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# The Role of Culture in Creative Cognition

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## Abstract

In this chapter, we propose the complementary model of culture and creativity (CMCC) to account for three pairs of contrasting forces that characterize the manners in which individuals manage their cultural experiences and that produce impacts on creative pursuits. We theorize three bidimensional psychological processes that explain the effects of culture on creativity: (a) stereotyping versus destabilizing cultural norms, (b) fixating on one cultural mindset versus alternating between cultural frames, and (c) distancing from versus integrating cultures. We contend that a broader and diversifying cultural experience offers an impetus to break down cultural confines, to oscillate between a variety of cultural perspectives, and to synthesize a multitude of ideas from different cultures, which can bring about discernible enduring benefits to creativity. We discuss the CMCC by putting it in the perspective of the state-of-the-art empirical findings on culture and creativity.

**Keywords:** complementary model, cultural stereotypes, fixation, alternation, cultural mindset, cultural distancing, cultural integration, culture-creativity nexus

Being asked during an interview why some products are great, the late CEO of Apple Inc., Steve Jobs, put it this way:

Creativity is just connecting things. When you ask creative people how they did something, they feel a little guilty because they didn't really do it, they just saw something. It seemed obvious to them after a while. That's because they were able to connect experiences they've had and synthesize new things. And the reason they were able to do that was that they've had more experiences or they have thought more about their experiences than other people. Unfortunately, that's too rare a commodity. A lot of people in our industry haven't had very diverse experiences. So they don't have enough dots to connect, and they end up with very linear solutions without a broad perspective on the problem. The broader one's understanding of the human experience, the better design we will have. (The Wired Interview, 1993)

Jobs talked about creativity as all about experience. A broader, connected human experience provides an impetus to break down existing conceptual boundaries, to oscillate between a variety of perspectives, or to synthesize a multitude of ideas, which are largely creativity-supporting processes. The Apple iPod provides an illustrative

example of how a broader understanding of experience creates the revolutionary “Walkman of the twenty-first century” (Simon & Young, 2005). Officially released in October 2001, Jobs described iPod as a device that puts “1,000 songs in your pocket” with its 5 GB hard drive (Hornby, 2013). iPod is a creation that breaks away from the set concept of the then big and clunky Walkman. It was designed with the vision of providing huge storage capacity as an external disk drive to play music, which showed a flexible switching of perspectives by engineering the device as both a music player and a digital storage disk. Ranging from its engineering to aesthetic design to user interface, iPod exemplifies creative idea synthesis that recombines seemingly incompatible ideas in ways most people would not even imagine.

In this chapter, we propose a theoretical framework to put into perspective how creativity can be instigated by cultural experience, a form of experience that is of paramount importance to human existence. We posit that a broader, connected cultural experience provides an impetus to break down cultural confines, to oscillate between a variety of cultural perspectives, or to synthesize a multitude of ideas from different cultures, and these processes in turn bring about discernible enduring benefits to creativity.

### The Complementary Model of Culture and Creativity

We propose a theoretical model to explain the role of culture in creativity (see Figure 1.1). The complementary model of culture and creativity (CMCC) examines three pairs of contrasting forces that describe the ways how individuals manage their cultural experiences can have an impact on their creative pursuits. Based on the model, we argue that the effects of culture on creativity are influenced by three bidimensional psychological processes: (1) stereotyping versus destabilizing cultural norms, (2) fixating on one cultural mindset versus alternating between cultural frames, and (3) distancing from versus integrating cultures. We further posit that destabilizing cultural knowledge, alternating between cultural frames, and integrating multiple cultures are more creativity enhancing, in that they serve to confer greater advantage to stimulate generation of more unconventional and novel ideas. Conversely, the opposing tendencies of stereotyping cultural knowledge, fixating on a single cultural frame, and distancing from foreign cultures are commonly understood as more creativity hampering.

Nevertheless, we want to highlight that those relatively creativity-hampering orientations remain useful in the creative process. Creativity is often culturally embedded to operate with a consensual basis (Chiu & Kwan, 2010). Therefore, when individuals access the stereotypical creativity-related norms in the culture or dwell on the local cultural mind frame, the salient cultural knowledge they attend to could still provide an important reference point for idea generation and selection.

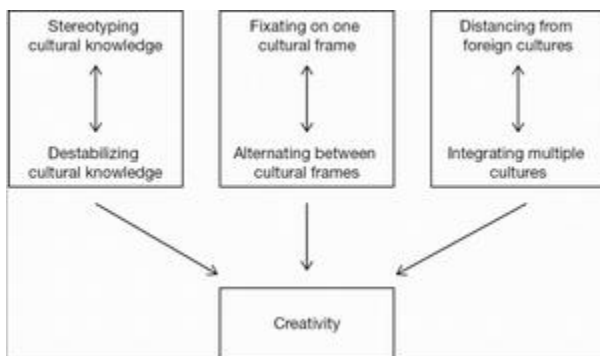


Figure 1.1. Complementary model of culture and creativity (CMCC).

### **Stereotyping Versus Destabilizing Cultural Knowledge**

As a form of well-learned stereotypes or generalized expectations, knowledge about a culture can become deeply ingrained and automatized. Socializing into the stereotypic conventions and mandates of a culture facilitates cultural members' sense making and interpersonal coordination, because they highlight the culturally normative ways of thinking and behaving (Chiu & Hong, 2006). However, as much as culture-specific knowledge aids psychological and social coordination, it instills a sense of structure that can constrain or impair generative and creative thoughts. We, therefore, argue that destabilizing the established and habitually accessible ways of thinking and acting that are predominant in a given culture confers the capacity to break set and to exercise flexible thinking among individuals (Nijstad, De Dreu, Rietzschel, & Baas, 2010).

### **The Creativity-Enhancing (Creativity-Hampering) Effect of Destabilizing (Stereotyping) Cultures**

It is widely understood that stereotypical schemas commonly found in a given culture are effective and efficient heuristics meant to help people make sense of frequently occurring events in that culture (Rosch, 1978). Efficiency aside, thoughts invoked by stereotypes usually lack originality. Not surprisingly, individuals who rely on stereotypical heuristics under time pressure or cognitive load are more likely to have their creativity constrained (Antes & Mumford, 2009; De Dreu, Nijstad, Baas, Wolsink, & Roskes, 2012). Even experts were found to be less creative in their subject domain, presumably because they have developed heuristic solutions or stereotypical views through their extensive experience, and they kept fixating on them even in novel situations (Wiley, 1998).

