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THE THREE ORDERS OF CULTURAL SIGNIFICATION: A PROPOSED DESIGN THINKING THEORY CONSIDERING CULTURES AND GLOBALIZATION

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ABSTRACT

Design thinking as a design theory is becoming a hot topic of discussion among the design community, and is also generating interest among design doctoral students. This paper attempts to investigate the inclusion of cultural factors in design thinking theory by adapting theories from semiotics to suggest creative theories, and methods for design education, with a focus on communication design, in response to the globalized world. Based on the semiotic theory, the model of "three orders of signification," Roland Barthes' (1972) exposition of "visual signification" identified three messages in every visual image: linguistic, coded iconic, and non-coded iconic. This paper borrows from these three orders of signification in semiotic studies, proposing a creative strategy that includes vernacular design, cross-cultural design, and transnational design, with embedded cultural elements for design in today's globalized world. Here, the author coined this "The three orders of signification."

INTRODUCTION

Design thinking has become a buzzword over the last decade, not only in the design discipline, but also in other areas of study, such as business, marketing, education, the arts, communication, and social innovation. It is becoming a hot topic of discussion within the design community, and among design doctoral students, as evidenced in sources such as the JISCMail-PhD-design-list-serv. The innovative, and creative popular magazine Fast Company reviewed the term as early as 2006, and articulated design thinking as a repeatable problem-solving protocol methodology with four elements: 1) design the problem; 2) create, and consider many options; 3) refine selected direction; and 4) pick the winner, execute (Fast Company, 2006).

However, discussions in the design thinking area often neglect the most important factor that governs the process of thinking: the cultural environment, and setting where the creative process takes place. In addition, the focus of design thinking theories has often been Eurocentric, with little consideration of cultural flows, and the development of transnational cultures in the global world. This paper attempts to investigate the inclusion of cultural factors in design thinking theory to suggest creative theories, and methods for design education, with a focus on communication design, in response to the globalized world.

A BRIEF REVIEW OF DESIGN THINKING AS A THEORY

Robert Curedale's (2013) recent book, entitled *Design Thinking: Process and methods manual*, includes a timeline showing the development of the history of design thinking dating back to the origin of participatory design in Plato's Republic of 380 BC (p. 4-8). The author pointed out that, over the past three decades, the term has integrated various design methodologies, and movements, emerging as human-centered design in the 1980s, popularized by a professor at the Harvard Graduate School of Design, Peter Rowe, in his book published in 1987. The term is now commonly recognized as describing the design-focused cognitive activities that designers carry out in the design process (Visser, 2006). In Curedale's (2013) words, it is "a people centered way of solving difficult problems. It follows a collaborative, team based cross disciplinary process. It uses a toolkit of methods, and can be applied by anyone from the most seasoned corporate designers, and executives to school children" (p. 13).

Because of the term's inclusiveness, Roger Martin (2009), professor of strategic management at the Rotman School of Management at the University of Toronto, wrote in his book advocating design thinking's tool, "abductive reasoning" (p. 62) is the key to the problem of business. Tim Brown of the design firm IDEO is famous for introducing the "human-centred design toolkit" for design thinking, available as a free download at his company's website (IDEO, 2009). His book is entitled *Change by design: How design thinking transforms organizations and inspires innovation*, upholding design thinking as an approach to creative problem solving in all organizations, business, and society (Brown, 2009). Together with Jocelyn Wyatt, Brown further championed design thinking for social innovation by promoting affordable health care around the world (Brown & Jocelyn, 2010).

To summarize dissimilar definitions of what design thinking is, in her two-part article on "rethinking design thinking", Lucy Kimbell (2011) categorizes "design thinking as a cognitive style," "design thinking as a general theory of design," and "design thinking as an organizational resource" (p. 297). Her lucid interpretations led her to challenge the flawlessness of the term by raising three important issues. Kimbell (2011) points out that:

> [F]irstly, accounts of design thinking often make a distinction between thinking and action and between the designer and the context in which they are designing; secondly, they propose that there is something shared by all designers while not acknowledging important differences in how design professions and their institutions have emerged; and thirdly, they emphasize designers as the main agents in design." (p. 301)

Indeed, design thinking remains questionable on those aspects, and on the delivery of creativity as well. For example, design commentator Bruce Nussbaum (2011) draws our attention to the low success rate of the creative process acknowledged by design consultancies that promote design thinking. This paper shares critiques outlined by Kimbell (2011, 2012), and Nussbaum (2011) to rethink the design thinking process by considering our globalized environment, and cultural factors as creative strategies in the creative thinking process.

