

## Culture and the Mind: Implications for Art, Design, and Advertisement

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Keyword: Culture → The mind, The mind → Culture, Culture ↔ The mind, Cultural Products

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## Culture and the Mind: Implications for Art, Design, and Advertisement

In the last 30 years, cultural psychology—an interdisciplinary field in the intersection of psychology, anthropology, linguistics, history, philosophy, and neuroscience—has accumulated abundant evidence that humans are inherently sociocultural beings (Bruner, 1990; Markus & Kitayama, 1991; Miller, 1999; Shweder, 1991). Researchers in cultural psychology have investigated how the mind (perceptions, cognitions, motivations, and emotions) is shaped by cultural content (shared meanings, ideas, institutions, practices, and norms). These researchers have reported systematic cultural variations in a variety of psychological processes. Their findings cast doubt upon the basic theoretical assumptions of mainstream psychology, which still focuses mainly on the universality of the human mind. Some mainstream researchers regard culture as either playing a minor role in the processes of the human mind, or presenting obstacles to a clear understanding of the mind. However, because of accumulated empirical evidence, the assertions of cultural psychologists have gradually become influential in psychology and even in neuroscience, where researchers investigate the plasticity of the brain (Kitayama & Uskul, in press). We maintain throughout this chapter that the implications of cultural psychology are not necessarily limited to academia. Rather, findings in cultural psychology have many potential implications for applied research in areas such as mass communication, business, and advertising.

The purpose of this chapter is to introduce findings in cultural psychology to readers who are interested in their application. Unlike the other chapters in this book, this chapter does not offer handy techniques for advertising, but rather theoretical frameworks and raw sources that will help the reader think of possible applications. Although this approach might discourage a

certain portion of the audience, we believe that the recent findings we introduce here will interest those who wish to consider the nature of human advertising behaviours and responses.

The chapter consists of three parts. First, we will define what cultural psychology is and explain the theoretical assumptions of this field of research. Next, we will describe current findings by referring to cross-cultural comparisons of people's patterns of perception, cognition, motivation, emotion. In particular, we contrast people in East Asian cultures with people in North American cultures from two major research perspectives: *independent vs. interdependent view of self* (e.g., Markus & Kitayama, 1991), and *holistic thought vs. analytic thought* (Nisbett, Peng, Choi, & Norenzayan, 2001). We will then review recent empirical works on cultural products (Morling & Lamoreaux, 2008) and discuss cultural variations in aesthetic preference, design preferences for posters and web pages; perspective preferences for video games; and dominant values in advertising messages. Finally, we will reflect on possible applications of this research to the mass communication and advertising industries.

### **What is Cultural Psychology?**

Although the origin of cultural research in psychology can be traced back to the emergence of experimental psychology at the end of the 19th century and the beginning of the 20th, the field has been content with its minor status in psychology. However, in the 1980s and 1990s a handful of researchers rediscovered the importance of culture on psychological processes, and their theoretical framework has since been used by many researchers.

Anthropologist Richard Shweder (1991) defined cultural psychology as the study of “the ways subject and object, self and other, the mind and culture, person and context, figure and ground, practitioner and practice, live together, require each other, and dynamically, dialectically and jointly make each other up” (p. 73). This assertion has been supported by a limited number of

top-notch researchers in psychology. For example, cognitive psychology researcher Jerome Bruner (1990), in his book *Acts of Meaning*, posited that the main topic of psychology should not be observable behaviour but rather the culturally shared meanings behind the actions. Bruner's assertion strongly resonated with anthropologist Clifford Geertz's (1973) famous statement: "We are in sum, incomplete or unfinished animals who complete or finish ourselves through culture—and not through culture in general but through highly particular form of it: Dobuan and Javanese, Hopi and Italian, upper-class and lower class, academic and commercial" (p. 49).

We consider Shweder, Bruner, and Geertz to be the founders of contemporary cultural psychology. They have strived to assert the dynamic relationships between culture and the mind. Their basic tenet has been that from birth we are surrounded by rich cultural resources, through which we develop our identity. As a member of a given culture, each of us then spreads these cultural resources to our own generation as creator, forerunner, and innovator (Sperber, 1996); and later, as parents, caregivers, or educators, we transmit them to the next generation (Tomasello, 1999).

How can we investigate the mutual constitution of culture and the human mind? One of the difficulties of investigating these processes is that cultural difference lives not only in one's internalized psychological processes but also in public representations, and is even embedded in everyday interactions and subtle nonverbal behaviours (Markus & Hamedani, 2007). Therefore, research necessarily targets multiple loci of human–culture interactions (Morling & Lamoreaux, 2008).

First, measuring cultural variation in psychological processes ("culture → the mind") is indispensable. Numerous studies in cultural psychology have documented that actions, motivations, cognitions, and emotions differ from culture to culture, and that the systematic

cultural variations in these psychological processes are attributable to profound cultural differences in ideas, values, beliefs, and meanings. Researchers have devised various concepts for describing the contrasts between two cultures. For example, some researchers investigate East Asians' and Westerners' mentalities in terms of independent vs. interdependent self-view, and others in terms of holistic vs. analytic worldview. Such studies form the most important research strands of cultural psychology (Heine & Norenzayan, 2006).

Second, there is a growing trend toward measuring cultural products (“the mind → culture”). Cultural products can be defined as human-made, tangible, public, shared representations of culture that convey important messages about dominant values, beliefs, and meanings in a given culture (Morling & Lamoreaux, 2008). They are vital resources that enable people who are born and raised in a given society to make sense of their lives. Cultural products can have many different forms. Cultural ideas, values, and meanings can be *explicitly* conveyed in written forms such as religious texts, books, and magazine and newspaper articles; and visualized forms such as visual arts, movies, and TV programs. Important messages can also be *implicitly* embedded in song lyrics, advertisements, and popular texts. Although researchers have acknowledged the importance of research into cultural products, it is only recently that this area has been extensively investigated.

