American and Chinese Similarities and Differences in Defining and Valuing Creative Products

ABSTRACT

This review of the literature explores how Americans and Chinese view creativity and what they expect from creative products. American and Chinese explicit beliefs about creativity (i.e., expert opinions) share many similarities. Implicit beliefs, however, show more divergence: Americans tend to value novelty and more “ground-breaking” types of creativity, whereas Chinese tend to appreciate creativity within constraints, such as reworking a traditional concept. The context of how people respond to creativity obviously varies by culture, although there are also some communal and universal creative ideals.

Let the Bullets Fly (Jiang, 2010) was one the greatest cinematic successes in Chinese film history. The action/comedy starring Chow Yun-fat made a record-setting $100 million dollars in its native country. Yet when the film had its American premiere (at the Tribeca film festival), filmgoers left in the middle of the movie; the festival ended without a distribution deal. Indeed, the film does not have an American distributor as of this writing. This cross-cultural disconnect is not an isolated incident; many recent Chinese films have not met with financial (or critical) success in America (Zeitchik & Pierson, 2011).

Why does such a discrepancy exist? This paper aims to review the research literature on how Americans and Chinese evaluate creative products and what they expect from them. Starting with an overview of how Americans and Chinese define and assess creativity, we will then examine previous research from the broad view of culture context. We will specifically emphasize cultural similarities and differences in expectations for a creative person and a creative product. We will also discuss the differences between how people desire a product and how they assess a product, then explore avenues for future research.

Creativity research came to prominence 60 years ago in America. From early work on divergent thinking (Guilford, 1950), creativity now has a multitude of approaches and perspectives. A small sampling include approaches rooted in personality (Batey, Chamorro-Premuzic & Furnham, 2010), social psychology (Eisenberger & Rhoades, 2001), cognitive psychology (Finke, Ward & Smith,
One trend is an increase in research on creativity and culture. Common themes include how cultures vary in the relative dichotomy between the importance of creativity and adherence to traditional norms (Torrance, 1988), as well as how differences in creative features are related to other cultural values (Paletz & Peng, 2008). Culture likely influences the definition, expression, and evaluation of creativity (Lubart & Sternberg, 1998; Niu & Sternberg, 2001). Correspondingly, people in different cultural contexts may have different social values and attitudes that deeply affect their motivations, attitudes, emotions, and thinking (Markus & Kitayama, 1991), thereby impacting creativity in a further multitude of ways.

Thus, examining creativity from a cross-cultural point of view is needed for a fuller picture of how creativity can be defined and assessed (Zha, Walczyk, Griffith-Ross, Tobacyk & Walczyk, 2006). One of the most common approaches is to look at differences between the East and the West, with individualistic (Western) and collectivistic (Eastern) societies offering many points of comparison (Tsang & Prendergast, 2009). Within such East-West cross-cultural work, American and Chinese cultures are among the most often studies, in part because they represent the two largest economies (United States, then China) in the world (Barboza, 2010). Not all East Asian cultures are exactly the same (Paletz & Peng, 2008), of course, so one benefit of narrowing a focus on Chinese and American cultures is that specifically comparing these two cultures can help draw a clearer picture under a more controllable context.

The first step is the most straightforward in many ways: How do Americans and Chinese define creativity? What do the experts say, and what do laypeople think?

AMERICAN AND CHINESE WORK ON CREATIVITY

There are two ways to define a construct. One is to gather explicit definitions. These often come from psychologists or other experts and are typically based on scientific data. In contrast, implicit definitions are personal beliefs about a topic. Such implicit definitions are often not articulated, but exist in a person’s mind (Sternberg, 1985). We will examine studies focusing on both types of definitions.

EXPLICIT DEFINITIONS

Explicit theories are typically psychometric in nature (Runco & Bahlada, 1986) and generally multi-dimensional, trying to explain what combination of elements is necessary for creativity to exist (Amabile, 1996; Sternberg & Lubart, 1995). Creativity has been conceptualized using many different variables, such as personality (Batey et al., 2010), motivation (Amabile, 1985), intelligence (Sternberg, 2001), and problem-solving abilities (Getzels, 1975).

Within American research, many researchers agree that the originality/novelty is a critical characteristic of creativity (Amabile, 1983; Barron, 1955; Sternberg & Lubart, 1999; Torrance, 1988). Most definitions (Kaufman, 2009) center around two key aspects of a creative product: it should be both novel (i.e., original, unexpected) and appropriate (i.e., useful, adaptive concerning task constraints). In other words, a
creative product must not only be new but also fulfill any necessary requirements (Sternberg, Kaufman & Pretz, 2002). Such requirements could be very low (such as for modern dance) or very high (such as for developing a treatment for diabetes). Cropley (2001) further argues that a creative product should reflect novelty, relevance and effectiveness, elegance, and genesis (ability to be applied to other areas).

Another perspective can be found in Csikszentmihalyi’s (1999) Systems Model. He defines creativity as an interaction between the domain, the field, and the person. A domain is a preexisting area of expertise. It could be as broad as mathematics or science; it could be as specific as game theory or particle physics. Creativity occurs when a domain is changed in some way. The field is defined as the “gatekeepers” – teachers, editors, critics, and so on. The field interacts directly with the domain; the field shapes a domain (i.e., the editors of psychology journals help determine how the domain of psychology is advanced) and the domain shapes the field (i.e., developments within the domain, such as new scientific discoveries, greatly impact how the gatekeepers make judgments). The third component is the person – the one who creates an idea or theory or piece of art. The success of such a creative product will likely depend on the interaction between the field (the gatekeepers) and the person. The field can impact the creative product in a negative way (via suppression or extensive criticism) or in a positive way (via mentorship and nurturance). Finally, the domain defines the space in which a person creates. A creative person designing a product within the domain of children’s toys is unlikely to include sharp needles and hallucinogenic drugs as part of the design, because children’s toys require a certain level of safety and age appropriateness. Csikszentmihalyi’s (1999) approach conceptualizes the creative act as being inherently interactive and context-dependent; any given culture will influence the members of the domain, the gatekeepers of the field, and the creative people in a myriad of different ways.