EXPLORE IDEAS IN DESIGN THINKING METHODS, AND THE INCLUSIONS OF SEMIOTIC THEORY

In his book, Curedale (2013) compiled a wide range of methods, such as brainstorming, dot voting, 6 thinking hats, out of the box, and word list, in his exploring ideas section (p. 313-358). If design thinking as a theory is aimed at demystifying creativity, and delivering creative results, I would like to argue that the two most important aspects are missing in the sphere of this theory. First, the creative process that is practiced in the real world, as in the communication design field, often starts with, and references the commonly known Creative Brief, which states fundamental background marketing information, including the target audience. Without access to basic information about the target market, it is unlikely that the creative results of the process will be appropriate. Second, design thinking hardly addresses a model for evaluating the creative ideas generated. As Brown, and Wyatt (2009) put it, the design thinking process looks at "inspiration, ideation, and implementation" (p. 33). The evaluation of ideas is conspicuously missing. This evaluation requires skills in decoding meanings within the given cultural context of the marketing environment set out in the creative brief.

To address these two concerns, I am proposing that the communication aspect of the market be addressed when applying a design thinking method to a defined task. For example, in today's multicultural society, inspirations for creative thinking often come from the everyday life context, where different cultural heritages are sometimes adapted or borrowed. In this mixed cultural environment, I categorize cultures into three spheres: vernacular, cross-cultural, and transnational, that supply inspiration for design thinking. Based on these cultural spheres, I have adapted them as creative strategies for design thinking, a system to evaluate creative ideas generated in the process, and which I have coined as the "three orders of cultural visual signification". The system that I am drawing upon is the model of "three orders of signification," Roland Barthes' (1972) exposition of "visual signification" that identified three messages in every visual image: linguistic, coded iconic, and non-coded iconic. Here, I argue that the process of generating creative ideas could adapt the methods of decoding messages in the "three orders of signification" model by looking into the "three orders of cultural signification." Viewing design

thinking methods as visualization strategy is not limited in communication design field, but could also apply to other design disciplines.

THE THREE ORDERS OF CULTURAL SIGNIFICATION

The linguistic theory known as semiotics is commonly used to study anything that conveys meaning. Its purpose is to examine, and discuss the meanings produced or conveyed by objects of study in visual cultural production fields, including films, advertisements, comics, television soap operas, and so on. Although Swiss linguist Ferdinand de Saussure established the theory initially, many others have since contributed to, and enriched its vocabulary across various disciplines. Barthes (1972) breaks down into the more familiar terms denotation (primary signification), and connotation (secondary signification): "the first system is then the plane of denotation, and the second system (wider than the first) the plane of connotation…. The signifiers of connotation … are made up of signs (signifiers, and signified united) of the denoted system" (p. 89-91).

According to Barthes (1972), every visual image could be verified with three messages: linguistic, coded iconic, and non-coded iconic. In today's globalized world of multicultural societies, I argue that creative strategies are being generated within the three orders of cultural spheres. First, the vernacular images found in creative work are a basic visual linguistic language that only local readers with in-depth understanding of the originating culture can fully understand. The second order, cross-cultural, is coded with visual elements from two cultures, requiring the reader to have knowledge of both cultures, or serving to educate readers from both cultures. The third order, transnational, refers to non-coded iconic visual images understood by readers across different cultures (figure 1). Here, I coined this "the three orders of signification."

