification with a culture (especially native or heritage culture) provides unparalleled opportunities for the satisfaction of these needs. This is especially evident in research that demonstrate that threats and disruptions of core psychological needs, such as meaning and existential security may elicit compensatory bolstering of one's cultural values, practices and worldviews, and derogation of those who oppose them (Greenberg et al., 1990). This motivated defensiveness of one's culture also extends to icons, symbols and identity

453 markers, such that mortality salience (an existential threat), motivates the protection and
454 maintenance of cultural norms and icons (Greenberg, Porteus, Simon, Pyszczynski, & Solomon,
455 1995; Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, 1989).

456 Further evidence for the threat-buffering function of heritage cultures comes from an
457 emerging body of research on cultural attachment, which postulates that analogous to attachment
458 processes involving caregivers (Bowlby, 2005), one's culture can serve as an attachment figure
459 and a secure base for exploration and contact with unfamiliar cultures. Notably, cultural
460 representations and symbols can act as reinforcers of cultural attachment security and mitigate
461 threats and insecurities. For instance, subliminal exposure to images of heritage cultural icons
462 (versus control images) can dampen physiological markers of arousal typically elicited in
463 response to explicitly threatening or disturbing stimuli (Yap, Christopoulos, & Hong, 2017).
464 Likewise, acculturation and immersion in a foreign culture can be an exciting, yet also a stressful
465 experience for sojourners. A sojourner's degree of positive affective transfer from symbols of
466 their native culture to an unrelated stimulus was associated with lower perceived discrimination
467 and acculturation stress when adjusting to a new culture (Hong, Fang, Yang, & Phua, 2013).
468 Importantly, the authors proposed this tendency to externally transfer positive associations from
469 symbols of one's culture reflects a broader attachment with abstract elements of one's culture
470 rather than an attachment to merely other people from one's culture (e.g., friends, family).
471 Additional studies have suggested that food from one's native culture can also increase feelings
472 of security. Food is a salient and ubiquitous cultural product, and can serve to compensate for
473 subjective threat or insecurities, such that experimentally-induced states of insecurity regarding
474 social and economic resources may subsequently motivate food intake, desire for high calorie
475 foods and portion sizes, as well as increased circulating levels of hormones that stimulate
476 appetite (Cheon & Hong, 2017; Sim, Lim, Forde, & Cheon, 2018; Sim, in press). Over and
477 above this generalized function of food to compensate for insecurity, consumption of foods from
478 one's heritage culture (but not foreign cultures) is associated with increased feelings of relational
479 security and openness to interacting with people of a foreign culture among sojourners (Fu,
480 Morris, & Hong, 2015).

481
482 *Psychological consequences of disrupting this function by culture mixing*

Patterns of exclusionary responses to culture mixing could be attributed to the disruption of the threat buffering qualities of heritage cultural representations and symbols when mixed with foreign elements. When psychological needs typically protected by one's culture are undermined, cultural mixtures may be more likely to be rejected. Studies examining the relationship between mortality salience (an existential/meaning threat) and responses to culture mixing provide initial support for this proposal. Torelli and colleagues (2011) exposed participants to monocultural or culturally-mixed products (an iconic American product with either an American or Chinese brand name), in addition to exposure to a mortality salience prime (versus control). Participants subsequently evaluated a proposed marketing plan that involved mixing a stereotypically American product (Nike shoes), with Arabic cultural elements. While there was no effect of the mortality salience manipulation on evaluations of the marketing plan after monocultural exposure, participants who had earlier been exposed to a culturally-mixed product evaluated the marketing plan more negatively under mortality salience (relative to control). Similar patterns were reported by Leung & Chiu (2010), who revealed that existential threats from mortality salience undermined the typical tendency for multicultural experiences to increase creative receptivity to ideas from foreign cultures.

Another way in which threats may promote intolerance of culture mixing is through the intergroup processes inherently implied by intercultural contact. Culture mixing and contact involves receptiveness and openness to accept concepts and people belonging to an outgroup. The experience of threat and insecurity is a key ingredient in prejudice, xenophobia, and intergroup conflict (Cheon & Hong, 2015; Riek, Mania, & Gaertner, 2006), such that biological-predispositions towards increased sensitivity to threats (e.g., genetic polymorphisms) may also contribute to individual variations in intergroup bias (Cheon, Livingston, Chiao, & Hong, 2015; Cheon, Livingston, Hong, & Chiao, 2014). Likewise, during situations involving heightened threat, culture mixing may appear to be even more aversive, contaminating and worthy of rejection compared to periods of relative security. Although the relationship between subjective threat and intergroup bias has been studied extensively, there have been limited investigations involving attitudes and responses to towards culture mixing as a core outcome, rather than intergroup attitudes per se. This may be an important area for future research that could provide novel insights into how the ever-changing climates of societal, economic, and geopolitical security may shape public attitudes towards culture mixing.

Future Directions

The study of culture mixing reveals it to be a key process and manifestation of cultural diversity, particularly in a globalizing world with increased opportunities and systems that promote intercultural influence and contact. Despite the progress made in understanding the nature of culture mixing, the diverse psychological consequences it can produce, and the contextual and individual factors that moderate it, some central questions still require addressing. Here, I propose some potentially promising directions for culture mixing research that may be especially useful for contextualizing and explaining the psychological consequences of globalization.

