 Culture-Based Knowledge
Towards New Design Thinking and Practice—A Dialogue
Benny Ding Leong in conversation with Hazel Clark

For the benefit of the reader, it should be explained that this paper is presented as a dialogue to represent our ongoing conversations. In effect, the dialogue began in 1999 when we constructed a new course for the MA in Design the students at the Hong Kong Polytechnic University, which explored the potential of designing from the basis of cultural knowledge and understanding. Benny Ding Leong, a Hong Kong-based designer, had been using this concept in his teaching of product design to undergraduate students, as well as in his own work. The strategy is in the process of refinement and the directions chosen are inevitably selective, but the potential it offers could be significant, not merely for Hong Kong and China, but on a much wider scale.

Hazel Clark

HC: We should begin by exploring what brought you to what you have called an “East-West” approach to design. While you are not unique in this, the majority of designers living and working in Hong Kong fail to engage with Chinese culture and tradition, preferring to espouse “modernity” or “global” design.

Benny Ding Leong

BL: There were three stages of evolution in my exploration of traditional Chinese culture as a premise for contemporary design. They were influenced by my studies in Hong Kong, and later at the Royal College of Art (RCA) in London and also in Europe.

The first stage took the form of doubts about the fundamental meaning of (product) design, which began when I was a student at the Hong Kong Polytechnic in the mid 1980s. Postmodernism was the leitmotif in design; the greatest influence was from Memphis in Italy and postmodern architecture in the United States. Professional design practice appeared to be becoming immersed in radically individualized consciousness. But the resulting products did not strike me as creative or meaningful. I enjoyed the activity of designing, and I appreciated things that embraced function or had a meaningful story. I had little sympathy for much contemporary design that concentrated on life style variations or served merely as markers of personal style and taste.1 Also, I was becoming increasingly aware of rapid object obsolescence; that is of things without any absolute values. To me, this was a betrayal of the value of

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1 "... the cultural movement away from homogeneity towards variation. Within mass production, theories of standardization began to be replaced by ideas of batch production within which cultural variation was possible," Penny Sparke, Design in Context (London: Bloomsbury Publishing Ltd., 1987), 211–212.
design. I ended my undergraduate studies in Hong Kong longing to uncover examples of more meaningful design—but where was I to find them?

**HC:** Was it at that point that you began to develop your awareness of what it meant to be living in Hong Kong—a British colony on Chinese soil, which, it had then been decided, would be repatriated with China in July 1997?

**BL:** I guess it was, and it led to the second stage, which was the beginning of my study of Chinese culture shortly before I left for England. I had to choose a research theme in preparation for studying at the RCA. Somewhat coincidentally, in 1986, I had come across a splendid book, *The Affection of Ming Furniture,* by Wang ShiXiang, published in Chinese the previous year. The ingenious Ming dynasty furniture and the prescient design philosophy captured my total attention and imagination, seeped into my mind and pulled me into moments of deep thought. Even though I had been living in Hong Kong more than twenty years, this was a revelation that completely altered my shallow comprehension of traditional Chinese design. A subsequent literature search revealed a wealth of invaluable knowledge that was waiting to be uncovered in traditional Chinese artifacts.

This led to the third and the most significant stage of my voyage of discovery which began soon after I arrived in England late in 1987. My studies at the RCA and an internship in The Netherlands reconfirmed my belief that homogeneous Western design thinking should be revised and reoriented, and that traditional Chinese creative thinking might provide an alternative.

**HC:** I can appreciate you being drawn to Ming furniture, which often is described as “timeless” and “classic.” However, this also made me reflect on how much of the recent “Chinese style” design available in Hong Kong and internationally has been based on imagery from the Qing dynasty. This is not surprising since this period is close to us in time and, in that sense, is more familiar and easier to access. But it begs the question of what can and should be the point of cultural access—should it only rely on the visual, or must it also encompass the philosophical? Where did you begin?