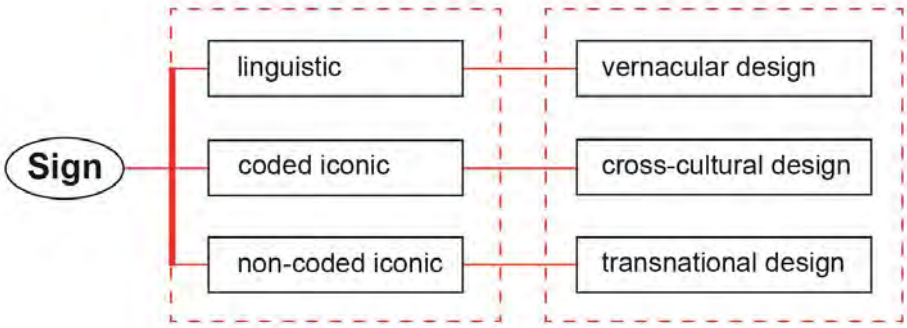

Figure 1: The three orders of signification & the three orders of cultural signification

These three orders of cultural signification are separate, but can also overlap, and become transnational over time within the contemporary flow of globalization. Articulating the proposed new model, "the three orders of cultural signification," this paper will provide examples from communication design to support the theory. However, the proposed design thinking methods could also apply to other design disciplines.

THE FIRST ORDER: VERNACULAR DESIGN APPROACH

When engaging in the process of generating creative ideas using any tool in design thinking models, designers or participants in the process may tap into conscious or unconscious association with elements from their everyday life contexts. The term "vernacular" given by the dictionary refers to 1) the native language of a country or people, as opposed to a foreign language that is also in use; 2) the form of a language as commonly spoken, as opposed to the formal or literary language; and 3) local native vernacular architecture (Chambers 21st Century Dictionary, n.d).

Among design disciplines, the term vernacular appears most frequently in architecture. For example, the exhibition held in the Vitra Design Museum in Germany recently, entitled "Learning from Vernacular", pointed out "the growing awareness of sustainable construction, and regional traditions" (Vitra Design Museum, 2013). Rediscovering traditional architecture from vernacular

typologies is a critical source of inspiration for today's architecture, with contemporary projects showcasing adaptations of local elements, and materials. This creative strategy is emerging not only in architecture, but also in other design disciplines throughout the world.

Graphic designers often associate the term with visual styles, such as vernacular typography, hand-lettered signage or shop fronts, and nostalgic objects. For example, in the Western context, American graphic designer Edward Fella created the hand-drawn *OutWest* font in 1993, and his book *Edward Fella: Letters on America*, published in 2000, offered a prominent example of vernacular design being used in communication design (figure 2). In the Eastern context, Chinese graphic designers in Hong Kong also often employ hand-drawn typography in the form of Chinese calligraphy in their designs (figure 3).

Figure 2: *Edward Fella: Letters on America,* London: Laurence King, 2000

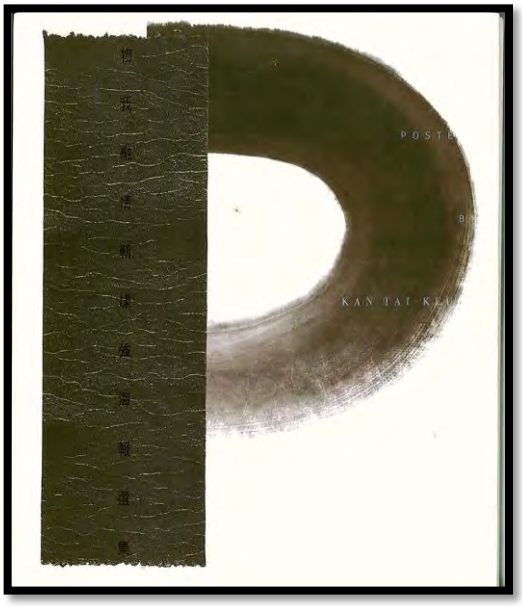

Figure 3: *Selected Posters by Kan Tai-Keung: Sentiments and Harmony*, Kan & Lau Design Consultants, 1998