Cultural Influences on Responses to Culture Mixing

Although responses to culture mixing has been studied among diverse samples across North America, Europe, and Asia, there have been limited research directly examining how local cultural values and norms may influence reactions to cultural mixtures. Cultural tightness is one candidate cultural dimension that may be especially relevant and promising. Tightness (relative to looseness) refers to the extent to which a culture enforces social norms and sanctions violations of these norms (Gelfand et al., 2011). Strict adherence to prescribed social norms serves as a mechanism for ensuring coordination and cohesion among members of a culture. Given the potential threat that culture mixing poses for undermining traditional and established scripts or guidelines for proper ways of acting and thinking, tight cultures (e.g., Singapore, China), may be especially intolerant of forms of culture mixing that may produce ambiguity and confusion regarding normative behavior. Furthermore, tightness of a culture is also positively associated with historical ecological and societal threats within a region (Gelfand et al., 2011; Harrington & Gelfand, 2014). Cultures situated in such regions may also be more antagonistic to culture mixing that may hamper the threat and insecurity-buffering qualities of their cultural representations. Future cross-cultural comparisons could provide a test of whether acceptance of varying forms of culture mixing and their psychological consequences differs across societies based on these cultural dimensions.

Exporting versus Importing Influence during Culture Mixing

Cultural contact and mixing does not occur symmetrically. Often, one culture acts as the ‘influencer’ that introduces or infuses its elements into another culture. Most of the prior studies on culture mixing have examined reactions to foreign cultural inflows or intrusion into one’s own culture. Although unwanted cultural inflows that alter the forms and meanings of representations of heritage culture may be perceived as a contaminating threat to cultural identity, watching outflows of one’s own culture entering and changing foreign cultural representations may conversely be welcomed. Based on the threat-buffering functions of culture, perceived strengthening or dominance of foreign worldviews in the face of weakened support for one’s own cultural worldviews may be a profound existential and meaning threat (Greenberg et al., 1990; Heine et al., 2006). However, knowledge that key reflections and representations of one’s own culture are influencing the cultural worldviews and practices of outsiders may act as a powerful affirmation of the legitimacy or superiority of one’s culture.

Limited studies have directly tested responses to culture mixing involving outflows of heritage culture versus inflows of foreign influences. In one notable example, Cui and colleagues (2016) demonstrated that culture fusion involving an American symbol (bald eagle) entering the space of a Chinese-style product (Chinese porcelain plate) was evaluated more positively than a Chinese symbol (dragon) entering the space of an Western-style product (Western silver plate). Given that globalization and intercultural contact involves not only concerns regarding foreign cultural inflows, but also the spreading and adoption of aspects of one’s own culture abroad, future research in cultural mixing would benefit from further investigations of this critical and ecologically pertinent boundary condition.

Role of Status Asymmetries in Culture Mixing

Responses to culture mixing also involve negotiating potential asymmetries in status and power between the cultures involved. Although culture mixing involving cultural outgroups perceived as competitive or inferior in status may be resisted, mixtures with cultures considered as ideologically congruent or high status may instead be welcomed. While fusion between elements of two cultures may be perceived as generally more disgusting than simply seeing these cultural elements simultaneously (Cheon et al., 2016), culture fusion is considered to be especially disgusting when it involves a culture evaluated unfavorably compared to one that is more admired (Cheon, Melani, & Hong, unpublished manuscript). People seek to maintain

positive regard and esteem for their social identities (Luhtanen & Crocker, 1992; Tajfel & Turner, 1979). Given the function of culture and its symbols and practices in reinforcing shared social identities, the perceived inferiority or superiority of the foreign culture involved in a mixture is likely to be a strong determinant of inclusionary/exclusionary responses to mixing.

In one study on the role of perceived relative status between cultures, Chinese shoppers who had just shopped in a high status Chinese store exhibited more negative reactions to food items involving culture fusion (e.g., a rice burger), compared to Chinese shoppers who had shopped in lower status Chinese stores or culturally non-iconic stores (e.g., Western stores) (Kwan & Li, 2016). Shopping in higher status Chinese stores may have increased the perceived status of their own culture among these Chinese shoppers, which subsequently may have increased resistance to culture fusion in favor of more pure Chinese brands and products. On the other hand, Europeans expressed more negative responses to such culturally-fused products after shopping in lower status Chinese stores, which may have served to reify or affirm perceptions of superior relative status of their own culture. Despite the profound role that concerns about relative power, status, and hierarchy have on the unfolding of intergroup relations and processes (Cheon et al., 2011; Sidanius & Pratto, 1999; Tajfel & Turner, 1979), these factors have received surprisingly limited attention in the study of culture mixing, yet may be promising avenues for future investigation.

Conclusion

As intercultural contact and mutual influences of cultures accelerate with globalization, representations and reminders of culture mixing will become an increasingly inescapable reality of our daily lives. Cultures are not static, fixed, or homogenous, as reflected by observable recent cultural changes and corresponding shifts in the psyches and behaviors of the populations situated within them (Hamamura, in press; Varnum & Grossmann, 2017), and culture mixing represents the key process at the heart of cultural change (Morris et al., 2015). Consequently, efforts to understand culture and its influence on human cognition and behavior in a globalizing world will be increasingly reliant on polycultural approaches and the study of cultures as mixtures. Globalization and intercultural contact may produce more complicated social and cultural landscapes, but the study of culture mixing offers promise for identifying how this

606 complexity of cultural diversity can be leveraged to promote more open, innovative and resilient
607 societies, rather than more intolerant and closed-minded ones.
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