In sum, research on culture and the mind simultaneously investigates the two sides of the coin: phenomena inside and outside of the mind. Because of the inseparability of culture and psychology in the research target, cultural psychologists use a wide variety of research methodologies (Cohen, 2007). In focusing on the mind, they have mostly used experimental methods borrowing from empirical research in sciences (“culture → the mind”). Morling and Lamoreaux (2008) maintained that studies that have made creative use of public, shared, and

tangible cultural products (“the mind → culture”) should be added to the methodological repertoire. In the next section, we will begin by introducing two working research frameworks for the mutual construction of “culture ↔ the mind.”

### **East vs. West: Research Frameworks and Empirical Findings**

Any culture and any population in the world can be a target of cultural psychology. However, much research has focused on two cultural groups—the people of East Asia and the people of North America—and investigated characteristics of these populations under a variety of theoretical frameworks. One reason for focusing on these two groups is that differences in psychological processes between East Asians and North Americans are substantial and systematic, and researchers are able to depict such differences fairly easily. In addition, similarities in the educational systems of these two cultural groups enable researchers to access sufficient numbers of potential participants from the student body and conduct empirical research relatively easily. Two major frameworks of research—*holistic thought vs. analytic thought* (Nisbett, 2003; Nisbett & Masuda, 2003; Nisbett et al., 2001) and *independent construals vs. interdependent construals* (Markus & Kitayama, 1991, 2010)—complementarily explain a variety of social cognitive phenomena.

#### ***Analytic vs. Holistic Thought***

In this research strand, researchers investigate cultural worldviews that shape people’s cognition and perception (e.g., Nisbett, 2003; Nisbett et al., 2001). This framework does not necessarily compete with the view-of-self framework discussed later in this chapter; the two are complementarily related to each other and shed different light on the same phenomena. Nisbett (2003) maintained that the cultural variations in cognition observable in contemporary members of Western and East Asian cultures can be traced back in part to ancient Greek and ancient

Chinese civilizations (whose dominant ideologies may in turn have resonated with their own economic or social practices at the time). Aristotelian and traditional Greek philosophy share the worldview that things exist independently, and the characteristics of an object are determined by the object's internal attributes. By contrast, Buddhism, Confucianism, and Taoism emphasize the holistic nature of things. This holistic understanding of the world became the foundation of a discourse—shared by contemporary East Asian cultures such as China, Korea, and Japan—that affords greater attention to relationships between objects and their contexts. Literature in the humanities and social sciences (e.g., Cromer, 1993; Munro, 1985; Nakamura, 1964/1985; Needham, 1954, 1962) gives credence to Nisbett and colleagues' assertion regarding the systematic cultural differences between psychological processes of people in North American cultures (especially those of European descent) and people in East Asian cultures.

*Cognitive aspect.* Numerous studies describe how analytic and holistic thought have different influences on people's social cognition. For example, North Americans are more likely to explain an event by referring to internal/dispositional factors of a target individual, whereas East Asians pay more attention to the external/contextual/situational factors that surround the target (Kitayama, Ishii, Imada, Takemura, & Ramaswamy, 2006; Koo & Choi, 2005; Lee, Hallahan, & Herzog, 1996; Morris & Peng, 1994). Similarly, East Asians are more likely to take situational constraints into account when they infer someone's attitude from his/her behaviour (Choi & Nisbett, 1998; Choi, Nisbett, & Norenzayan, 1999; Masuda & Kitayama, 2004; Miyamoto & Kitayama, 2002; Norenzayan, Choi, & Nisbett, 2002; Norenzayan & Nisbett, 2000). Third, North Americans explain the causes of an event by referring to limited numbers of major pieces of information, whereas East Asians refer to more information, some of which is only peripherally important (Choi, Dalal, Kim-Prieto, & Park, 2003). Fourth, North Americans are

good at detecting specific common attributes among objects, whereas East Asians are good at holistically seeing similarities (Norenzayan, Smith, Kim, & Nisbett, 2002) and relationalities among objects (Ji, Peng, & Nisbett, 2000). Fifth, East Asians are more likely than North Americans to apply naïve dialecticism, that is, to show greater leniency toward contradictions (Choi & Choi, 2002; Koo & Choi, 2005; Peng & Nisbett, 1999; Spencer-Rogers & Peng, 2004). Finally, North Americans tend to conceptualize the world linearly, whereas East Asians tend to conceptualize the world as a constantly changing field (Ji, 2008; Ji, Nisbett, & Su, 2001).

*Perceptual aspect.* Recent evidence further suggests that systematic cultural differences in cognition are governed by more basic perceptual processes, notably attention (Nisbett & Masuda, 2003; Nisbett & Miyamoto, 2005; Peng & Knowles, 2003). Several studies measuring behavioural patterns during perceptual and cognitive tasks have indicated that East Asians are more likely than North Americans to describe contextual information and remember objects in relation to context (Masuda & Nisbett, 2001), to perform well on a task that requires attention to context (Kitayama, Duffy, Kawamura, & Larsen, 2003), and to perform less well on a task that requires attention to focal objects (Ji et al., 2000; Masuda, Akase, Radford, & Wang, 2008; Miyamoto, Nisbett, & Masuda, 2006). North Americans are good at focusing on focal information while ignoring contextual information; however, they often find it difficult to process information if the contextual information is overwhelmingly complex. By contrast, East Asians are good at coping with complex pieces of information but often find it difficult to ignore contextual information even when asked to do so (Wang, Ito, & Masuda, 2011). Other studies directly measured the number and duration of eye fixations during a task; the findings suggest that East Asians are more likely than their North American counterparts to allocate their attention to context, and that the way of allocating attention to specific areas in the field corresponds to



cultural patterns of memory (Chua, Boland, & Nisbett, 2005; Goh, Tan, & Park, 2009) and the observer's style of judging the target's emotional expression (Masuda, Ellsworth, et al., 2008).