**BL:** The point of access can vary from person to person. However, no matter where you start, either from the visual or philosophical, one should encompass some basic understanding of the other. For example, a leading Chinese architect and scholar, Liang Ssu C’cheng was the first person to make a very thorough and systematic study of traditional Chinese architecture. He did a formal analysis of formats, traits, and design principles based on actual material objects, while developing a rich understanding of ancient Chinese thinking. Personally, I took a “philosophical” and, what I call, an “immaterial” route to understand basic Chinese thinking and reasoning;
recognizing that the Western definition of philosophy was not trans-
ferable to ancient China. This led me to study some of the earliest
writings dating back to between the Xia dynasty and the Warring
States period (circa 2000–221 B.C.). They included the I Ching or
Book of Changes, the Analects of Confucian thinking, and the Taoist
Dzao Te Ching. Writing from the period circa 770 to 221 B.C., the so
called Chinese enlightenment proved to be most essential to my
search for fundamental cognitive traits that affected conscious and
unconscious perceptions of life, matter, nature, and human relation-
ships.

HC: How did this relate to your design studies?
BL: While I was studying in Europe, a lot of interest was developing
in “eco-design” that led to a questioning of the roles and responsi-
bilities of the industrial designer. Propositions such as, “back to
basics,” “re-humanization,” and “neo-functionalism” were being
advocated in product design. I was fortunate to be exposed to these
new ideas, but, at the same time, I also was aware of a growing
materialism and technological orientation in European design. My
empirical knowledge of contemporary European design made me
question its very role, and nourished my interest in studying culture
—particularly traditional Chinese culture. I believed that cultural
knowledge could enrich contemporary design theory and underpin
innovation in design practice, providing an alternative to Western
design that would have international application.

HC: Did you feel that this approach would be appealing in contem-
porary China? It’s ironic that while Westerners, like myself, are
drawn to Chinese culture, in Hong Kong and the mainland, Western
culture often is much more desirable as being advanced and
“modern.” Do you feel that your roots in Hong Kong, and your ex-
periences studying and working in Europe, enable you to respond
objectively to Chinese tradition and culture as well as to Western
modernity?
BL: Yes, but I also recognize that in today’s pragmatic world people
can choose what is valuable to them. This applies to culture. China
once possessed very original design methodology, which was
embraced by millions of people over thousand of years, but this
became forgotten over the last two centuries for historical, econ-
omic, political, and cultural reasons. Any success in revitalizing
methods from the past must depend on their perceived contempo-
rary value. There are many academics who cherish cultures other
than their own. The point of entry is, for me, less important than the
desire to be enriched by greater cultural awareness and under-
standing.

2 According to Hai-guang Yin there are four interrelated traits within all cultures:
normative, materialistic, artistic, cognitive. (Hai-guang Yin, The Prospect of
Chinese Culture, Part 1 (Taiwan: Laureate

3 “Westernization” here is home to
science, democracy, rationalism, freedom, and individuation; and poses universal-
sim as a value that has become identified as the “social solvent” of most
developed countries today. For some
developing countries that have strong
local cultures, such as China and India, a struggle evolves between ideals of
particularism and universalism. For many
Chinese scholars such as Dao Wei Ming
(a representative of new Confucianism),
the realization and identification of the
contemporary value of “particularity” in
traditional Chinese culture is a significant
step towards its preservation and promo-
tion as a “universal” concept. Dao Wei
Ming, Decade Awaiting Confucianism
—The Re-evaluation of the Eastern Asia’s
Value [in Chinese] (Hong Kong: Oxford
University Press Ltd., 1999), 12–14.
HC: So where did you begin?
BL: I began by attempting to identify specific cognitive traits in traditional Chinese culture, and used contemporary Western culture as a relative opposite, optimized in Hong Kong as what might be termed a place of cultural bifurcation. To do this, I had to formulate a guiding set of values: the first relates to the issue of subjectivity (and to the development of a “new subjectivity”), the second to comparative cognition, or objectivity, and the third involves the inevitable process of acculturation:

1. A discernment of the basic traits of Chinese culture (sufficient to provide a methodological starting point);
2. Forming a holistic picture of the other (i.e., contemporary Western culture, as a point of comparison for traditional Chinese culture); and
3. Seeking examples of the interpenetration of the Chinese and Western culture (as evident in Hong Kong and in developed mainland cities).