Even with a clear goal of generating truly original ideas, creative work is often anchored on existing schemata normally experienced in everyday life. When passenger rail trains were first implemented in the United States in the 1830s, they were modeled directly after horse-drawn stagecoaches with conductors sitting outside the train cabin. Although directly transferring the design of the horse-pulled stagecoach to the rail train had facilitated implementation of railway travel, many conductors sitting outside the train cabin fell off and were killed at the time (Ward, 2007; White, 1978). This example is in line with what Ward and colleagues (2002) proposed as the path of least resistance. In a given culture, many paths of least resistance dominate different domains of thoughts. During idea generation many people are susceptible to these paths of least resistance by first retrieving typical instances of a known concept and subsequently attempting to modify them (Ward, Patterson, Sifonis, Dodds, & Saunders, 2002). For instance, participants who were asked to imagine animals from other planets with "wings" tended to also include "feathers" rather than "fur"; similarly, the feature "scales" also coincided highly with "fins" and "gills." These findings suggest how people would conform to the stereotypical schemas of bird and fish (Ward, 1994).

Our culture has made accessible many stereotypes, schemas, and exemplars to provide structure and predictability, but stereotype-driven thoughts can often constrain generative and creative thinking. It follows that countering these predominant stereotypes in the culture can potentially boost creative functioning. One way to destabilize or loosen the constraints of norms, stereotypes, worldviews, and practices that are seldom challenged in a given culture is through adequate immersion in multiple cultures. It was theorized that multicultural diversity could foster the creative process that brings into being something both novel and useful by challenging and resolving stereotypical expectations (Crisp & Turner, 2011; Leung & Chiu, 2008, 2010; Leung, Maddux, Galinsky, & Chiu, 2008; Maddux & Galinsky, 2009).

In line with the basic tenet in the creative cognition approach (Finke, Ward, & Smith, 1992; Ward, Smith, & Vaid, 1997), the acquisition of different cultural knowledge systems through extensive multicultural exposure is key to destabilizing bounds of culture. We argue that destabilizing cultural bounds is initiated by bringing together disparate ideas from different cultural sources, giving multicultural individuals a broader knowledge base at their disposal to experiment with creative pursuits (Cheng, Sanchez-Burks, & Lee, 2008; Chiu, Leung, & Hong, 2010; Leung et al., 2008). It follows that when structured and routinized mindsets are destabilized and disrupted, multicultural navigators might start to appreciate seemingly incompatible perspectives and become more prepared to explore and exploit the interrelations of incongruent concepts from different cultures (Maddux & Galinsky, 2009). This can further promote their integrative complexity—the capacities to differentiate and integrate competing cultural elements (Suedfeld, Tetlock, & Streufert, 1992; Tadmor & Tetlock, 2006), as well as their conceptual expansion ability—the capacity to broaden conceptual boundaries of an existing concept by combining it with other seemingly irrelevant concepts (Ward et al., 1997). Mastering these creativity-supporting processes can strengthen the generalized ability to think creatively across domains (Leung & Chiu, 2010).

Related arguments were put forward by Crisp and Turner (2011) in their categorization-processing-adaptation-generalization (CPAG) model. The central proposition of the model predicts that if social or cultural diversity is experienced under the right conditions, which go in the order of (a) the diversity experience challenges existing stereotypical expectations (i.e., categorization), (b) the perceivers are motivated and competent to resolve the stereotypical inconsistencies through suppressing stereotypes and producing generative thoughts (i.e., processing), and (c) the perceivers repeatedly engage in such inconsistency resolution processes (i.e., adaptation), then (d) they will be capable of developing generalized cognitive flexibility to spontaneously inhibit stereotype-based knowledge and exhibit generative thinking in future diversity encounters (i.e., generalization).

To elaborate on the CPAG model, the categorization component concerns how the diversity experience categorizes individuals (e.g., majority vs. minority group members). Such categorization makes apparent the categorized group (e.g., the minorities) as being inconsistent with the dominant norm and provokes deeper cognitive processing to resolve the inconsistency. For example, the research on minority opinions offers support that categorization increases inconsistency salience, which then triggers more divergent thinking and detection of novel solutions (e.g., Nemeth, 1986; Nemeth & Kwan, 1985; Nemeth & Wachtler, 1983). In the face of categorization, individuals must have the cognitive resources and motivation to engage in the processing of inconsistency resolution and to proceed to the subsequent stages. Otherwise, they will focus on one categorical frame without seeing the need to resolve inconsistencies. Notably, although both categorization and processing are effortful processes, they can become cognitively easier with adaptation or repeated engagement. Individuals can adapt to repeated resolution of stereotypical inconsistencies by automatically inhibiting stereotype activation and inducing divergent thought process to, say, form less biased individuated impressions (Hall & Crisp, 2005; Hutter & Crisp, 2005). Finally, generalization occurs when the process of inconsistency resolution is repeatedly engaged over time and to be applied to other domains. It is through the generalization process that multicultural individuals achieve higher levels of cognitive flexibility and become more adept at generative thinking across multiple domains of behavior and judgment (Crisp & Turner, 2011).

## **Empirical Evidence**

The creative benefits of breaking away from the stereotypic and structured ways of thinking and behaving in a culture are evidenced from both historiometric and psychometric research. According to Simonton (2008), historiometric investigations are conducted at the aggregate or individual level. At the aggregate level, creative activities in a given nation or civilization are analyzed over historical time. For example, analyses revealed that countries tended to experience creativity influx after the periods they underwent nationalistic revolts and

rebellions (e.g., the Golden Age of Greece appeared after the revolt against the Persian Empire and the Greek civilization was fragmented into different city-states; Simonton, 1975), they opened their civilization to foreign immigrants (e.g., Chinese Buddhist monks, Korean artists, and Christian missionaries entered the Japanese territory; Simonton, 1997, 2000), or they had their citizens travel or study in foreign soils. In many of these circumstances, the inflows of foreign influences led to the emergence of a polyglot civilization within the nation-state and that often accompanied prominent creative activities among its citizens.

At the individual level, historiometric researchers seek to examine characteristics of specific creative personalities. For example, historiometric investigations of over 300 eminent twentieth-century personalities (Goertzel, Goertzel, & Goertzel, 1978), Nobel laureates (Moulin, 1955), and US scientists (Levin & Stephan, 1999) showed that most creative geniuses appeared to have been either foreign born, lived overseas, or studied abroad. Based on large databases, historiometric inquiries provide support that shaking up the structured ways of life might fuel creativity (see Chapter 3: Cultural-Historiometric Studies of Creativity, this volume).