Within the Chinese creativity research community, many initial definitions of creativity were simply the application of American theories into a Chinese cultural context (Li, 2011). One possible reason could be that there is no way of directly translating the word “creativity” into Chinese. Based on the most authoritative Chinese dictionary-Xinhua Dictionary, there are two expressions that most closely refer to the concept of creativity. The first is “Chuang Zao,” which means the ability to create and invent, including the ability of problem-finding, foreseeing and judging, problem-solving, task-accomplishing, and assumption-testing (Xinhua Dictionary, n.d.). Levels of creativity mainly depend on experience, knowledge, method and psychological diathesis. The second is “Chuang”, which means having or providing a creative idea, conception, etc. (Xinhua Dictionary, n.d.), an abstract concept about which characteristics may be associated with creativity. Neither expression is useful in discussing the creative product.

As social psychology became a dominant presence in psychology, more and more cross-cultural research searched for historical and indigenous roots of the concept of creativity and compared Chinese conceptions with those of Westerners (Rudowicz, 2004). The most common definition of creativity, from the field of education, encompasses the sum of creative skill, creative thinking, and creative ability of a
person pursuing creating activities (Lin, 2000; Niu, 2006). Mao, Guo, Chen and Lin (2000) used this definition to generate eight different characteristics of creativity: Creating a product that had never been created before, living a creative life, solving a problem, combining factors and building new relationships, having the ability to be creative, having a creative personality, thinking creatively, and comprehensive performance.

Most conceptions of the creative product, however, are simply based on the creativity industry in China (Li, 2007; Yin, 2011). Novelty and inventions are either non-existent or conceptualized differently in traditional Chinese teaching (Rudowicz, 2004). Chinese tend to conceptualize creativity with a more socially related attitude. Li (2007) proposed that creative goods are products or services that have symbolic value, social meaning, and a certain cultural connotation, mainly created by the development and application of intellectual property rights based on the requirements of society and individual creativity, skill, and ability. Previous research has shown that Chinese tend to link creativity to ethical and moral standards, which bears little semblance to the Western concept of creativity (Lau, Hui & Ng, 2004).

**IMPLICIT DEFINITIONS**

Stein (1953) proposed that creativity must be defined in terms of the culture in which it appears. Culture can influence creativity's frequency, quality, and perception (Zha et al., 2006). Implicit theories are conceptual rather than empirical and derived from individuals' belief-systems (Runco & Bahleda, 1986). By formulating the common cultural views on creativity and understanding what people from certain cultures mean when referring to creativity, implicit theories help provide a broader scope from which to look at creativity. Such work can highlight underlying and shared assumptions that drive people to think and behave in certain ways. This implicit knowledge is generally held by laypeople in the same culture or sub-culture and is not discussed, questioned, or consciously considered (Paletz & Peng, 2008). Furthermore, its impact on individual thoughts and feelings may be more proximal than explicitly held values (e.g., Hong, Morris, Chiu & Benet-Martinez, 2000).

Yet comparing implicit definitions between the United States and China is not easy. The first step is exploring two different points of view: “culture-universality” or “culture-specificity.” Some researchers believe creativity is a concept that contains universal meaning, and thus can be measured by a standardized or universally meaningful test. Niu and Sternberg (2002) argue that most cross-cultural research is based on the assumption of a universal understanding of creativity, typically creator-focused. Research on how people conceive of creative products has shown cross-cultural agreement that a product must be accepted as useful, satisfactory, or appropriate by a group at some point in time in order to be considered creative (Rudowicz, 2003; Stein, 1953). Although less research focuses specifically on Chinese vs. American creativity, if the range is expanded to include studies on Eastern and Western creativity then there is a solid body of work to draw upon.

Some research focused on cultural differences in implicit views on creativity (e.g., Niu & Sternberg, 2002; Rudowicz, 2003). The Western conception of creativity is
primarily concerned with innovation, whereas the Eastern conception of creativity is more dynamic, involving the reuse and reinterpretation of tradition rather than a break in tradition (Lubart, 2010). Thus, Eastern creative individuals are more inclined to adhere to the socio-cultural norms when they come up with a new idea or creative product. Further research shows that Easterners tend to view time, human action in time, and progress through time as a circular conception, thus creativity is the rediscovery of a “pre-established holistic reality” (Westwood & Low, 2003), thus is consistent with history and societal norms.

In addition, the translation of creativity might be different based on different cultural and language systems. Most cross-cultural studies have been criticized for using a “Western” framework in defining and measuring creativity even in other parts of the world, as they may represent a distorted view of the phenomena without having the same meanings or resonance as in another context (Westwood & Low, 2003). Rudowicz’s (2003) research shows that the focus on newness in the Western conception is not shared in the East. The meaning of novelty and originality fits North American belief system perfectly based on the ideals of individuality, democracy, and freedom, but Eastern societies have developed a different perspective on the meaning inherent to novelty and originality rooted in their cultural context. Although some research argues the standards of creativity may not differ depending on the culture, a difference in the importance placed on those standards remains across cultures (Averill, Chon & Hahn, 2001). We will further expand these differences in the following review. Specifically, Hempel and Sue-Chan (2010) pointed out there is a considerable agreement between Chinese and Americans examining the concept of creativity in East and West from the view of beholders; however, more specific investigations are still needed.