In sum, much of the cross-cultural research on cognition and attention applied the two different models of thought advocated by Nisbett and his colleagues and demonstrated the usefulness of these models (e.g., Nisbett, 2003; Nisbett et al., 2001). North Americans' mentality is generally analytic and object oriented at the expense of context, whereas East Asians' mentality is more holistic and context oriented. Later in this chapter we will discuss whether it is possible to observe such messages in the dominant cultural products available in each culture.

### ***Independent vs. Interdependent View of Self***

Researchers also investigate cultural variations in the human mind from a slightly different angle: the view of self. How culture shapes one's view of oneself is one of the most popular research topics in cultural psychology. Although mainstream psychology has long assumed that the concept of self is the same across cultures, many cultural psychologists challenge this assumption (e.g., Markus & Kitayama, 1991; Shweder & Bourne, 1982). Of the many theoretical frameworks regarding cultural variations in the concept of self, Markus and Kitayama's (1991) models of self-construals—the independent and the interdependent view of self—are the most widely recognized.

The independent view of self is dominant in Western cultures, especially in middle-class European American culture. It defines people as independent agents whose locus is the centre of their world, physically and mentally separated from others. The origin of this view of self can be traced back to modern Western intellectual traditions (Taylor, 1989, 2007). People who share this view of self are highly motivated to actualize themselves by searching for attributes and

talents they are proud of, by establishing personal preferences and unique characteristics, and by valuing self-consistency across situations.

In contrast, the interdependent view of self, which is dominant in East Asian cultures such as China, Korea, and Japan, defines people as physically separated but mentally interconnected to each other, and surrounded a complexity of social networks. Buddhism, Taoism, and Confucianism are the intellectual traditions that have contributed to generate such a view of self. People who share this view of self are highly motivated to actualize themselves by attuning to social roles expected by important people in their lives in a in a given social context, by correcting imperfect and insufficient aspects of the self so as to meet the social standard, and by flexibly adapting themselves to the context (e.g., Markus & Kitayama, 1991, 2010). Since the advent of Markus and Kitayama's models of self-construal, these models have been applied to a large number of studies in cognition, motivation, and emotion.

*Cognitive aspect.* As was the case with holistic vs. analytic thought models, empirical evidence regarding the independent vs. interdependent view of self suggests that ways of defining oneself differ systematically differ from culture to culture. For example, when asked to define themselves, North Americans refer to abstract personal attributes, whereas East Asians describe themselves in terms of social categories and roles (Bond & Cheung, 1983; Cousins, 1989). Furthermore, whereas North Americans are eager to maintain a consistent view of themselves across contexts (e.g., home, school, and work), East Asians flexibly redefine and accommodate themselves according to each context (Kanagawa, Cross, & Markus, 2001). Further evidence suggests that North Americans are more likely to be motivated by self-consistency and attitude-behaviour consistency (Heine & Lehman, 1997; Kashima, Siegal, Tanaka, & Kashima, 1992; Kitayama, Snibbe, Markus, & Suzuki, 2004). These differences in

self-conceptualization are observable even in patterns of brain activation. When Chinese thought of important people in their lives, the area of the brain that is relevant to self-identification was activated, whereas North Americans activated the same brain area only when they thought of themselves (Han & Northoff, 2008; Zhu, Zhang, Fan, & Han, 2007).

***Motivational aspect.*** Culturally influenced views of self are associated with socioculturally expected patterns of motivation. For example, although much research in North American social psychology places importance on the concept of self-esteem and concludes that the motivation to maintain a high level of self-esteem is a human universal, recent findings in cultural psychology indicate that levels of self-esteem are drastically different across cultures, and that such differences can be explained by the view of self. High self-esteem is a desirable characteristic if people are motivated to be proud of and confident in the unique personal attributes that constitute their identity. However, if one is motivated to accommodate and attune to social needs, paying attention to one's insufficiencies is more beneficial than boosting one's self-esteem. In fact, North Americans have higher self-esteem than non-Western individuals (Bond & Cheung, 1983; Heine, Lehman, Markus, & Kitayama, 1999). North Americans remember their successes more than Japanese do (Endo & Meijer, 2004) and are motivated by self-enhancement to re-engage in a task they succeeded in, whereas East Asians are motivated by self-criticism/self-improvement to re-engage in a task they failed in (Heine et al., 2001). North Americans tend to believe that their talent and ability is fixed, which motivates them not to persist in activities they are not good at, whereas East Asians tend to believe that their ability is changed by their effort, which motivates them to demonstrate their perseverance and resiliency (Azuma, 1994; Stevenson & Stigler, 1992). Such cultural differences can be observed in motivation to influence vs. motivation to be accommodating to others. In general, when asked to

recall their experiences, North Americans can easily recall situations in which they influenced the environment, whereas East Asians can easily recall adjusting to the environment (Morling & Evered, 2006; Morling, Kitayama, & Miyamoto, 2002; Weisz, Rothbaum, & Blackburn, 1984). North Americans tend to think they are agents at the centre of the world who control the things that surround them; East Asians tend to consider themselves as part of society, so accommodating to the expected role is more important. Finally, a conceptualization of self is also observed in the process of differentiating oneself from others. North Americans strive to express their uniqueness, but this tendency is very weak among East Asians. East Asians are more likely to adopt the dominant or majority patterns of behaviour in a given society (Kim & Markus, 1999). The saying “The squeaky wheel gets the oil” exemplifies North Americans’ motivation to assertively actualize themselves, while the saying “The nail that sticks out will get a pounding” nicely depicts the East Asian idea that if you stand out from the crowd, you will invite trouble, and this idea in turn develops the motivation to minimize one’s uniqueness.