Psychometric investigations that compare individuals' performance in creativity tests are more common in the field of psychology (Simonton, 2008). For example, both correlational and experimental studies demonstrated that individuals spending longer (vs. shorter) time living in a foreign country or experiencing joint (vs. single) culture activation (or minimal intercultural contacts) scored higher on various creativity tests that measure performance in generating original ideas or coming up with creative insights (Leung & Chiu, 2008, 2010; Maddux & Galinsky, 2009). People are often bound to familiar or frequently activated knowledge in their culture. Exposure toward or activation of foreign cultures could free them from these cultural restraints and allow them to "think outside the box."

Studies on the cognitive and emotional mechanisms underlying the multicultural experience–creativity link also support the theorization that destabilizing cultures could be creativity enhancing. In terms of cognitive process, research has shown that Caucasian American participants with richer multicultural experiences were more inclined to appropriate ideas from foreign (vs. local) cultures in a creative idea expansion task (Leung & Chiu, 2010; Study 3). The task required them to freely sample some sayings authored by American, Chinese, or Turkish scholars in order to receive inspirations for expanding a preliminary research proposition about promoting happiness. Multicultural American students were more likely to recruit Chinese and Turkish sayings, which were supposedly to be more foreign to them, than local American sayings. Another study found that those participants who obtained a higher multicultural experience score tended to spontaneously retrieve culturally unconventional gift ideas that other people in their community did not readily generate (e.g., poetry, donation in their friend's name; Leung & Chiu, 2010, Study 2). These findings attest to the creative value of destabilizing cultural conventions when people are willing to break free from their culture's normative mental sets.

In terms of emotional process, it is reasonable to imagine that destabilizing cultures could put much strain on individuals, at least during the early stage of breaking away from familiar cultural mindsets. When examining the role of emotions on creativity, Cheng, Leung, and Wu (2011) posited that (a) cognizing the juxtaposition and the accompanied dissonance of seemingly conflicting ideas from dissimilar cultures could induce negative emotions, (b) negative emotions have been shown to enhance cognitive complexity (e.g., Forgas, 2007; Isen, Daubman, & Nowicki, 1987; Sinclair, 1988), and (c) enhanced cognitive complexity is conducive for creative capability (Tadmor, Tetlock, & Peng, 2009). To test the emotional underpinning of the relationship between joint culture activation and creativity, they found that Singaporean Chinese students under the dual (vs. single) cultural exposure condition showed a reduced amount of positive emotions, which in turn promoted greater creative flexibility, thus offering partial support for the proposed meditation. In another study, they recruited Taiwanese participants who had relatively fewer multicultural experiences and a stronger degree of cultural ambivalence than Singaporeans. As hypothesized, Taiwanese participants' negative emotions significantly mediated the relationship between local–foreign cultural exposure and creative performance. Of import, participants in this study were

either exposed to a self-relevant local (Taiwanese) culture and a foreign (American) culture (i.e., the local-foreign cultural exposure condition) or to two foreign cultures (Indian and American cultures; i.e., the dual-foreign cultural exposure condition). Given that exposure to two foreign cultures did not produce the same creative benefit, it would be intriguing to consider the possibility that while foreign cultural immersion can destabilize conventions of a self-relevant local culture for harnessing its creative advantage, exposure to two foreign cultures does not pose the same destabilizing and creativity-enhancing effects if people are not actually bounded by the imperatives of these foreign cultures.

Although cultural pluralism provides a conducive environment to catalyze people's creativity by destabilizing routinized cultural conventions, the realization of this potential is largely predicated on people's receptivity to cultural heterogeneity and their ability to learn from and engage in the new culture. Openness to experience, as a relatively chronic personality disposition, supports intercultural learning and promotes integrative responses in intercultural settings (Leung & Chiu, 2010; Leung, Qiu, & Chiu, 2014). Being one of the Big Five personality traits, individual variability in openness to experience is reflected in one's tendencies to seek out and appreciate new experiences and ideas, to take risks, and to entertain alternatives (Costa & McCrae, 1992; McCrae & Costa, 1987). Intuitively, open-minded individuals should be more receptive to novel cultural experiences and more easily "let go" of well-learned stereotypic cultural knowledge. Their close-minded counterparts, in contrast, are more likely to resist inflows of foreign cultures. They fear that new ideas and practices from unfamiliar cultures will contradict and challenge established social norms and cognitive structures in the local communities, thus bringing about uncertainty and ambiguity to their everyday sense making.

Consistent with this contention, Leung and Chiu (2010) showed that openness to experience modulated the multicultural experience-creativity link, such that participants with richer intercultural contacts performed better in creativity tasks only if they were open to experience. When their European American participants were asked to generate novel uses of a garbage bag or to retrieve exemplars in the conceptual domain of "occupation," only those who reported more extensive intercultural experiences and higher openness to new experience came up with more unusual uses of a garbage bag (both in terms of number and strategy) or more normatively inaccessible occupations (e.g., dialect coach).

To demonstrate the important role of multicultural learning, in one study, Maddux, Adam, and Galinsky (2010, Study 1) randomly primed individuals with either within-culture learning experiences or multicultural learning experiences. Whereas making within-culture learning experiences salient was expected to activate routinized, preexisting, and chronically accessible responses, priming multicultural learning experiences was expected to challenge culturally constrained assumptions and destabilize habitual cognitive structures and behaviors. In another study, Maddux and colleagues (2010, Study 2) further tested the nuances of multicultural learning by priming functional multicultural learning or within-culture learning experiences, highlighting the learning of the underlying reasons or functions why people from a different culture or their own culture behave the way they do. Across both studies, results indicated that multicultural learning, in particular those experiences that involved functional learning, stimulated creative problem solving. In yet another study with a longitudinal design, Maddux, Bivolaru, Hafenbrack, Tadmor, and Galinsky (2014) recruited a sample of highly international MBA masters students and showed the practical value of multicultural engagement, which captures individuals' ability to actively engage in understanding and learning a new culture in a multicultural environment. Participants' degree of multicultural engagement raised their integrative complexity, which in turn predicted job market success in terms of increasing their professional opportunities.

Besides individuals' predispositions to endorse an open attitude toward and to learn from and engage in the new culture, it is also effective to consider how situationally induced interventions can help individuals break their mental set from accustomed ways of thinking and acting. One way to facilitate breaking of mental sets and approaching problems from multiple perspectives is to induce a dissimilarity (vs. similarity) comparison mindset.