THE CREATIVE PRODUCT

Generally speaking, creativity is considered to have various features based on different levels or aspects. Studies on creativity mainly focus on four facets: the person, process, product, and press/environment (the four P’s) first categorized by Rhodes (1961). Research on the person investigates the creative individual’s personality as well as motivational states. The creative process research focuses on creative thinking and production. The press investigates environmental pressures that may facilitate or inhibit creativity. The creative product represents the end result of a person’s creative process, tangible or not, such as a poem, dance, essay, cake, computer program, or machine tool (O’Quin & Besemer, 1999). Of the four P’s, the creative product is probably the most widely studied and measured. The product definitions are widely regarded as the most useful for applied creativity research (Amabile, 1982, 1983).

To fully explore how people define and value creative products in different cultures, we should first specify the nature of creativity in products. Is it universal or culture-specific? Based on the fact that the definition of creativity is different across cultures in its very meaning, people will look differently upon creative products as well. In China, the creative product is broadly believed to be the outcome of the creative industry (Wang, Xie & Chen, 2007). These products are slightly different
according to different creative industry lists; for example, Shanghai and Beijing have their own industry lists (Zhang, 2009). Generally the creative industry covers such areas as “industry design,” “film-video & art,” “software service,” “fashion,” “architectural adornment,” and “exhibiting & publishing.” This conception is different from the American creative product. Although creative goods have been used in American research studies, creative products have rarely been connected with the creative industry as economic activities. More often than not, objects created by a random individual, such as a poem, drawing, writing, or even a sentence, have been considered creative products in academic research (Kaufman, Plucker & Baer, 2008). A creative product for Americans is more of a creation, whereas Chinese may consider it more as goods for sale.

On the basis of previous research, we can see that people with different backgrounds hold different opinions of product creativity. Even if they statistically “agree” with each other, the words they use to express creativity might vary from culture to culture. As Glăveanu (2010b) pointed out, any process or product can be evaluated as being more or less creative, but always in relation to a certain group, domain, or historical period. Most researchers typically do not bother to offer supplementary explanations in current evaluations of creative products. In the next section, we will expand this line of thought and review how a creative product is evaluated by American and Chinese.

EVALUATING CREATIVE PRODUCTS IN AMERICA AND CHINA

Based on different understandings of the creative product, people use different ways to value those products. By designing different tools to test different groups of people, assessing the creative product is more effective and efficient. Three categories of assessment methods could be found in general: expert ratings, scale-based ratings, and layperson ratings. Expert ratings are based on expert (or quasi-expert) judgments, which are believed to be the best judges of creativity; scale-based ratings rely on product rating scales, mainly used in engineering in industry; layperson ratings are used for assessing how “average” people think of creativity (i.e., aesthetic response) Each way has its own focus in specific areas.

EXPERT RATINGS

A series of findings show that experts and novices perceive, evaluate, create, and experience art differently (Axelsson, 2007; Kozbelt & Seeley, 2007). Experts are more likely than novices to consider aesthetic value, the ideas behind the work, and the norms of “good” and “bad” taste (Tallberg, 2007). Kozbelt and Seeley (2007) claimed that art historians, artists, psychologists, and neuroscientists also have long asserted that artists perceive the world differently than non-artists. Although empirical research on the nature and correlates of skilled drawing is limited, the available evidence supports this view that artists outperform non-artists on visual analysis and form recognition tasks. Evidence has been found from empirical aesthetics that experts find art more interesting and pleasing, particularly when it is complex, challenging, and abstract (Axelsson, 2007; Hekkert & van Wieringen, 1996; Silvia & Berg,
2011; Winston & Cupchik, 1992); meanwhile, experts react more negatively than novices in simple stimuli evaluation (Tallberg, 2007). Axelson’s (2007) study provided evidence that photo professionals had a higher ability to process photographic information and preferred photographs that were relatively uncertain and unfamiliar. Similarly, an average person would have more difficulty in evaluating the creativity of a scientific theorem or mathematical proof than one well versed in those areas (Simonton, 2004). In a recent study, Silvia and Berg (2011) measured expertise in film appraisals and found differences between experts and novices in the effects complexity had on interest. Reviewers with expertise in film found complex films more interesting and less confusing than their novice counterparts. This echoes an earlier study on the influence of art training on interest, showing that people with high training in art found complex pictures relatively more interesting (Silvia, 2006).

Lee, Lee and Youn (2005) applied generalizability theory techniques to expert and novice ratings of flower designs. Their experts were professional artists who worked in flower design and their novices were undergraduate students. They found low levels of inter-rater reliability in the Novices, as in past studies. They also calculated that the variance due to raters was much less for the experts, also indicating a higher level of agreement. Finally, Lee et al. (2005) found that product-based variance was twice as high in experts as in novices. In other words, novices were much less likely to be able to discriminate between different types of flower designs.

In addition, experts and novices differ in the types of information that prompted detailed message processing. Maheswaran and Sternthal (1990) found that experts are more likely than novices to process details given only attribute information (e.g., a description of product function). In contrast, novices tend to give a favorable judgment when given benefit information (e.g., product advantage). Besides focusing on different factors, experts may be harsher than peer or self assessments in the assessments of artwork (Kaufman, Baer, Cole & Sexton, 2008; Kaufman, Plucker et al., 2008b).