In *Meggs' History of Graphic Design*, the authors pointed out: "The term vernacular design refers to artistic and technical expression broadly characteristic of a locale or historical period; it closely relates to retro design. Vernacular design is the paraphrasing of earlier commonplace graphic forms, such as baseball cards, matchbook covers, and unskilled commercial illustrations and printing from past decades" (Meggs, 2012, p. 477). To manipulate such autochthonous coded cultural elements that are naturally restricted to those who understand the native language or dialect, and history, the reception of meaning is first limited by the linguistic comprehension skills. Here, I assert this as the first order of cultural signification within the vernacular design approach. However, this approach should not be limited as a stylistic or symbolic generative method, but rather should push toward a "systematic method for creation" (Bjørnard, 2010, p. 1). In Kristian Bjørnard's (2010) article, he has given an example of the newest version of the Walker Art Museum identity as a case study model of the vernacular process, which allows expansion, and flexibility for future cultural tastes, and needs.

Discussions on vernacular design and process in the domain of design thinking are still in the pre-emergent stage. Yet, Norwegian researcher Janne Beate Reitan (2005) conducted an empirical investigation of vernacular design on Slovakian shawls by learning the vernacular design process through the Inuit community, while other studies, such as those by Elvert Duran Vivanco, and George Verghese (2010), explored issues of the balance of vernacular design identity for the globalized world. Also, a more recent paper by Brazilian scholars (Finizola, Coutinho, & Cavalcanti, 2012) discusses concepts of vernacular design from a perspective on the term from that part of the

world. Examples given here indicate a potential design thinking model from the vernacular design approach, and here I affirm this approach as the first order of cultural signification.

THE SECOND ORDER: CROSS-CULTURAL DESIGN APPROACH

In today's globalized world, particularly with American brands, and mass media, selling and screening all over the world is a common scene in Asia. On the other hand, North Americans, and Europeans also find themselves living in an increasingly multicultural environment, with neighbours, and friends originating from different cultures, and ethnic groups from other parts of the world. Design thinking models that address people from multicultural backgrounds are more inclusive of users from different ethnic groups than models using differentiation of cultures as a creative strategy. Given the globalization phenomenon with people living together in a shared space, a cross-cultural design approach is the step next to vernacular design.

"Cross-cultural" is defined by the dictionary as "relating to the differences that exist between cultures" (Chambers 21st Century Dictionary, n.d.). In the larger field of communication studies, cross-cultural communication also refers to "intercultural communication", and can be traced back to before the WWII-initiated business, and government search for global expansion. With the rise of global trade, interest in studies on how different cultures communicate naturally increased. Eventually, an interdisciplinary area of studies emerged by borrowing theories from various fields such as anthropology, cultural studies, psychology, and communication. Understanding the way other cultures work has now become a fundamental aspect of success in global business.

In the communication design discipline, effort to facilitate cross-cultural communication in design is minimal. Although branding design communication strategists, and designers are aware of, and act on those needs, intellectual discussions exploring theories, and their creative processes are rare. The book *Cross-cultural Design: Communicating in the Global Marketplace*, by Henry Steiner, and Ken Haas (1995), is one of the earliest graphic design books to address cross-cultural theme in communication design. Author Henry Steiner is an American designer, and Yale graduate who studied under the great Paul Rand, and has worked in Hong Kong since 1962.

Steiner's love of Chinese cultures and his professional training in graphic design established successful examples of how cross-cultural design can be done, with examples dating back to the 1960s (figure 4). In this book, Steiner and his long-time work partner, photographer Ken Haas, outlined tools and methods used in creating "cross-cultural design" for visual messages by mixing and integrating contents and elements from different cultures. The creative directions of cross-cultural design shown in this book include iconography, typography, symbolism, ideography, and split image. This book, although published nearly two decades ago, is the most influential book in the cross-cultural communication design field. In 2007, Steiner was named a fellow by AIGA (The American Institute of Graphic Arts) in recognition of his achievements in cross-cultural design (figure 5).