As prior research suggested, some creativity-supporting capacities attest to whether individuals can recognize and subsequently reconcile and combine cultural discrepancies to make novel connections between ideas (Tadmor et al., 2009). A dissimilarity processing mindset can highlight cultural differences in norms and values, and it can motivate the creative processes of acknowledging and recombining discrepant cultural perspectives to bring about new insights (Cheng & Leung, 2012; see also Mussweiler, 2003; Mussweiler & Damisch, 2008). As further argued, the cultures should be distinctive enough, or of sufficiently large perceived cultural distance, in order to energize the dissimilarity comparison mindset to induce heightened creative processing (Cheng & Leung, 2012). Across two studies, Cheng and Leung (2012) showed support for the predictions that participants undergoing dual cultural primes featuring two cultures with high levels of perceived cultural distance solved more creative insight problems when they personally predisposed to or were experimentally induced to adopt a dissimilarity (vs. similarity) comparison mindset.

Another relevant line of research examined whether inducing counterstereotypical thinking, arguably an intervention to highlight differences not normally encountered in a given culture, can enhance divergent creativity (Gocłowska & Crisp, 2013). The research is based on the premise that exposure to counterstereotypes (e.g., a female mechanic) would discourage individuals to use any easily accessible knowledge, but this effect is qualified by individuals' personal need for structure (PNS; Neuberg & Newsom, 1993). If individuals feel uncomfortable abandoning stereotypic thoughts or seeing their cherished generalized expectations being challenged (i.e., those high in PNS; Hutter, Crisp, Humphreys, Waters, & Moffitt, 2009), they would react against stereotype-inconsistent information and would not harness the creative benefit. As hypothesized, the study showed that only low-PNS participants became more flexible and original in a divergent thinking task after thinking of a counterstereotypic (vs. stereotypic) target (see also Gocłowska, Baas, Crisp, & De Dreu, 2014; Gocłowska, Crisp, & Labuschagne, 2012, for similar results).

### **Fixating on a Single Cultural Frame Versus Alternating Between Cultural Frames**

It is reasonable to argue that individuals who adhere to mainly one cultural identity or have not acquired much cultural knowledge at their disposal will readily act upon or fixate on their habitual ways of thinking or behaving. However, some individuals are identified as alternating biculturals who tend to oscillate between dual cultural identities based on situational demands (LaFromboise, Coleman, & Gerton, 1993). As alternating biculturals have two or more possible ways to categorize themselves, the identity that the situation activates and deems applicable will serve to call out the identity-defining cognitive and behavioral reactions (Gocłowska & Crisp, 2014). Similarly, for those individuals who have gained extensive knowledge of two or more cultures, it is widely understood that they would exhibit cultural frame-switching—a process that depicts how bicultural or multicultural individuals flexibly alternate between cultural frames to act congruently with the meaning systems and behavioral rules salient in the situation press (Hong, Morris, Chiu, & Benet-Martinez, 2000).

Empirical evidence abounds to illustrate the effects of cultural frame-switching. For example, as demonstrated by Fu and colleagues (2007), Hong Kong Chinese biculturals could switch correspondent moral inferences to cues from American or Chinese culture spontaneously even within the same experimental session. In the last decade, the cultural frame-switching phenomenon was replicated with a multitude of dependent measures, including self-concept and values (Ross, Xun, & Wilson, 2002), behavioral decisions in economics games (Wong & Hong, 2005), attributional judgments (Benet-Martinez, Leu, Lee, & Morris, 2002; Hong et al., 2000), personality profiles (Ramírez-Esparza, Gosling, Benet-Martínez, Potter, & Penebaker, 2006), conformity of judgments (Mok & Morris, 2010b), and evaluative forecasts of others' behavior (Mok & Morris, 2011), to name just a few. We posit that alternating between cultural mind frames, as opposed to fixating on the conventionalized mental sets of a single culture, has an important role to play in promoting creative performance.



## **The Creativity-Enhancing (Creativity-Hampering) Effect of Cultural Alternation (Fixation)**

Normative understanding of creativity resides in our culture. As Morris and Leung (2010, p. 322) put it, “culture does not shape an individual’s creative behavior, as is popularly imagined, by imprinting fixed mentalities, worldviews, or talents. Culture shapes behavior largely through social norms, contexts that cue them, and motives that drive individuals to follow, ignore, or invert them.” Instead of adhering to a trait account that portrays East Asians as predisposed to conformity and Westerners to uniqueness, Morris and Leung (2010) put forward a normative account that East Asians prioritize the usefulness norm and Westerners the novelty norm (see also Lubart, 1999; Noriko, Fan, & Van Dusen, 2001).

Erez and Nouri (2010) further theorized that the cultural normative orientations toward different facets of creativity are linked to specific cultural values, with the East Asian culture’s dominant values of collectivism, high uncertainty avoidance, and high power distance supporting the expression of usefulness and the Western culture’s dominant values of individualism, low uncertainty avoidance, and low power distance supporting novelty (see also Brewer & Chen, 2007; Jones & Davis, 2000; Miron, Erez, & Naveh, 2004; Morrison & Milliken, 2003). Of import, as individuals are motivated by accountability concerns, it was found that cultural variations in generating novel versus useful ideas were accentuated in social contexts, such as working in the presence of peers or supervisors (vs. working alone; e.g., Nouri, Erez, Rockstuhl, & Ang, 2008).

Consonant with a normative approach to creativity, Miron-Spektor, Paletz, and Lin (2015) discussed how the cultural logic of face—the public-self as construed by others’ views—undermines creativity. A cultural logic is a normative syndrome that organizes a culture with a constellation of shared beliefs, values, and practices around a particular theme (e.g., face, honor, individualism), giving people a sense of coherence and logical consistency to derive meanings from being a member of the culture (see Leung & Cohen, 2011; also Triandis, 1994). Although a given culture is likely to have multiple cultural logics in operation, some logics are the more dominant organizing syndrome of the culture, and the face logic is identified as more prevailing within the East Asian culture. Specifically, Miron-Spektor and colleagues’ (2015) results showed that the face cultural logic weakens the novelty dimension of creativity, but not necessarily the appropriateness or the usefulness dimension. It is because people who are concerned with face are more likely to take the perspective of others (Liu, Friedman, Barry, Gelfand, & Zhang, 2012) and to feel more at ease with generating appropriate ideas as opposed to highly novel ideas that may threaten consensus and convention, or heighten risk and uncertainty.