The Consensual Assessment Technique (CAT) is a specific technique that utilizes the subjective judgment of original products by experts (Amabile, 1982) and has been proved to be the most widely used method in product-based assessment of creativity (Hennessey & Amabile, 1999; Hennessey, Kim, Guomin & Weiwei, 2008; Kaufman, Baer et al., 2008a). In the CAT, participants are asked to create a drawing, writing, or even a sentence, which experts are later asked to evaluate the creativity of the product. Previous studies show that experts provide reliable and valid judgments (Amabile, 1996; Sternberg & Lubart, 1995). Some studies have compared novice-expert assessments on creative products, concluding that experts are far more consistent in their ratings compared to novices, hence would be able to give a more accurate assessment. Kaufman, Baer et al. (2008; see Kaufman & Baer, 2012) examine both novice and expert judgments of student short fiction using the CAT. Results indicate that experts were far more consistent in their ratings compared to non-experts, which were more inconsistent with lower inter-rater reliability and did not match those of the expert raters.
Glăveanu (2010a) used multiple feedback methodology in evaluating the creativity of Romanian Easter eggs. This approach requires “appropriate assessors”, who are more involved and in contact with the product, to evaluate the creativity of a certain product or class of products. In this study, four groups (ethnographers, priests, art teachers and folk artists) of 27 evaluators in total who have relevant background were included. This methodology also requires an in-depth understanding of the social and cultural context of creativity evaluations (Glăveanu, 2010a). Although this study claimed to use non-experts to make an assessment, it seems these “appropriate assessors” should be labeled as quasi-experts rather than laypeople. This method echoes how Amabile defined creativity 30 years ago: that the assessment of creativity of a product or response should be made by appropriate observers who are familiar with the domain in which the product was created or the response articulated (Amabile, 1982, 1983).

Chinese expert assessment could be found in both cross-cultural studies in English journals and Chinese domestic studies in Chinese. The CAT has been widely used because it is free of cultural and linguistic bias (Hennessey et al., 2008). Initial studies focused on aesthetic judgment and have generally found consistencies across Eastern and Western cultures (Berlyne, 1976; Iwao, Child & Garcia, 1969).

Hennessey et al. (2008) used the CAT to examine four countries, including China and America, to explore the applicability of the CAT focusing on product creativity. Results found that judges’ ratings of product creativity were highly reliable, echoing past findings (Niu & Sternberg, 2001; Rostan, Pariser & Gruber, 2002). Other cross-cultural studies comparing American and Chinese expert assessments have yielded inconsistencies. For example, Tsang and Prendergast (2009) used content analysis to compare computer game reviews from Chinese and American participants, obtained from six (three American and three Chinese) popular PC-game magazines. Research found similar evidence that, although both Chinese and American reviews have a relatively equal number of positive comments, Chinese reviews use fewer negative comments and give higher final ratings for the same set of products than their American counterparts. In addition, Chinese reviews showed a lower consistency between their evaluative comments and their final ratings (Tsang & Prendergast, 2009). Correspondingly, Jawecki, Füller and Gebauer (2011) analyzed American and Chinese online discussion boards and found comparable levels of quality and creativity in the comments but different creative styles. Chinese board members, for example, were both less competitive and less organized. These findings are consistent with studies of Chinese and American cultures. As a society that highly relies on context, Chinese raters are more likely to communicate in ambiguous or implicit ways (Lau et al., 2004).

In China, most of the creativity assessment tools originate from Western studies. Expert assessments in China has been introduced in literature reviews or quality research (Song & Shi, 2005), rather than empirical studies. The CAT has been used in creativity assessment mostly in Taiwan and Hong Kong, however it is mostly used to assess creativity of children in general aspects (Lau et al., 2004). Some studies have claimed to develop their own assessment scale based on western creativity...
assessment tools, such as the CAT, many being scale-based methods requiring further testing from more studies. For example, Xu (2007) developed the “Creative Product Assessment Scale” in his Master’s thesis based on Amabile’s CAT and Zhang’s (2008) product creativity assessment scale. Ten experts who have been trained or have worked in creativity education and training were asked to judge students’ creative products. Results have shown that product function is better expressed than product aesthetic outlook (Xu, 2007).

**LAYPERSON RATINGS**

Experts are considered to be better judges of creativity in a certain domain at a certain time (such as during the decision process for the Nobel Prize). However, there is also value in determining what “average” people (or laypersons) think of creativity (i.e., how they evaluate creative products). For example, experts in the industry would not necessarily know how consumers feel about the product, a customer may not agree with Michelin’s restaurant ratings. In recent research, Gláveanu (2010b) suggested that the value of a creative product must never be assessed only on the basis of expert judgment, or from the perspective of the creators, rather it should be assessed based on multiple forms of feedback from a wider audience. Assessments made by novices cannot be replaced by those of experts. This is more important in cross-cultural studies, as beliefs about creativity originate from the customs, traditions, and values of the culture are mainly brought by laypeople, unaffected by expert or professional knowledge (Hempel & Sue-Chan, 2010).

In America, more and more studies have started to pay attention to how average people feel about creative products. As mentioned earlier, Horn and Salvendy (2006) tested consumer perception of product creativity and indicate that there are three product creativity dimensions (centrality, importance, and desire) that significantly predict customer satisfaction (40% of the explained variance) and purchasability (33% of the explained variance) of creative products. In their following studies, three main product creativity factors (affect, importance, and novelty) have been found. The affect factor is highly related to the consumer’s purchase attitude toward a creative product; equally important as novelty in consumer perception of product creativity. In addition, affect and importance dimensions significantly predict customer satisfaction (Horn & Salvendy, 2009). Maheswaran and Sternthal (1990) also supports the hypothesis that in the aesthetic domain, preference and judgments diverge in the assessment of a product; people may not like a work that be recognized as a good work, while they may like a work even if they judge it to be not very good.