Figure 4: JADE Creations Ltd., designed by Henry Steiner, 1972

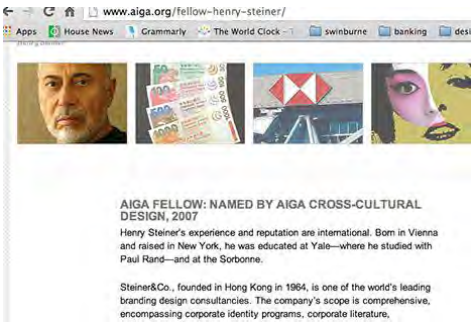

Figure 5: AIGA Fellow: Named by AIGA Cross-cultural Design, 2007

The key to the success of a cross-cultural design approach requires designers' personal understanding of the coded iconic elements of two different cultures. Inspired, and influenced by Steiner, designers in Hong Kong, and the Greater China Region commonly employ cross-cultural design approaches. I assert this approach as the second order of cultural signification. The

exploration of a culture's visual styles is now expanded; however, the creative process of generating concepts still remains as a myth. Discussions of the cross-cultural design process are hardly being touched on in design thinking theories.

Like the vernacular design process, it is possible to outline the thinking procedure, particularly in the inspiration, and ideation stages. Cross-cultural design strategy not only can utilize diverse underlying meanings embedded in coded iconic design images for mainstream population communication, but also can provide educational opportunities for audiences from different cultures to better understand each other, and have successful global businesses. Designers, and design students living in a global village should be equipped with global competence for understanding coded iconic images from various cultures, and have critical awareness of cultural relationships. These skills are only going to become more crucial for success in the global market.

THE THIRD ORDER: TRANSNATIONAL DESIGN APPROACH

In this paper, I am proposing a model of three orders of cultural creative strategy in response to the globalized world, and for the expansion of design thinking theories. In this model, the first order of cultural creative strategy, vernacular design approach, represents the first order of signification of linguistic messages. Then, the second order of cultural creative strategy, the cross-cultural design approach, represents the second order of signification of coded iconic messages. The third order of this model, transnational design approach, represents the non-coded iconic messages—meanings that can be interpreted freely by an audience from any cultural background.

Here, I borrow the term "transnational" as an adjective, which the dictionary defines as "extending beyond national boundaries or being of concern to more than one nation" (Chambers 21st Century Dictionary, n.d.), and extend it into the context of design. In the global business environment, design embedded with linguistic or coded iconic messages may not be effective for communication purposes. The definition of transnational design that I am defining here is that of design embedded with non-coded iconic messages that can be communicated beyond national boundaries. The appearance of transnational design could be represented in abstract forms, and shapes. Alternatively, the design could take the form of representational images or icons that are established globally, and recognized by audiences the world over.

This definition is proximate to what the term "international style (architecture)" defined, claiming "the design solutions were indifferent to location, site, and climate … the style made no reference to local history or national vernacular" (Wikipedia, n.d.). However, such a definition of international style is restricted to visual style only, rather than implying the mobile nature of "extending beyond national boundaries" suggested by the term "transnational". Thus, I am adapting the term "transnational design" rather than "international design" as the third order of cultural signification. In terms of visual expression, transnational design does share design features with international style.

In the context of communication design, the history of international style can be traced back to the early modern graphic designers in early-20th-century Switzerland. In the book *Swiss Graphic Design: The origins and growth of an international style, 1920-1965*, author Richard Hollis (2006) traces the development of a style initiated by a group of Swiss graphic designers back in the 1920s (figure 6), first named the Swiss Graphic Design (later simply Swiss Style), and then exported in the 1960s to become an international style (figure 7). This style vouches for the efficiency of visual communication by employing straightforward typography with abstract geometric shapes or powerful photographs. After nearly five decades of development, it became the fundamental international visual language for communication design. Transnational design approach built upon this visual style by mainly using non-coded iconic elements with no reference to any particular cultural factors.