Culturally normative expectations of orienting creativity toward novelty versus usefulness align with the theorizing that Western culture fosters breakthrough innovation and East Asian culture fosters incremental innovation (Herbig & Palumbo, 1996; Morris & Leung, 2010). Whereas breakthrough innovation boldly introduces more radical disruptions to existing ideas for bringing about novel inventions, incremental innovation improves current ideas or products with gradual extensions for upgrading their usefulness (Morris & Leung, 2010). Based on this perspective that emphasizes the culturally consensual norms of creativity, Chiu and Kwan (2010) commented that a fruitful way to understand the role of culture on creativity is to examine cultural differences in lay constructions of what creativity and innovation entail. Taken together, based on the normative account of creativity, we theorize that switching between normative frames of creativity is more likely to enrich idea generation than fixating on one normative orientation that narrows the scope of what constitutes creativity.

Another important research area corroborating the creativity-enhancing effect of cultural alternation or switching is bilingualism. Presumably, multicultural experiences are reciprocally linked to bilingualism or even multilingualism. An extensive exposure to multiple cultures is advantageous to the acquisition of second-language competency, and a bilingual/multilingual experience involves socializing people with speaking different languages, which is often an integral part of multicultural experiences. It was argued that bilingual individuals (who are often biculturals) are more adept at cultural frame-switching (Gocłowska & Crisp, 2014), as they were

often found to possess more superior executive control to manage conflicting information and to switch between changing task demands (Bialystok & Viswanathan, 2009).

Extant research suggests that the many cognitive benefits of bilingual experience, including creativity, stem from bilinguals keeping both of their native and second languages activated and regularly switching between the two languages (Abutalebi & Green, 2007; Bialystok, 2009; Green, 1998). Whenever bilinguals process words or semantics, they experience neurocognitive activations in both languages, a phenomenon known as parallel language activation, resulting in crosslinguistic competition where concepts of the nontarget language must be suppressed for fluent speech production (Blumenfeld & Marian, 2013; Giezen, Blumenfeld, Shook, Marian, & Emmorey, 2015). This puts a greater demand on bilinguals' attentional and inhibitory control and hence sharpens these control processes, so that they can suppress coactivation of both the target and nontarget languages (Starreveld, De Groot, Rossmark, & Van Hell, 2013).

In addition, research identified that switching between languages contributes to both syntactic and lexical flexibility. Syntactically, bilinguals are more aware of the languages' structural flexibility (e.g., the form change of verb in Spanish depends on emotional state, personal volition, or uncontrollable chance). Semantically, bilinguals recognize the lack of conceptual equivalence between languages. This enriches their semantic networks because shared, but not identical conceptual representations spread broader activation to additional unrelated concepts from different categories (Paradis, 1997). This automatic process of spreading activation across richer associations is coined as language-mediated concept activation (see Altarriba & Basnight-Brown, 2007; Kroll & De Groot, 1997; Kroll & Tokowicz, 2005), which presumably supports bilinguals' more superior creative development (Mohanty & Babu, 1982; Simonton, 2008). Together, higher creative functioning among bilinguals (vs. monolinguals) might ensue from better cognitive control and higher language-afforded flexibility to aid switching between different languages.

## **Empirical Evidence**

In view of the normative emphasis of different creativity dimensions in different cultures, it is reasonable to argue that fixating on one normative view debilitates creativity because the norm prioritizes one facet of creativity but ignores another. Dunlap-Hinkler, Kotabe, and Mudambi (2010) carried out a field study to examine the temporal trend of the new applications to the Food and Drug Administration submitted by 98 companies between 1992 and 2002. Of the 1,699 total applications, they found that companies with an established track record of focusing on incremental innovations had lower levels of breakthrough innovations from 1992 to 2002, suggesting that companies that used to incrementally innovate by specializing in extending or complementing an existing product line were less successful to radically innovate by starting a new cycle of technological change. Thus, the existing cultural expectation or practice of the company may have limited the kind of innovation it can pursue.

It is interesting to consider adherence to creativity norms in relation to the socio-ecological notions of cultural tightness versus looseness that exert different degrees of demand on norm adherence (Gelfand, Nishii, & Raver, 2006; Triandis, 1989). Tight cultures are characterized by very clear and strong norms and a strict enforcement of sanctioning norm deviance. In contrast, loose cultures are characterized by greater acceptance of diversity of norms and tolerance for deviant behaviors. Through socializing individuals to fixate on cultural norms and to develop psychological characteristics emphasizing discipline and caution, cultural tightness is believed to stabilize norms and to inhibit divergent thinking (Chua, Roth, & Lemoine, 2015). As Chua and colleagues (2015) argued, cultural tightness aligns with an adaptor cognitive style to reference on established and existing ideas in order to achieve incremental innovation; conversely, cultural looseness aligns with an innovator cognitive style to introduce radical changes in order to achieve breakthrough innovation (see also Kirton, 1994). Further, in the context of pursuing foreign creativity projects that require divergent thinking to go beyond local norms, the

constraining effect of cultural tightness on foreign creativity tasks would be magnified. With field data collected from participants working on an online crowdsourcing platform, their findings supported that cultural tightness undermined foreign creative task performance, with cultural distance between the local and foreign cultural environments exacerbating the negative relationship. Nevertheless, participants coming from tight cultures were more likely to succeed at local creative tasks because being knowledgeable of local cultural norms that are strong and unambiguous presented them a distinct advantage of benefiting local tasks. Together, the demand on strict norm adherence in tight cultures could be detrimental to creativity when the creativity tasks are tailored to foreign cultural needs; however, cultural tightness increases individuals' likelihood of creative engagement in and creative success at local creativity tasks.

As fixation on one normative expectation of creativity is likely to be creativity hampering, it follows that when individuals can alternate between normative views, they are more likely to express creativity more optimally by considering both novelty and appropriateness. One study supported the context-specific alternating strategy among individuals with higher bicultural identity integration (BII) who perceived their two affiliated cultures to be compatible and in harmony (Mok & Morris, 2010a). Asian Americans with integrated bicultural identity (i.e., higher BII) responded assimilatively by generating more novel ideas after being primed with American (vs. Asian) cultural cues, although their lower BII counterparts responded contrastively by generating fewer novel ideas. Biculturals' tendency to flexibly switch between different cultural orientations of creativity suggests that they could be versatile to spontaneously express novelty or usefulness in their idea as signaled by situational demands, or even incorporate both creativity facets into the idea depending on which identity is made salient during different times within the idea generation stage. To summarize, the lay conception of creativity pertinent in the culture provides a reference point that can constrain the source of idea generation (either fixating on novelty or usefulness). With an extensive amount of foreign cultural experiences, coupled with a perceived sense of compatibility with biculturality, people may more readily go beyond local cultural norms and switch their creative cognitive styles based on environmental signals, thus expanding their creative bandwidth.