Other studies also suggest shared subjective criteria of creativity in any domain changes over time and differ across cultures, which therefore must, ultimately, be culturally and historically bound. What is considered to be a creative drawing in one culture would not necessarily convey the same assessment in another culture (Chen et al., 2002). For example, Niu and Sternberg (2001) compared the creativity ratings of artwork created by American and Chinese college students, as well as the criteria used by American and Chinese judges to evaluate these works. The difference
between the use of criteria by American and Chinese judges was small, and consisted mainly of the American judges’ use of stricter standards in evaluating overall creativity. Moreover, there was a greater consensus among Chinese judges regarding what constitutes creativity than among American judges. Rostan et al. (2002) used a similar methodology comparing Chinese American and Caucasian students’ artwork, with two groups in each culture: students with additional art training and classes and students with no such classes. Each group’s artwork (one drawing from life and one drawing from imagination) was judged by both Chinese and American judges. There were no significant differences between cultures from either set of judges, only between art students versus non-art students.

In addition, cultures differ in their emphasis on novelty versus usefulness (appropriateness) of creativity. When evaluating creativity, Westerners emphasize novelty more than appropriateness compared with non-Westerners (Lubart, 2010). Consequently, the need for variety and uniqueness tends to be weaker in East Asian cultures compared with Western cultures (Erez & Nouri, 2010; Kim & Drolet, 2003). Consistent with this view, Yue and Leung (2003) assessed the attitudes concerning creativity among Hong Kong and mainland Chinese undergraduates and found that emphasis was placed on concepts such as social responsibility and societal contributions rather than personal satisfaction and other intrinsic qualities. This finding is in direct contrast to a series of Western studies emphasizing the importance of intrinsic motivation to creative performance (e.g., Amabile, 1985; Amabile, Goldfarb & Brackfeld, 1990). It is interesting to note that the determinants of intrinsic motivation may differ by culture; Iyengar and Lepper (1999) found that personal choice was less related to intrinsic motivation in Asian children than in American children.

In China, however, creativity is seen more as a means to an end, supporting the notion that Chinese tend to emphasize the appropriateness dimension of creativity (Leung & Morris, 2011). Also, lacking priority, creativity was less encouraged in Chinese culture possibly explaining why Chinese students improve more than American students when motivated to be creative (Niu & Sternberg, 2001). Besides cultural factors, an ecological account may provide another explanation of why creativity (particularly novelty) is less emphasized in non-Western cultures. Most non-Western cultures are less affluent, so the dominant ethos channels people’s attention and energy toward survival needs rather than the pursuit of novelty and stimulation. In line with this reasoning, Schwartz and Sagie (2000) found that across 42 societies, socioeconomic development was positively related to self-direction, which includes the value of creativity and curiosity.

However, other researchers have found contrary results regarding the effect of the individual in rating the creative product. Paletz and Peng (2008) manipulated the novelty and appropriateness of different products and asked university students from China, Japan, and the United States to indicate their evaluation and desirability. Surprisingly, Chinese were more influenced by novelty and less by appropriateness in their desirability ratings than both Japanese and Americans. Leung and Morris (2011) argued this finding is inconsistent with previous results because Beijing
underwent phenomenal economic growth in the past decade; its norms, therefore, shifted toward an emphasis on novelty.

It is important to note that dimensions important to product assessment are not necessarily equivalent to what people actually desire from the product. In consumer behavior research, things we call our own are referred to as possessions (Belk, 1988). These are distinguished from the temporal or long-term utilization without purchase and ownership, referred to as experience (Holbrook & Hirschman, 1982; Pine & Gilmore, 1999). Cultures differ in their values, which influence what is desirable or undesirable (Erez & Nouri, 2010). When people are asked to rate creative products with certain internal standards, different preferences are shown in Eastern and Western research. For example, Chinese respondents emphasize assimilation needs as more favorable, whereas Americans stress differentiation needs (Aaker & Schmitt, 2001). The most direct evidence is provided by Paletz and Peng (2008). In their study, mentioned earlier, they also found that both novelty and appropriateness have strong significant effects on both ratings of creativity and desire; however, novelty was more important overall for creativity, and appropriateness was more important overall for desire. Further, they found that Chinese are more strongly influenced by the novelty manipulation than were Americans (Paletz & Peng, 2008). It is one of the few studies to distinguish the evaluation of product itself and how desirable it is for people who assess it.

SCALE-BASED RATINGS

In addition to expert and layperson ratings of creative products, another method is to use a specific product rating scale. Such scales typically have detailed criteria for assessing creativity and can ideally reduce discrepancy among raters. One system is the Creative Product Analysis Matrix (CPAM), which is aimed to assess creativity, such as in works of art, new product ideas in manufacturing, or when considering other types of artifacts of the creative process (Besemer, 1998; Besemer & O’Quin, 1999; Besemer & Treffinger, 1981). This method is based on explicit theory and posits three important indicators of creativity in products: novelty, resolution, and elaboration and synthesis. Each factor is then divided into categories or facets that further describe the product. The dimension of novelty addresses various aspects of newness in a product, such as outlook and materials; the dimension of resolution concerns function that is how well the product does what it is supposed to be; the dimension of elaboration and synthesis, also called style, often relates to aesthetic appreciation of the product. Based on the CPAM, the Creative Product Semantic Scale (CPSS) is an evaluation instrument intended to assess creativity using non-expert judges and has been tested and developed by empirical studies in the United States (Besemer, 1986, 1998; Besemer & O’Quin, 1987; O’Quin & Besemer, 1989).