***Emotional aspect.*** Research on cultural variation in subjective emotional experiences also supports the view of self models. North Americans tend to experience socially disengaged emotions that accentuate the difference between oneself and others, whereas Japanese tend to experience socially engaged emotions that accentuate connections between self and others (Kitayama, Markus, & Kurokawa, 2000; Kitayama, Mesquita, & Karasawa, 2006; Uchida & Kitayama, 2009). For North Americans, self-esteem is strongly associated with well-being. In East Asia the association is not so strong; rather, the sense of being accepted by others is an important indicator for one’s well-being (Diener & Diener, 1995; Uchida, Kitayama, Mesquita, Reyes, & Morling, 2008). Such a tendency is observable even in Asian American populations. For example, Asian Americans and Japanese are more likely than their European American

counterparts to feel higher life satisfaction when they meet the expectations of important others than when they meet their own personal goals (Oishi & Diener, 2003). Similarly, the emotions of European Americans become more intense when they are reminded of the self, whereas the emotions of Asian Americans intensify when the group is salient (Chentsova-Dutton & Tsai, 2010).

In sum, much of the cross-cultural research on cognition, motivation, and emotion supports the two different models of self advocated by Markus and Kitayama (1991, 2010). In general, North Americans' mentality is independence oriented, whereas East Asians' mentality is interdependence oriented. The next section will address the question, "Can we observe such messages in dominant cultural products available in each culture?"

### **Cultural Products:**

#### **Do Art, Design, and Advertisements Convey Culturally Important Messages?**

Morling and Lamoreaux (2008) maintained that cultural psychologists also need to investigate the "the mind → culture" part of the mutual relationship between culture and psychological processes. In this section, we will review recent findings from research on cultural products. As mentioned previously, culturally important messages that shape one's mind are conveyed through a variety of public, shared, and tangible media. These messages can include directly stated values, beliefs, and ideas mediated by written forms and visual forms, such as religious texts and icons. But they can also be embedded in secular visual representations such as art, design, and advertising. These cultural products are created, maintained, and consumed by members of a given culture, so a "culture ↔ the mind" mutual construction is taking place. At the same time, however, cultural products that are public, shared, and tangible can be investigated as somewhat independent from and external to objects from the mind. Two types of

investigations are going on in the field of cultural psychology. First, with regard to cultural variation in attention under the rubric of holistic vs. analytic thought, researchers investigate expressions of fine arts, pictures, posters, and web page designs. Second, researchers studying the independent vs. interdependent view of self analyze the perspective of view in video games as well as cultural messages embedded in advertisements.

### ***Holistic vs. Analytic Cultural Products***

Previous findings in attention suggest that East Asians are more likely than North Americans to be sensitive to contextual information. For example, Masuda, Ellsworth, et al. (2008) asked both Japanese and North Americans to view images of a target figure surrounded by four others, and to judge the target individual's emotion by his or her facial expression. The researchers manipulated the congruency between the facial expressions of the target and the other individuals. In half the scenes, the target and the background figures showed congruent emotional facial expressions (e.g., happy target and happy others); in the rest of the scenes, the figures showed incongruent facial expressions (e.g., happy target and sad others). Since the task was to judge ONLY the target figure's emotions, the target's facial expression should receive the same score in both conditions, and Americans indeed judged the target person's emotion to be the same in both conditions. In contrast, the Japanese ratings of the target emotion were intensified when the target figure was presented with congruent others. In addition, eye-tracking data provided evidence that Japanese allocated their attention to the background figures more often than did Americans, even though they were asked not to do so. Similarly, Masuda and Nisbett (2001) presented 20-second animated vignettes of underwater scenes to Japanese and Americans. The participants were then asked to report what they had seen. Even for such a simple task, there were systematic cultural variations in the reports. That is, Americans tended to

spotlight the most important scene (e.g., “I saw three fish swimming around, one of which had red fins”), and Japanese tended to refer to the background (“It looks like a deep sea because the water color was much darker than in the previous video”). The findings suggest that Japanese are prone to include the field and to think about the relationships between objects and fields, whereas Americans are prone to selectively attend to what is the focal and main issue in the scene.

If East Asian and North American patterns of attention are so distinctive, what types of cultural products can be created, disseminated to the same generation, and transmitted to the next generation? We assume that when people are sensitive to context and relationships, their drawings, designs, and graphic designs are also likely to set the threshold of relationships among objects low—and therefore to include, rather than exclude, more pieces of information as necessarily and equally important pieces as a whole context. This can be seen as a typical pattern of holistic thought. By contrast, when people have a tendency to selectively attend to a focal object, they are likely to set the threshold of relationships among objects high, and are motivated to clearly differentiate focal objects from peripheral objects, and to exclude, rather than include, peripheral objects.