Apart from the degree of dual identity integration, it is important to consider individuals' motivated cognitive needs that affect their tendency to fixate on or oscillate between the perceptual and habitual sets of a culture. One motivated need concerns the epistemic need for cognitive closure (NFCC), which reflects individuals' urge for seeking firm answers and adhering to cultural conventions in order to attain order and predictability when rendering judgments or making decisions (Chao, Zhang, & Chiu, 2009; Fu et al., 2007; Leung, Kim, Zhang, Tam, & Chiu, 2012). An acute need for cognitive closure can be situationally induced when individuals are pressurized to make quick judgments under time pressure (Chiu, Morris, Hong, & Menon, 2000). One study showed that when time pressure heightened participants' need for epistemic closure, more exposure to foreign culture tended to decrease an individual's willingness to appropriate intellectual resources from other cultures to expand an improvised idea about happiness into a creative one (Leung & Chiu, 2010). However, when the participants did not feel pressurized to hurry through the task, replicating previous findings, more multicultural experience was accompanied by a greater readiness to sample ideas from unfamiliar cultures and incorporate them in the creatively expanded idea. In another study, when European American participants were asked to list exemplars of fruit, those with higher (vs. lower) levels of NFCC tended to access normatively accessible fruits in their own culture, but not those that are also common in other cultural settings (e.g., durian, rhubarb; Ip, Chen, & Chiu, 2006).

Another motivated need pertains to the need for existential security, as seen when individuals are motivationally driven to assuage existential anxiety by upholding cultural imperatives and protecting the integrity of their culture (Pyszczynski, Greenberg, & Koole, 2004; Pyszczynski, Greenberg, Solomon, Arndt, & Schimel, 2004). By defending and adhering to the normative mandates of their own culture, people would experience symbolic immortality through the continuity of their cultural tradition. With the same creative expansion task mentioned

earlier, Leung and Chiu (2010) found in another study that, among participants in the mortality salience condition, exposure to foreign cultures was unrelated to how favorably they evaluated the ideas from foreign cultures, which were potential sources of creative inspirations to expand the impoverished idea. When mortality threat was not activated, the more exposure to foreign cultures, the more favorably participants rated the foreign ideas. In summary, both the needs for epistemic and existential security can drive individuals to freeze on or affirm the value of local cultural mandates.

Regarding the empirical support for the creative benefit of linguistic switching, one research study examined different, but interconnected aspects of bilingual experience concerning (a) second language aptitude, (b) the age of second language acquisition, and (c) the length of immersion in the new culture where second language acquisition takes place (Kharkhurin, 2008). Findings suggested that these aspects uniquely promoted bilinguals' creative performance. Specifically, by comparing Russian-English bilingual immigrants and English monolingual native speakers, partial correlational analyses revealed that second language exposure at a younger age and longer cultural immersion significantly increased fluency (i.e., a greater number of new ideas generated) and flexibility (i.e., a higher ability to simultaneously activate multiple seemingly unrelated concepts from distant categories). Further, both linguistic fluency and length of cultural immersion were positively associated with elaboration (i.e., a higher ability to keep concepts active during creative thought processes). Notably, bilinguals did not show superiority in idea originality by producing more unique and original ideas. Kharkhurin (2008) reasoned that bilingual experience might not directly promote creativity, but rather those creativity-supporting processes that underlie successful generation of creative ideas.

In another study, Lee and Kim (2011) compared balanced against less balanced Korean American bilinguals who differ in the degree to which they are equally proficient in both languages. They showed that balanced (vs. less balanced) bilinguals performed more creatively in the Torrance Test of Creative Thinking, regardless of their age and gender. Even stronger support for the creativity-enhancing effect of linguistic alternation comes from the study of bilingual code switching, defined as “the alternation and mixing of different languages in the same episode of speech production” (Kharkhurin & Wei, 2015, p. 153). As expected, bilinguals who were habitual code switchers surpassed their nonhabitual counterparts in creative thinking (Kharkhurin & Wei, 2015).

### **Distancing From Foreign Cultures Versus Integrating Multiple Cultures**

In the face of multiple cultures, some individuals might choose to keep a distance from foreign cultures and maintain a strong attachment with their ethnic culture, whereas others may choose to forge integrations between cultures or even go beyond mere integration to create a third, hybrid culture. Findings are generally in favor of the discernible creative benefits of cultural integration, but some recent research has started to bring some novel insights to demonstrate the creative potential of cultural distancing.

### **The Creativity-Enhancing (Creativity-Hampering) Effect of Cultural Integration (Distancing)**

Past research suggests that individuals' cultural identity or their use of cultural knowledge might progress from distancing to alternation to integration. In a four-stage model of cultural identification (Amiot, de la Sablonniere, Terry, & Smith, 2007), the first two stages—anticipatory categorization and categorization—are analogous to cultural distancing, with individuals identifying with only one of the two affiliated cultures. Individuals in the third stage, compartmentalization, are alternating biculturals who hold two separate cultural identities and act in a way that is context dependent. Finally, integration is a stage where individuals attain an integrated identity as they identify with multiple cultures simultaneously and reconcile cultural conflicts more completely. In a similar

model, Gocłowska and Crisp (2014) further extend the integration stage into a broadening stage that produces a more inclusive self-concept. A broadened self-definition facilitates accessibility and integration of concepts, thus benefiting creative performance.

According to the notion of BII, levels of identity integration are perceived to differ on a continuum (Benet-Martinez, Leu, Lee, & Morris, 2002). Specifically, the construct of BII captures two independent and exogenous dimensions: the dimension of cultural distance pertains to the degree to which individuals perceive the two cultural identities as blended and compatible (vs. dissociated and incompatible), and the dimension of cultural conflict pertains to the degree to which individuals feel that the two cultures are in harmony (vs. conflicting). The two dimensions are mainly derived from people's subjective perception and experience of cultural compatibility and harmony, but not objective differences between the original and receiving cultures (Benet-Martinez, 2010).

Why and how does an integrated identity confer creative advantage? According to Gocłowska and Crisp (2014), alternation works best only when individuals can keep the two cultural worlds separate, but not when they face upfront situations of culture mixing where two or more cultures collide at the same time and in the same space. Culture mixing situations might challenge alternating biculturals to resolve intra-individual conflicts and to maintain belongingness with multiple cultures, thereby threatening their cohesive self-identity (Amiot et al., 2007; Walsh, Shulman, Feldman, & Maurer, 2005). However, integration is conducive for fostering creativity under conditions of culture mixing as integrating biculturals are more adept at blending both of their identities; for example, Indian transnational youths in Canada experiment with a creative fusion of ethnic Indian and Western attire for displaying their blended cultural identity (Somerville, 2008). To integrate conflicting gender-role identities, a woman might manage two seemingly nonoverlapping identities of being a mother and an engineer by broadening her self-definition to be a "professional woman" (Amiot et al., 2007; Gocłowska & Crisp, 2014). Furthermore, if the to-be-combined identities are seemingly incongruent (e.g., combining the identities of "a Harvard graduate" and "a carpenter"), individuals might become aspired to assume an emergent identity (e.g., a Harvard-educated carpenter who is a highly skilled and creative entrepreneur; Amiot et al., 2007). Prior research has also demonstrated that integrating disparate ideas that belong to two or more cultures is a powerful way to stimulate idea generation (Wan & Chiu, 2002).