The authors of the CPSS have argued that their measure helps businesses in marketing, new product design, product improvement, and advertising (O’Quin, Besemer & Buffalo, 2006). For example, the CPSS has also been used in advertising assessment to compare different types of advertising (White & Smith, 2001; White,
Shen & Smith, 2002). In another study, Besemer (2000) asked designers to create concept drawings and were able to present highly unusual ideas. Results show that, although customers appreciated these ideas (ratings of “surprise” were high), “logical and useful” ratings were low.

The CPAM was also used as a framework for testing participants’ attitudes toward creative products from the business perspective, Horn and Salvendy (2006) developed a model of consumer perception of product creativity consisting of seven dimensions: novelty, resolution, elaboration and synthesis, pleasure, arousal, centrality, and applicability.

Another creative product rating scale is the Creative Solution Diagnosis Scale (CSDS; Cropley & Cropley, 2005), based on four dimensions: relevance and effectiveness, novelty, elegance, and genesis. They arranged them in a hierarchy ranging from the “routine” product (characterized by effectiveness alone), to the “innovative” product (characterized by all four dimensions above) at the extremes, and “original” and “elegant” products in the more moderate center. They pointed out there are both levels and kinds of creativity, that is to say products can have creativity to greater or lesser degrees, or display different kinds. In empirical studies designed to test the CSDS, Cropley and Kaufman (2012) and Cropley, Kaufman and Cropley (2011) had two groups of non-experts use the CSDS to evaluate the creativity of different mousetrap designed. Based on factor analyses from these studies, the CSDS was reframed to measure five criteria: Relevance & Effectiveness, Problematization, Propulsion, Elegance and Genesis.

Many other product rating scales exist, including some aimed at specialized populations. For example, Horng and Lin’s (2009) Scale for Evaluating Creative Culinary Products uses 34 assessment criteria in 8 categories: professional technique; aroma, taste, and texture; color; modeling and arrangement; garnish; dishware; handling of ingredients; and overall assessment. Reis and Renzulli (1991) developed the Student Product Assessment Form (SPAF) in order to aid teachers in rating student products. The SPAF measured five types of products: scientific, creative writing, social studies, audiovisual, and interdisciplinary products and has been repeatedly proven to be valid and reliable. Im and Workman (2004), developed NP (new product) and MP (marketing program) creativity measures, examined both new product creativity and marketing programs and suggested that new product success was driven more by the “valuable and meaningful attributes” (resolution) of the products and their marketing programs than by novelty.

Most Chinese product ratings scales are rooted in Western measurement tools, although often modified to fit Chinese culture. When using Western scales, Chinese researchers tend to combine several scales into a multi-scale according to research design. For example, Tan (2005) uses a product creativity assessment scale that included the CPSS and Horn and Salvendy’s (2006) scale and other instruments to test product creativity assessment based on consumer satisfaction. Cheung, Tse and Tsang’s (2001) Chinese Creative Writing Scale is a rare example of a Chinese-developed assessment tool. This scale contains 13 items, addressing flexibility, originality, and fluency to assess creative Chinese writing ability of primary school students in Hong Kong.
AMERICAN AND CHINESE EXPECTATIONS OF CREATIVE PRODUCTS

We will further examine cultural differences between what Americans and Chinese expect from creative products from two perspectives. The first will follow the core of implicit theory and find evidence from broader contexts, such as culture. The second is to analyze different factors on how American and Chinese think a creative person should be, as there is little direct evidence, if any, on what American and Chinese expect from a creative product. The rationale behind this method lies in the fact that evaluations of creative products have commonly been used to assess how creative an individual is (Niu & Sternberg, 2001), the product being the external expression of internal creativity. Knowing what specific characteristics or dimensions people expect from a creative person may help to find what people expect from a product.

By reviewing papers on creativity across and within cultures, we can see a universal agreement that cultures do vary in the relative importance of creativity and adherence to traditional norms and how differences in creative features are related to other cultural values (Paletz & Peng, 2008; Torrance, 1988). Current research demonstrates that evaluative judgments, which might be assumed to always align with the implicit theories that stem from cultural knowledge, undergo dynamic shifts as well (Briley & Aaker, 2006). The evolved view of cultural influence that is emerging from this line of research suggests that stable, domain-general effects are few and far between. By viewing cultural features, respectively, we aim to draw a clearer picture about what American and Chinese expect from creative products.

The dimension of individualism/collectivism has been frequently compared to distinguish Eastern and Western communication styles (Triandis, 1995). Cross-cultural psychologists have judged it to be one of the most concise, coherent, integrated, and empirically testable aspects of cultural variation (Kim, Triandis, Kagitci, Choi, & Yoon, 1994). Some researchers suggest that individualism and collectivism are the “prime distinction” between North American and Chinese cultures (Tse, Lee, Vertinsky & Wehrung, 1988). Individualism has been recognized as a defining characteristic of western culture in general, American culture in particular (Zha et al., 2006). In such a society, autonomy is highly valued and an individual is viewed as a separate entity. Chinese culture, on the other hand, is collectivistic, in which all people are socially interrelated (Lau et al., 2004). People in such cultures tend to look after others’ needs and preserve their feelings to seek interpersonal harmony (Hsieh & Scammon, 1993). Many cultural differences are related to or rooted in this dimension.