Several findings give credence to this speculation. For example, Choi et al. (2003) demonstrated that compared to North Americans, East Asians have a stronger desire to include more pieces of information. The researchers asked Koreans and Americans to read a brief summary of a murder case, in which a professor had been murdered and the chief suspect was a graduate student in the laboratory. Participants were then provided with a booklet containing 97 facts (e.g., the professor had a conflict with the graduate student, the professor’s hobby was XX, the graduate student’s GPA was XXX), and were asked to exclude the facts they thought to be irrelevant to the investigation. The results indicated that Americans were much more likely to

exclude more facts, suggesting that Koreans considered even trivial and slightly relevant pieces of information to be necessary for capturing the whole story, and that Americans thought that the best way to reach the truth was to selectively choose a limited number of important facts while eliminating the noisy peripheral information. Similarly, other research on cultural variation in cognition suggests that East Asians categorize things on the basis of family resemblance and relationship-based processes, whereas North American categorize things according to simple rules and shared attributes commonly applicable to all things (Ji et al., 2000; Norenzayan, Smith, et al., 2002)

*Perspective.* If an attentional-cognitive orientation is robustly held by members of each culture, we might reasonably expect to observe this attentional orientation in public, shared, and tangible cultural products (Morling & Lamoreaux, 2008) such as artistic expressions. The tradition of artistic expressions in East Asia is completely different from that in Western cultures. The artistic technique known as the *linear perspective*, which has been commonly used for drawing scenery in the West, strongly resonates with Westerners' analytic ideology. The technique of perspective was one of the most notable developments of the Renaissance. Kubovy (1986) described two major functions of this technique. The most obvious is to represent space by providing the illusion of depth. The other is to fix the viewer's standpoint, usually forcing the viewer to occupy the same level as the subject of the work. The amount of field information, moreover, is restricted in classic Western art; painters include field information only to the extent that it can realistically be observed given the perspective within a given scene. East Asian artists, however, have traditionally applied a bird's-eye view, which increases the visible area of the scene, by placing the horizon line high in the upper part of the frame; this aesthetic preference resonates strongly with the holistic cultural ideology. It is therefore reasonable to think that fine



arts in the East and West are qualitatively different from each other. To test this possibility with scientific rigor, we analyzed archival data of East Asian and Western fine art masterpieces (Masuda, Gonzalez, Kwan, & Nisbett, 2008). The results indicated that the location of the horizon is indeed much higher in East Asian landscape masterpieces than it is in Western art.

Behavioural data analyses by Masuda, Gonzalez, et al. (2008) further support this observation by demonstrating that contemporary adult members of East Asian cultures are more likely than their North American counterparts to apply the bird's eye view when asked to draw a scenic image. Extending this line of research by focusing on socialization processes of aesthetic preferences in landscape drawing, we investigated at what point in the developmental course culturally dominant ways of aesthetics emerge (Senzaki & Masuda, 2011). We examined cultural and developmental differences in the use of holistic and analytic attention styles in artistic expression among young children (ages 6 to 12 years) in Canada and in Japan. We found that the process of learning the concept of horizon was similar across the two cultures, but the children learned the concept in culturally unique manners. That is, the majority of Canadian and Japanese children showed a clear understanding of the concept of horizon by 9 years old; however, Japanese children placed the horizon significantly higher and drew a larger number of objects. A similar outcome was observed with college students in Canada and Japan. These findings are consistent with previous indications that cultural differences in lay theories of change (one's tendency to see the world as stable or fluid) became apparent around ages 9 to 11 (Ji, 2008). Similarly, another study suggested that age 9 is the critical age for children to become fully acculturated in another country when they move from Eastern to North American cultures (Minoura, 1992). Together, these studies demonstrate that the culture in which we are socialized

at a young age significantly influences our cognitive styles, and there seems to be an age range that is significantly important in the socialization processes.

*Size of portrait models.* Portraiture has been a popular genre in Western societies (Shimada, 1990). Generally, Western portraits depict an individual and fulfill a variety of functions; they can mark the occasion of a particular success or can record the existence of an individual for posterity. Accordingly, Western portraiture seeks to make the subject salient, and the model occupies a major fraction of the space. East Asian portraiture, however, has emphasized the individual in context; the size of the model is relatively small, as if the model is embedded in an important background scene. Sometimes, the open space is filled with much visual information (such as a mattress, a folding screen, and a window shade), but sometimes it is filled by comments handwritten by those who evaluated the portraits. Furthermore, a space can be intentionally left empty so viewers can enjoy the sense of *ma* (space). The sense of *ma*, which is highly appreciated in the East Asian arts tradition, serves to soften the salient visual representation (Kenmochi, 1992; Minami, 1983). Although most evidence of obvious cultural differences in artistic representations is still anecdotal, our archival data analysis of art from other historical periods indicated that models in East Asian portraits did tend to be smaller than models in Western portraits (Masuda, Gonzalez, et al., 2008).

Further investigations suggest that even contemporary North American and East Asian undergraduates' picture-drawing styles, photo-taking styles, and photo selection tasks corresponded to their traditional aesthetic styles. North Americans were more likely than East Asians to exclude context when they took portrait photographs. In addition, East Asians preferred to take portraits with wide backgrounds and small models, whereas North Americans preferred to have the model fill most of the field. These findings suggest that people's aesthetic

preference in portraiture has been influenced by the dominant patterns of visual attention developed in their respective cultural worldviews. We maintain that Western analytic thought, which emphasizes the focal object of the scene at the expense of the context, is indeed embedded in a large focal-object-to-frame ratio. In contrast, a small focal-object-to-frame ratio allows East Asian artists to draw more contextual information, which in turn is indicative of the cultural message of context inclusion shared in East Asian holistic thought (Masuda, Gonzalez, et al., 2008).