As seen from the earlier examples, adhering to an integrated bicultural experience attests to several creativity-enhancing implications (to put it differently, assuming a cultural distancing position may hamper the opportunity to capitalize on these implications). First, as people are socialized to take up their culture's perceptual and mental sets, they often fall into a habitual way to work with the same assumptions and look at problems from a similar perspective (Chiu & Kwan, 2010). Cultural integration entails developing a deeper relationship with the dual cultures and an engagement with incongruent cultural perspectives (e.g., Huang & Galinsky, 2011; Saad, Damian, Benet-Martínez, Moons, & Robins, 2013; Tadmor, Galinsky, & Maddux, 2012). Second, when combined, these incongruent cultural perspectives will trigger higher levels of cognitive flexibility, mental-set breaking, and expansion of conceptual boundaries of existing knowledge (Godart, Maddux, Shipilov, & Galinsky, 2015; Leung et al., 2008; Maddux et al., 2014; Morris, Mok, & Mor, 2011; Tadmor et al., 2009). Third, integration paves the way to eventually develop a broadened, inclusive, and superordinate sense of self-definition for increasing receptivity to an expanded scope of cognitions, norms, and values (e.g., Amiot et al., 2007; Gaertner et al., 2000; McFarland, Brown, & Webb, 2013). Through integration, individuals can recategorize their multiple cultural or social identities into one unified identity characterized by a higher order conceptual category (e.g., a new generation Indo-Canadian, a professional woman, a creative carpentry entrepreneur; Amiot et al., 2007; Gocłowska & Crisp, 2014). As a consequence, coherently forging an integration of the discrepant identities boosts individuals' creative potentiality through the production of some fused novel concepts, widening the base of cognitions to accommodate counternormative possibilities, and loosening identity boundaries to generate emergent properties that are not inherently linked with the original identities.

## Empirical Evidence

Benet-Martínez, Lee, and Leu (2006) examined bicultural Chinese American and monocultural Anglo-American students' free associations about Chinese and American cultural representations. Results showed that bicultural participants were more cognitively complex than their monocultural counterparts, with their descriptions of each culture incorporating different perspectives and their evaluations featuring both differentiated and integrated properties. In another study that used the same methodology, the researchers compared students with lower versus higher levels of BII, and interestingly results revealed that the free descriptions of lower (vs. higher) BII participants were higher in cognitive complexity. The researchers reasoned that bicultural individuals, particularly those with incompatible cultural identities, are under a constant need to monitor conflicting demands between the two cultures, and over time they have developed higher cognitive complexity to systematically process and elaborate on cultural cues (see also Botvinick, Braver, Barch, Carter, & Cohen, 2001).

Notably, lower BII individuals' higher cognitive complexity in cultural representations does not necessarily carry over to benefit their creativity. As shown in another study (Cheng et al., 2008), Asian Americans and female engineers with higher (vs. lower) levels of BII performed more creatively in tasks that were identity relevant (e.g., developing fusion dishes using both Asian and American ingredients, designing a communication device targeted for female users). As performing well in these tasks requires drawing upon identity-related knowledge domains, higher BII individuals are at an advantage to simultaneously recruit knowledge from two compatible social identities to creatively enrich their solutions.

In line with this finding, another study showed that bicultural individuals who adopted an integrationist strategy of acculturation (i.e., they identified highly with both the mainstream and ethnic cultures) displayed higher integrative complexity, which was further shown to mediate the relationship between their dual cultural identification and creative advantages, including more adept performance in laboratory creativity tasks, greater workplace innovation, higher promotion rates, and more positive reputations at work (Tadmor et al., 2012). These findings did not emerge for those who identified with only one culture through adopting the assimilation or separation strategy. Interestingly, improvements to integrative flexibility and creativity were also observed among individuals who adhered to a marginalization strategy that is associated with low identification with both cultures.

It is worth a closer look at the unexpected finding that biculturals who adopted the marginalization strategy could be more creative. Indeed, recently researchers have paid more attention to this neglected group who marginalizes from both their heritage culture and the receiving culture. The notion of marginalization has long been associated with a pejorative connotation, which prompted some researchers to reconsider marginalization as actually depicting cultural independence or (p.20) cosmopolitanism (Cannon & Yaprak, 2002; Gillespie, McBride, & Riddle, 2010; Glaser, 1958; Kim, 1988; Razzouk & Masters, 1986; Rudmin & Ahmadzadeh, 2001). Other researchers have incorporated a new acculturation orientation—individualism—to Berry's original framework of integrationism, assimilationism, separationism, and marginalization (see the Interactive Acculturation Model [IAM] proposed by Bourhis, Moise, Perreault, & Senecal, 1997). Accordingly, they identified individualists as those “who define themselves and others based on their personal characteristics rather than on their group membership” (Bourhis, Barrette, El-Geledi, & Schmidt, 2009, p. 444). Although individualists, like marginalists, are not concerned with identifying with both their native and the receiving cultures, they are distinct from the marginalists in showing higher tendencies to emphasize personal qualities and aspirations, to downplay group ascriptions, and to interact with other immigrants and members of the dominant group alike in a nondifferentiating manner (Bourhis et al., 2009).

Denoting a lack of strong identification with either culture, it was theorized that cultural individualists or cosmopolitans could transcend any cultures, acquire a stronger sense of self-efficacy, and develop a more secure self-identity (Bennett, Passin, & McKnight, 1958; Gillespie et al., 2010; Nash & Schaw, 1962). In line with this

reasoning, accumulating evidence supports that cultural independence or cosmopolitanism is associated with positive socio-psychological outcomes, such as better sociocultural adaptation to a second culture (Kosic, 2002), attaining above-average school performance (Saruk & Gulutsan, 1970), being successful professionals at work (Kim, 1988), developing autonomous worldviews and higher creative potential that transcend particular cultures (Cannon & Yaprak, 2002), exhibiting more complex thinking and better discriminatory capability to select the best aspects of different cultures for improving performance (Tadmor et al., 2009), and displaying highly sought-after qualities such as rationality, objectivity, logical thinking, and effective management skills (Mol, 1963). Further, Gillespie and colleagues (2010) showed that their Mexican participants who pursued integration or cultural independence were more likely to be upper-level managers than their counterparts who identified strongly with either the Mexican culture or the new American culture brought by American employees working in their companies. In the school setting, Bourhis and colleagues (2009) found that both local European American and African American students and immigrant Asian and Hispanic students attending a multicultural university in Los Angeles had more harmonious intercultural relations if they endorsed integrationism and individualism, but more problematic and conflicting relations if they endorsed the other three acculturation orientations.