Markus and Kitayama (1991) proposed that people of Western cultures tended to be independent and to find meaning largely by reference to their own internal thoughts, feelings, and actions rather than by the thoughts, feelings, and actions of others. On the other hand, people of the East including Chinese, Indians, or Japanese, tend to hold an interdependent perspective of the self in which meaning depends more on interpersonal relationships. In other words, in the United States, individuals often focused on discovering and expressing themselves and on accentuating differences from others, whereas Chinese attach a great deal of importance to “face” and tend to seek agreement from others. Bond and Lee (1981) argue that, “face,” equivalent to the
indigenous Chinese concept of “mianzi,” refers to a person’s prestige, in which one’s success is driven by being honored by other people. Concern with enhancing self-esteem however, leads North Americans to adhere to their own internal standards (Heine, Takemoto, Moskalenko, Lasala & Henrich, 2008). Although the tendency of preserving face is also found in American culture (Hallahan, Lee & Herzog, 1997), it does not permeate its social interactions. In addition, America has small power distance (low agreeableness and conscientiousness), somewhat weak uncertainty avoidance (openness to experience and emotional stability), moderate masculinity (conscientiousness and low agreeableness), and short-term orientation (emotional instability), thus creating a cultural environment that supports people to show uniqueness and differences (Westwood & Low, 2003). Comparatively, uncertainty avoidance and high power distance may restrain Chinese from expressing their unique ideas and from deviating from the norm (Erez & Nouri, 2010).

Maintaining “face” motivation tends to make Asians adhere to social norms. In addition, the sensitivity to social context also varies across cultures. East Asians tend to be more sensitive to social contexts, paying closer attention to the views of others and adjust their behaviors accordingly (Ng, 2001). People in a collectivistic society, such as China, are generally more caring about what other people think based on social norms and are accustomed to a high-context communication style. Ambiguous, indirect, implicit wording and understatements are commonly used and accepted in expressions in such cultures (Tsang & Prendergast, 2009). In contrast, individualistic cultures value low-context communications. Speakers in low-context cultures express their true intentions and expect their listeners to directly understand what has been expressed (Lau et al., 2004). Social context establishes a range in which uniqueness and novelty will be acceptable. The norms of a social context establish boundaries of uniqueness and usefulness. As such, some ideas may be so unique that they are rejected, ignored, or dismissed as irrelevant (even though they have much potential usefulness).

Paletz, Peng and Li (2011) examined implicit theories of creativity by asking Chinese, Japanese, and American students to rate which profession was more creative in forced choice pairs (the six professions were artist, team manager, philosopher, scientist, inventor, and a deeply spiritual person). Their focus was on whether the professions expressed creativity internally (dispositional) or externally (experientially). They found that Asian students were more likely to pick externally focused professions as being creative, whereas American students were more likely to pick internally focused professions.

Rudowicz (2003) reviewed another approach to explore the East–West differences in creative expression based on the theory of two forms of knowledge, intuitive and logical. In Wonder and Blake’s (1992) research, Eastern thought is believed to be more “intuitive” (i.e., more experiential, subjective, changing, and nonsystematic), whereas Western thought is more “logical” (i.e., more structured, unemotional, and individualistic). Thus, Westerners tend to rely on logic and demands that everything fit together according to existing laws. Easterners, in contrast, are more likely to rearrange the pattern based on the existing “database” culture, and are less likely to force the creative process by introducing new information (Wonder & Blake, 1992).
This idea is supported by previous research showing that Easterners are more likely to conform to social norms (Ng, 2001; Sternberg, 1985; Westwood & Low, 2003).

Americans and Chinese seem to have different implicit understandings of creativity, with different aspects being stressed more by different cultures. Explicit beliefs about creativity do show some similarity, as in Paletz and Peng’s (2008) finding of the importance of novelty for both American and Chinese. Differences are more noticeable between the groups in expectations for a creative product: (1) Americans are likely to expect a creative product to be more new and “groundbreaking,” and (2) Chinese emphasize the social components of creativity, expecting a creative product to be more consistent with tradition and social norms (Yue, 2004). For example, a sarcastic cartoon on politics or a government leader might be seen as funny and creative in America, however, may be believed to be anti-social and reckless in China. Gilson and Madjar (2011) distinguish between radical and incremental creativity; it may be predicted that Americans would prefer radical creativity, whereas Chinese people may equally respond to incremental creativity.

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If creativity is multi-dimensional, one key aim of explicit theories is to explicate which combinations of elements are most needed (Amabile, 1996; Sternberg & Lubart, 1995). Many studies explore which characteristics a creative person should have; as with creative products, there are both similarities and differences across America and China. Some concepts, such as “innovative ideas,” “imagination,” “intelligence,” “independence,” and “high levels of activity/energy” are shared by both Chinese and Western conceptions of creativity (Rudowicz & Hui, 1997). Sternberg (1985) asked both American experts and laypeople to list behaviors that would be characteristic of creative people in art, business, philosophy, and physics. The result of multidimensional scaling shows certain creative behaviors, such as “question(ing) societal norms, truisms, assumptions” and “Aesthetic taste (e.g., has an appreciation of art, music, and so forth; has good taste)” and “imagination.” Other studies have linked creativity with having a good sense of humor (Murdock & Ganim, 1993). Yet Rudowicz and Hui’s (1997) found that traits such as humor, aesthetics, and art appreciation were absent in Hong Kong’s concepts of creativity despite their importance in Western conceptions. It is also noteworthy that those in Hong Kong said they considered a person creative based on “contribution to society,” a component not present in the North American samples. Rudowicz and Yue (2000) further found that being aesthetics and humor were rarely mentioned in implicit concepts of undergraduates in Mainland China, Hong Kong, and Taiwan.