***Fuzziness and flatness.*** Other investigations further support our assertion in terms of cultural variation in artistic expressions. For example, paintings by Westerners are more likely to show contrast between background and foreground (Masuda, Gonzalez, et al., 2008). These findings suggest that East Asians are aesthetically habituated to perceive foreground and background boundaries in a more fuzzy manner, allowing them to attend to the background information along with the foreground object. In contrast, Westerners are aesthetically habituated to accentuate the foreground–background contrast. Furthermore, research in fine arts (Azuma, 2000; Gombrich, 1961/2000; Masuda, Gonzalez, et al., 2008; Murakami, 2000) indicates that in East Asian pictorial representations the flatness of the representation is emphasized by drawing images two-dimensionally, whereas Western linear perspective allows the audience to perceive three-dimensional texture on the two-dimensional frame. These reports suggest that East Asians are accustomed to seeing the world in a single plane, whereas North Americans are accustomed to seeing the world by perceiving the depth of field of objects.

***Complexity.*** Some findings have indicated that human-made environmental structures of a given culture—such as the structures of cities, towns, and villages—also facilitate the development of specific modes of attention (Miyamoto et al., 2006). Comparisons of the real

landscapes of East Asian and North American cities indicated distinctive differences in the complexity of the cities. East Asian landscapes are much more complex than their North American counterparts. Although we have to consider possible confounding variables (e.g., population density) that might differentiate the landscape of these cities, we believe that this finding strongly resonates with research indicating that East Asians' drawings, pictorial collages, and cartoons are generally more complex than those produced by North Americans (Masuda, Gonzalez, et al., 2008; Wang et al., 2011). Taken together, information disseminated not only through mass media and traditional aesthetic styles (e.g., fine arts) but also through city designs could be important means of conveying dominant messages of a given cultural meaning system. Through exposure to the cultural resources that surround them, people in a given culture internalize certain dominant modes of attention.

These findings further motivated us to investigate the optimal amount of complexity in visual representation. For this purpose, we extended our research to contemporary visual representations such as web page design and conference posters. Our analysis of web pages of federal/provincial governments and major universities (Wang et al., 2011) suggests that East Asians' web page design is characterized by single long frames containing extremely complex pieces of information—showing all the information at once in a single plane—whereas Westerners' web page design is characterized by layered structures of short frames with limited amounts of information per frame, so as not to overwhelm the viewer with the complexity of the information.

Cultural variation in complexity perception can be also observed in conference poster design (Wang et al., 2011). We analyzed 212 electronic versions of conference posters at the 2008/09 Society for Personality and Social Psychology (SPSP) conference. The posters were

from both East Asian and North American research institutions. When a single study was presented on a regulation-size (4 feet × 6 feet) poster, no cultural difference in the level of complexity was observed. However, when a poster presented more than one study, presenters dealt with the space constraints in different ways. East Asians retained all the details and complexity of the message, whereas North Americans presented the gist of the studies by sacrificing details and using fewer words. Taken together, these findings suggest that people develop a sense of optimality regarding the amount of information needed, and that their selection and design preferences strongly resonate with the dominant ideology of their culture.

In sum, research on culture and visual representation (actual city design, web page design, and posters) has allowed us to identify critical cultural variations in the perspective of landscape, the ratio of model size in portraiture, the fuzziness and flatness of images, and the complexity of visual representation.

### ***Cultural Products and the View of Self***

Many researchers have investigated characteristics of cultural variation in cultural products by contrasting independence-oriented self messages with interdependence-oriented self messages. Researchers have investigated how people actively produce and maintain cultural products, and how they consume such cultural products. Overall, as expected, the findings indicated that cultural products from East Asia tend to represent a more interdependent orientation, whereas cultural products from North America tend to represent a more independent orientation (Morling & Lamoreaux, 2008). These studies examine cultural products ranging from media reports and magazine articles to children's books and religious texts. In this section, we will introduce recent empirical research on cultural products in the categories of independent vs.

interdependent agency, excitement vs. calm (emotional experience), uniqueness vs. conformity (orientation of the self), and first-person vs. third-person perspective.

***Independent vs. interdependent agency.*** Markus, Uchida, Omoregie, Townsend, and Kitayama (2006) examined Japanese and American media coverage of the 2000 and 2002 Olympics. Although most commentators commented mainly on the performance of sports athletes, Japanese and American accounts differed in their explanations of the nature and source of intentional agency of the action. Japanese commentators tended to interpret an athlete's agency as a mixture of the athlete's personal attributes, social and emotional experience, and the context of the action. By contrast, Americans tended to interpret an athlete's agency as separate from the athlete's background or social and emotional experience. Therefore, in American comments, performance was explained primarily in terms of positive personal characteristics and the characteristics of the other competitors. In addition to analyzing the archival data, Markus et al. asked Japanese and American study participants to select the most important and appropriate pieces of information that they would include if they were to report on winning athletes' accomplishments. Japanese participants selectively preferred information about an athlete's coach and team (e.g., "Her coach has been her most comprehensive advisor, helping her develop strategy and competency"), interdependence-oriented motivation ("After all the help she received from her team, she knew she couldn't let them down"), emotion ("She takes long walks around the city after dinner in order to calm any anxiety she feels about the race"), and doubt ("She won despite her worries that the unfamiliar conditions of extreme heat and humidity might hurt her performance"). In contrast, Americans selectively preferred information about the athlete's personal attributes (e.g., "She has been described as a remarkable, interesting, and energetic person, absolutely dedicated to being the best") and uniqueness ("She stood out from

the crowd from the start, sticking close to her signature strategies. She showed us all what a world-class champion looks like”). Similarly, other research has indicated that Japanese elementary school textbooks and Korean advertisements commonly use interdependent/collectivistic messages such as relationships with others, whereas American advertisements commonly use individualistic/independent messages (Han & Shavitt, 1994; Imada, in press).