One may find that the general support for the creative benefits of cultural integration is paradoxical to the finding that some form of cultural distancing (e.g., individualism, independence, or cosmopolitanism) is also creativity inducing. To reconcile these seemingly contradictory results, we argue that people's orientation or motivation toward cultural learning might matter more than whether they choose to identify with certain cultures (as cultural identifications form the basis for their acculturation attitude such as integrationism and marginalization). Our argument is based on two propositions. First, in the literature an important distinction is made between multicultural knowledge and multicultural identity, in that individuals with extensive exposure to a multicultural environment could acquire sufficient knowledge about diverse cultures, but they do not necessarily uphold a sense of identification, attachment, or loyalty with the cultures to which they are exposed (Benet-Martinez, 2010; Benet-Martinez & Haritatos, 2005; Haritatos & Benet-Martinez, 2002; Hong, Wan, No, & Chiu, 2007). The relationship between multicultural knowledge and multicultural identity is also likely to be asymmetrical, as people tend to be knowledgeable about the cultures they identify with, but they might not identify with the cultures that they are knowledgeable of.

Second, in their comprehensive review of the literature on cosmopolitanism and development efforts of a Cosmopolitan Orientation Scale (COS), Leung, Koh, and Tam (2015) derived some essential qualities or orientations of being a cosmopolitan individual (cultural openness, global prosociality, respect for cultural diversity). Among the three dimensions, cultural openness is often identified as the most defining feature that exemplifies the cosmopolitan core in existing measurements (Hannerz, 1990; Roudometof, 2005; Szeszynski & Urry, 2002). Cosmopolitans are open, both intellectually and aesthetically, and they have an outward stance toward divergent cultural experiences (Beck, 2002; Hannerz, 1990). With their regular travel experiences and intercultural interactions, they easily feel at home when abroad (Konrád, 1984) and are usually culturally competent to participate skillfully in different cultures (Pichler, 2011). They are often open-minded intellectuals, or so-called cultural omnivores, who are highly receptive to engage with and learn through people, places, and experiences that belong to other cultures and to seek mental stimulations through foreign cultural encounters (Brett & Moran, 2011; Lizardo, 2005).

Based on these propositions, we posit that cultural distancing is not necessarily antithetical to cultural learning. One might choose not to strongly attach to or identify with any cultures, but maintain a strong cultural learning orientation to acquire knowledge from diverse cultural sources and uphold a cosmopolitan orientation driven by a sense of world openness. Above all, what matters to enhancing individuals' creative bandwidth is their motivation to remain open to the rich intellectual resources made available by different cultures, rather than their degree of identification with these cultures.

## Implications and Conclusion

Throughout the manuscript, we have argued and presented empirical evidence that destabilizing cultural norms, alternating between cultural frames, or integrating disparate cultural identities/ideas offers individuals an advantage to promote their creative cognition. However, we want to highlight that it is not our intention to interpret the proposed CMCC that relying on cultural stereotypes, fixating on one cultural frame of mind, or distancing from foreign cultures is not useful for the creative process. According to the process model of creativity proposed by Chiu (p.22) and Kwan (2010), the production of creative ideas pertains to three successive stages of knowledge creation: (a) authoring new ideas; (b) selecting, editing, and marketing ideas; and (c) idea acceptance in the market. We posit that focusing attention toward the (accurate) creativity-related stereotypes pertinent in a given culture can provide the idea producers much needed cultural knowledge to anchor the authoring of original ideas. Stereotypical expectations of the lay creativity construction in the culture can also provide them the normative basis for idea selection, editing, and marketing. In other words, attending to the cultures' stereotypical creativity conception can aid idea producers to engage in audience design (Clark, Schreuder, & Buttrick, 1983; Clark & Wilkes-Gibbs, 1986; Isaacs & Clark, 1987), which is the process of adjusting idea generation and its accompanying selection, editing, and marketing processes toward the normative knowledge of the idea recipients in that culture. By harnessing a common ground, audience design can heighten the chance of eventual acceptance of the ideas in the cultural marketplace.

These arguments are consonant with Chua and colleagues' (2015) finding, which showed that familiarity with and adherence to local cultural norms conferred creative advantages for idea producers, particularly when strong and clear norms were enforced in the local culture (i.e., a tight culture). In addition, the evaluations of usefulness and novelty are relative to a culture. The assessment of usefulness is relative to the demands and needs of the prospective audience or users embedded in a given culture, whereas the assessment of novelty is relative to what is known currently in the culture (Chiu & Kwan, 2010). As a consequence, orienting toward the culturally consensual knowledge about creativity can impact on the evaluative judgments of an idea's usefulness and novelty.

Based on the intersubjective representation approach, we also noted that people who are more strongly identified with a culture tend to align their personal values with the collective representation of those cultural norms that are intersubjectively perceived to be distinctively important for that culture (Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010). Therefore, individuals who are strong identifiers of their own culture, regardless of whether they keep a distance from or identify with other foreign cultures, can discern the intersubjective representations of the creative norms endorsed in their culture. They can apply this culturally consensual knowledge to benefit different stages of the creative process. Furthermore, as we have discussed even for those who hold a distancing orientation from both the native culture and other foreign cultures (i.e., those identified as marginalists, individualists, independents, or cosmopolitans), research has shown preliminary evidence that they could transcend cultural bounds to be creatively inspired—a discovery that adds to the negative socio-psychological adaptation outcomes commonly found among those who adopt a marginalization strategy to disidentify with both the ethnic and host cultures.

To sum up, the complementary model of culture and creativity proposed here seeks to identify the important role of culture in creative cognition and to recognize the different socio-psychological variables that are part of this complex culture–creativity nexus. As the next chapter will present, creativity also assumes (p.23) an important role to participate in various cultural processes. Creativity resides in a culture, and the way culture emerges, stabilizes, and evolves is embedded in processes of knowledge creation. We hope that our model will inspire future research to provide more nuanced insights on the mutual and dynamic relationship between culture and creativity.



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