Aside from different expectations from creative individuals, Chinese and Americans also have different expectations about certain social groups. Rudowicz and Hui (1998) showed that Chinese people (from Hong Kong) identified creative achievement with financial and political accomplishments rather than with aesthetic or artistic ones. Thus, when responding to the request to nominate a person from Hong Kong known for outstanding creativity, they listed businessmen, fashion designers, and politicians as the most creative. The next on the list were film directors, actors, popular singers,
and architects; writers, artists, and scientists were rarely nominated. Chinese university undergraduates from Mainland China, Hong Kong and Taiwan considered both historical and modern politicians, scientists, and inventors as most representative of creative people; they rarely nominated artists, writers, and composers (Yue & Rudowicz, 2002). It seems that Chinese people place a great deal more emphasis on the creator’s social influence, status, fame, and contribution to society than on contribution to culture. Such beliefs are consistent with Chinese giving high evaluations based on a person’s prestige, and with a high level of respect for authority (Bond & Lee, 1981).

One important caution is that studies of implicit beliefs still rely on self-reports. People’s insights into their own beliefs may not be highly articulated. To give an example, Lim, Plucker and Im (2002) investigated implicit beliefs about intelligence in Korean samples. When measured in a more traditional way (rating different behaviors as to how they relate to intelligence), Korean beliefs seemed to diverge greatly from American beliefs. Similar to studies on Chinese beliefs about creativity, Koreans highly emphasized social harmony. When implicit beliefs were measured by having participants rate profiles of fictional people; however, the results mirrored common Western beliefs. It is possible that nuances in measurement, accuracy, and self-insight may result in the appearance of more divergence that actually exists.

A product is the external expression of its creator. From the research above, we can see that people are likely to expect the same features from product as from a creative person. Americans expect their products to be aesthetic and humorous, that is, they are more open to appreciate a wider range of creativity and are more sensitive to the sense of humor in a product. They may prefer products that challenge societal norms, truisms, and assumptions to some degree. Chinese people, on the other hand, are more likely to appreciate a product that conforms more to cultural norms and benefits or improves the society. Their views on product creativity are more influenced by the theme of the work and creator’s status.

CONCLUSIONS

By reviewing and comparing the similarities and differences between Americans and Chinese in defining and evaluating creative products, we can draw a clearer picture of two points: how American and Chinese evaluate creative products, as well as what they expect from creative products. Do people under different cultural contexts have a universal understanding about creative products? What kind of creative products do they appreciate? What characteristics of creativity do they expect from a product?

To explore the first point, we first reviewed definitions of creativity in both America and China based on implicit theory and explicit theory. Although most research suggested there is a universal understanding of creativity, when judging creativity of a product, we believe that differences are more evident between Americans and Chinese. The two cultures may agree with each other on some characteristics, but the meaning of these characteristics might differ from culture to culture.

To address the second point, we first reviewed assessment methods in America and China under three categories: expert ratings, layperson ratings, and scale-based ratings. Although expert ratings are traditionally held to be the standard, and are not
interchangeable with novice ratings, we posit that layperson ratings may be the most
relevant for cross-cultural investigations. Because creativity beliefs originate from the
customs, traditions, and values of a culture, unfiltered by expert or professional
knowledge, they are mainly reflected in layperson attitudes (Hempel & Sue-Chan,
2010). However, cross-cultural research on what average people think about creative
products is still rare. Therefore, to ascertain what Americans and Chinese expect from
creative products, we examined previous research from the viewpoint of cultural
context and Americans and Chinese beliefs about creative people. Studies indicate
that Americans say they expect products to be aesthetically pleasing, humorous,
novel, and even groundbreaking, whereas Chinese appreciate a product with more
class and popularity that is consistent with traditional and social norms.

This review suggests several future studies that can be conducted to better investi-
gate the intersection the creative product, laypersons, and culture. If product creativity
is defined as the subjective judgment of a product that may elicit an emotional
response based on a rater’s preferences, product evaluation might be different when it
is owned than when it is visited. A product can be considered creative only in relation
to a certain time and a certain group of reference by adopting a communal perspective
on creativity (Glăveanu, 2010b). People with different goals, different knowledge, and
different appraisals of what is happening will inevitably vary in how they experience
and value the world (Siemer, Mauss & Gross, 2007). Given that participants asked to
assess a creative product may not see it at the same level, future studies should distin-
guish these two possible situations. In the case of product creativity, it is important to
explore the useful features in relation to the people who would desire and would like
to purchase them, such as customers, rather than creators, experts, or critics.

There is a dearth of specific discussions of the perception and evaluation of the cre-
avtive product across cultures. Although some literature within the psychology of crea-
tivity and information processing has highlighted factors that influence creative
product assessment, there remains much be explored. Although various factors that
may influence an individual’s judgment have been considered previously (e.g.,
experience, prior knowledge, personality, environment, priming, or expectation), most
domain discussions focus on people’s skill, aptitudes, traits, propensities, and motiva-
tions. Such abilities contribute to the performance aspect of creativity, but not neces-
sarily to the creative product itself. As Baer (2010) suggested, most of the methods
commonly used have approached creativity via features theoretically related to creativ-
ity, rather than assessing creative products directly. Exploring how people evaluate
creative products and what they desire from creative products still requires study.

In past research, similarities in aesthetic judgment have been found across Eastern
and Western cultures, rather than specifically between Chinese and Americans. As
China and America represent typical cultures of the East and West and have many
similarities in geography and social diversity, more research between the two
cultures should be explored, particularly in the similarity and differences in how
creative products are evaluated. We broadly suggest that to understand creativity
cross-culturally, we need to at least entertain the possibility that it may take a
number of forms (Westwood & Low, 2003).
REFERENCES


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