*Excitement vs. calm emotional experience.* Other researchers have focused more on a specific aspect of independent vs. interdependent contrast: subjective emotional experience. Several studies have targeted specific media—children’s books and religious texts—as cultural products that convey the message of culturally expected emotional experiences. For example, Tsai, Louie, Chen, and Uchida (2007) analyzed the affective content of pictures in 20 best-selling story books for children between 4 and 8 years of age in Taiwan and the United States, respectively. At this range of ages, pictures are more effective than text in conveying affect (Bainbridge & Pantaleo, 1999). Therefore, the facial expressions appearing in story books convey culturally important messages. Tsai et al. assumed that in the North American independent cultural context, assertively expressing oneself would be seen as an important skill for self-actualization and therefore the facial expressions would be more intense. Conversely, in the East Asian interdependent cultural context, harmoniously accommodating with others would be seen as an important skill for self-actualization and the facial expressions would be milder or less intense. Compared to the Taiwanese storybooks, the American storybooks did in fact show more excited expressions, wider smiles, and more arousing activities. In a study of practices and written materials pertaining to Christianity and Buddhism, Tsai, Miao, and Seppala (2007) examined whether religions differ in the ideal affective states they commonly endorse. Tsai et al.

analyzed Christian and Buddhist practitioners' ideal affect, Christian and Buddhist classical texts, and even contemporary self-help books oriented toward either Christianity or Buddhism. The results indicated that compared to Buddhism, Christianity values high-arousal positive emotional states (such as excitement) more, and values low-arousal positive emotional states (such as calm) less. In another study, Hong Kong residents also reported experiencing positive emotional states that were calm and harmonious rather than excited or intense (Tsai, Knutson, & Fung, 2006). In sum, these researchers maintained that culturally shared ideas about the self resonate strongly with the affective states that people ideally want to feel (Tsai, 2007). Thus it is not difficult to see why such culturally dominant messages are observed even in contemporary advertisements (Chim, Moon, & Tsai, 2009).

***Orientation of the self: Uniqueness vs. conformity.*** Other researchers have conducted cultural comparisons of advertisements by focusing on cognitive aspects of the independent vs. interdependent contrast. For example, Kim and Markus (1999) coded four types of magazine advertisements (business, social commentary, women's, and pop culture/youth) and found that Korean magazine advertisements use appeals emphasizing conformity, and American magazine advertisements use appeals emphasizing uniqueness. Conformity advertisements emphasized collective values and tradition (e.g., "Our ginseng drink is produced according to the methods of a 500-year-old tradition"); traditional social roles ("Bring a fresh breeze to your wife at home"); harmony, group well-being, and group norms ("Our company is working toward building a harmonious society"); popularity ("Seven out of ten people are using this product"); and the latest trends ("Trend forecast for spring: Pastel colours!"). By contrast, uniqueness advertisements not only reflected individual values such as freedom ("Inspiration doesn't keep office hours"), being different from others ("Individualize!"), and uniqueness ("The Internet isn't



for everybody. But then again, you are not everybody”); they also rebelled against collective values and beliefs by rejecting tradition (e.g., “Ditch the Joneses”), rejecting social roles (“Princess dream. Pony dream. Ready for a kick-butt dream?”), and emphasizing personal choice (“Choose your own view”).

***First-person vs. third-person perspective.*** Finally, some researchers focus on the perceptual aspect of the independent vs. interdependent contrast. The independent self-construal encourages people in the idea that they are the centre of their social world. In this mode of self-awareness, people tend to take the first-person perspective, that is, seeing the world from their own point of view. Conversely, the interdependent self-construal encourages people to see themselves as part of a larger social context, and not necessarily at the middle of it. In this mode of self-awareness, people tend to take the third-person perspective, conceptualizing themselves in context by taking others’ point of view (Cohen & Gunz, 2002; Cohen & Hoshino-Browne, 2005; Leung & Cohen, 2007). Cohen and Gunz (2002) examined cultural variation in Canada. Because the Canadian constitution emphasizes multiculturalism, Canadian immigrants are highly encouraged to maintain their cultural heritage. Cohen and Gunz targeted Canadians of East Asian cultural heritage and Canadians of European cultural heritage. The results indicated that Asian Canadians tended to memorize their experience from the third-person perspective, whereas European Canadians tended to memorize it from the first-person perspective. Perspective taking also shapes here-and-now events. Cohen and Hoshino-Browne (2005) asked Asian Canadians and European Canadians to tap out a tune (such as “London Bridge Is Falling Down”) on the table so that another participant might recognize it. They asked participants to estimate how difficult it was for the listener to identify the target song. European Canadians were overconfident about their guesses compared to Asian Canadians, arguably because, from their

own first-person perspective, the task was fairly easy. Asian Canadians, who were more likely to apply the third-person perspective, could more accurately guess the constraints on the listener (Cohen & Hoshino-Browne, 2005). Thus it is possible to speculate that cultural products in the Asian tradition tend to take the third-person perspective and those in the Western tradition tend to take the first-person perspective. Although we need to wait for more systematic empirical research to test this possibility, there is at least one report that may support this assumption. Masuda (2010) reported that market research in Japan indicated that video games requiring players to take the first-person perspective (e.g., Call of Duty), which are very popular in the United States, did not catch on in Japan. By 2009, cumulative unit sales for Call of Duty had reached 8 million in the United States, compared to only 230,000 in Japan ([http://www.npd.com/press/release/press\\_100203a.html](http://www.npd.com/press/release/press_100203a.html), 2009). However, games that require the player to take the third-person perspective are extremely popular in Japan; cumulative unit sales of Dragon Quest, Pocket Monster, and Final Fantasy video games were 4.1 million, 3.3 million, and 1.6 million ([http://www.famitsu.com/game/news/1231257\\_1124.html](http://www.famitsu.com/game/news/1231257_1124.html), 2009).