Figure 6: Abstract and Surrealist Painting and Sculpture, designed by Han Arp and Walter Cyliax, 1929

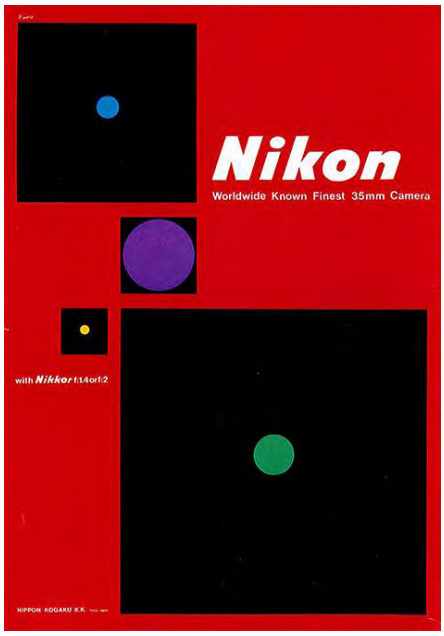

Figure 7: Nikon Camera, designed by Yusaku Kamekura, client: Nippon Kogaku K.K. Ltd, 1955

Within the development of globalization so far, there are some representational images or icons that have been established universally, and could be considered transnational design elements. Examples include Isotype (International System of Typographic Picture Education), a pictogram system that originated in 1920s Vienna with a team of artists, and which was later taken over by Otto, and Marie Neurath, establishing the foundation of information graphics. The self-explanatory Isotype pictogram in various forms is widely used all over the world, and is recognized by most audiences in developed countries, and cities. This example testifies that the nature of culture in the global world is a fluid one. Although the world's most recognizable symbols or icons evolved as non-coded iconic messages mainly originating from the Western countries, and spreading to the rest of the world, a handful of examples of objects emanating from the East (such as sushi, Kung Fu or Psy of Gangnam Style) can be identified.

Among the design thinking models, there is hardly any discussion of the cultural flows of globalization, and how that impacts the process of "inspiration, ideation, and implementation" (Brown & Wyatt, 2009, p. 33). This third order of cultural signification attempts to fill in the cultural gap that has been overlooked in design thinking theory. This model of three orders of cultural signification, addressing the linguistic, coded iconic, and non-iconic messages, should be able to provide a cultural, and social context for the creative process.

The three orders of cultural signification—vernacular design, cross-cultural design, and transnational design—discussed above can be viewed as individual entities. Each entity represents a cultural creative strategy, and a potential method for exploring design thinking. However, due to the nature of cultures, each entity overlaps each other, and those overlaps will change over time. That is the fluid nature of this model of three orders of cultural signification (figure 8).

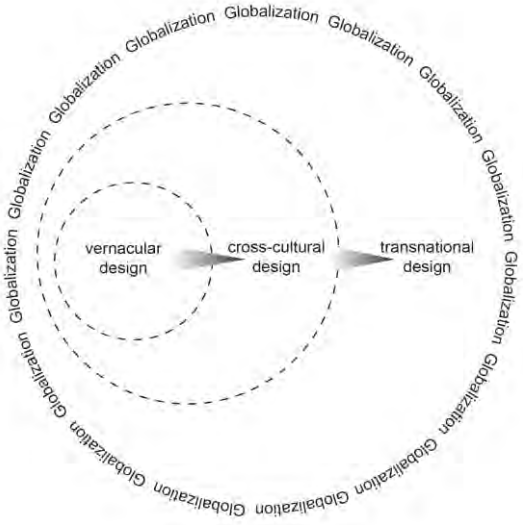

Figure 8: The fluid model of three orders of cultural signification

CONCLUSION

Flows of culture in a globalized world travel from one nation to another through various channels, including migrants, students, mass media, and the internet. This is the very nature of globalization. With the popularity of social media, and the growth of the digital age, it provides a new model of communication. A distribution infrastructure that was once dominated by big transnational corporations has been largely taken over by the public.

This cultural signification model provides a system for a new direction in design thinking in terms of culture. It would be useful to teach students in formal design education settings to be sensitive to different cultural spheres in their creations. Yet, the proposed model discussed here is merely an outline, and the concept is still in its preliminary stage. Further explorations on building a framework for the concept will be needed.

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