In sum, these findings suggest that in the cycle of “culture  $\leftrightarrow$  the mind,” North Americans and East Asians who are exposed to different types of self-relevant cultural products internalize their preference for them, and use that internalized preference to reproduce cultural products containing the same cultural message.

### **Conclusion**

This chapter reported two types of research in cultural psychology. First, focusing on the “culture  $\rightarrow$  the mind” path, we reported how East Asians’ mentality differed from that of North Americans. Second, focusing on the “the mind  $\rightarrow$  culture” path, we reported that cultural products created and maintained by East Asians entail holistic and interdependent cultural

messages, whereas those created and maintained by North Americans entail analytic and independent cultural messages. Practical applications of this research to business have yet to be studied. However, we are confident that these empirical findings, obtained through rigorous scientific methods, will provide a good foundation for thinking about cultural variation in advertisements. To close this chapter, we address the future directions in culture and cognition research, and some caveats for the application of research in culture and the mind.

### *Investigating Dynamic Processes*

Although cross-cultural research on the human mind and on cultural products indicated the constancy in patterns between culture and the mind (e.g., the holistic ideas expressed in East Asian cultural products correspond to East Asians' holistic mentality), the means by which cultural products shape one's mind have not been well investigated. Since the cycle is a dynamic process—culture shapes the mind, and the mind shapes culture—such analyses should be a major part of the research. Our recent work on cultural variation in web page designs attempted to answer this request (Wang et al., 2011). One of the intuitive questions arising from previous findings is, “Why are East Asians not overwhelmed by such a complex organization of information?”

To address this question, we go back to the “culture → the mind” line of research. Wang et al.'s (2011) information search task, using 24 mock web pages, revealed that East Asians' information search speed was much faster than that of European Canadians when participants were presented with complex web pages, although there was no significant cultural difference in performance when using simple web pages. The findings suggest that East Asians are more likely than North Americans to be good at handling complex pieces of information, and to search a target object much more quickly. We concluded that if people are surrounded by complex

pieces of information from birth, they develop skills to cope with complex ways of organizing information.

It could thus be said that people are born to attune to the characteristics of available cultural resources. Developmental research under the umbrella of analytic vs. holistic thoughts gives credence to this assertion. These studies suggest that people who are exposed to cultural resources that convey dominant cultural messages become attuned to the values and then transmit them to their own and subsequent generations (e.g., Duffy, Toriyama, Itakura, & Kitayama, 2009; Ji, 2008; Senzaki & Masuda, 2011). We believe that more research of this type should be conducted in the future, to better address cultural psychologists' assertion of the "culture  $\leftrightarrow$  the mind" dynamism. Indeed, as Cohen (2007) pointed out, cultural psychologists currently ask whether cultural effects are driven by things "in the head," "out in the world," or some combination of both, and how these causal forces should be measured (p. 200).

***The Process of Cultural Transmission and Dissemination: The Caveat***

The dominant beliefs, values, ideas, and worldview shared by people in a given culture shape those people's minds, and the people in turn reproduce and sustain these cultural messages through cultural products in two ways: by spreading the cultural products (Sperber, 1996) and sharing them with others, and by transmitting the cultural products to the next generation (Tomasello, 1999). Thus, those who are interested in the practical application of cultural psychology cannot help asking the following question: What kind of information is most effectively spread and transmitted to potential customers? After reading this chapter, the reader might expect that messages that fit nicely with the dominant cultural beliefs, values, ideas, and worldview would be the most transmittable and disseminable. Or would counterintuitive messages, which are shocking and vivid, influence potential customers more effectively? This is

not an easy question, and obviously beyond the scope of this chapter. Rather, we would like to share one research finding that we find intriguing.

Norenzayan, Atran, Faulkner, and Schaller (2006) hypothesized that cultural narratives such as myths and folktales are more likely to achieve cultural stability if they correspond to a minimally counterintuitive (MCI) cognitive template that includes mostly intuitive concepts combined with a minority of counterintuitive ones. To test their hypothesis, they examined whether this template produces a memory advantage, and whether this memory advantage explains the cultural success of myths and folktales. They manipulated the proportions of the intuitive and counterintuitive messages in four ways—totally intuitive messages, mostly intuitive but a few counterintuitive messages, mostly counterintuitive but a few intuitive messages, and totally counterintuitive messages—and asked people to memorize the messages. The results indicated that people can easily memorize messages in which intuitive messages are dominant. This finding suggests that information (or advertising) that includes intuitive messages is the most transmittable and disseminable. However, an interesting phenomenon was observed. Norenzayan, Choi, and Nisbett (2002) found that an MCI template produces a memory advantage after a 1-week delay, relative to entirely intuitive or maximally counterintuitive cognitive templates. This finding suggests that people easily process culturally dominant messages, but in the long run, small amounts of vivid or shocking accents increase the likelihood of the message being transmitted and disseminated. We leave the reader to reflect on this example of the complex dynamics of “culture  $\leftrightarrow$  the mind.”

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