HC: Are you saying that you studied aspects of Chinese tradition and culture initially, but that Hong Kong was a subsequent and separate point of reference?
BL: Yes, I believed it necessary to look at Hong Kong and China separately when responding to the three points above. While I studied traditional culture from China, in Hong Kong I looked at both traditional and contemporary culture, [see (iii) above], and also how the local meets the global. Although this was an exogenous, passive, and unconscious process in which Hong Kong originated in China, but evolved during a century of colonial rule, it provided a concrete case study from which to reflect on the evolution of China. Simultaneously, Hong Kong provides a significant point of departure for the conscious development of a new design theory based on Chinese culture.

HC: How would you describe your approach?
BL: My approach is clearly a theoretical one, based on assumptions and hypotheses, with the China-Hong Kong connection as a unique starting point.

HC: Can this be described as an attempt to develop a new Hong Kong subjectivity in design and design thinking?
BL: I am attempting to develop a “greater China” subjectivity, predicated on the study of contemporary culture in Hong Kong and traditional Chinese culture. Studying both reveals a fresh viewpoint, what I call a “mac-micro” view, where Hong Kong is seen as a microcosm of “macro” China. This facilitates a wide cultural examination intended to enrich design thinking in Hong Kong and in the “new China.”

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4 Acculturation can be read as “cultural exchange” to describe the process and characteristics of how two cultures meet and what alternation may evolve. (Hai-guang Yin, The Prospect of Chinese Culture, Part I (Taiwan: Laureate Publishing Company, 1988).
5 The concept of “mac-micro” is inspired by the term “macro-history” of the book China: A Macro History by the Chinese historian, Ray Hunag in 1993. According to Huang the term “macro-history” referred to the general theory of “macro” & “micro” economics.
7 The normative trait comprises the cautious “prescriptions” of values, conducts and expressions of thought prescribed by a particular way of thinking / perception. Ethics and morality can be seen as the aggregated manifestation of this trait. Hai-guang Yin, The Prospect of Chinese Culture, Part 1, 74–76.
8 The three elements provide the nuclei of a proposed new Chinese design model. They are “core-knowledge” (cultural cognition), “criteria” (value orientation), and “methods” (strategic integration). Dr. H. Clark and B. D. Leong, “Culture Based Knowledge Towards New Design Thinking and Practice,” Conference Proceedings, Useful and Critical, International Conference (Helsinki UIAH, September 1999).
HC: This is a potentially enormous task. How did you refine your exploration of Chinese culture? Was it simply what appealed to you, for example your response to Ming furniture, or something more objective?
BL: “Chinese culture” here focuses on the study of cognitive traits, although I accept that they can be difficult to pinpoint, being, on the one hand, essential, but on the other an immaterial concept. An example is Ming furniture, and my particular favorite the Officer’s Cap chair, which underpinned Confucian notions of people as a social dyad. (Figure 1) Normative rites or etiquette are demonstrated through the material traits of the chair itself, that is its formal and structural design. For me the chair realizes the idea of design predicated on human values, which relates to my earlier studies of traditional Chinese creativity.

HC: Can you explain this in more detail?
BL: The core of any culture is constructed on traditional concepts, specifically its value system which contributes substantially to its normative trait. Value orientation, along with cultural cognition and strategic integration, is one of three key components that can underpin a theory of design, as we have discussed elsewhere. As design criteria, value orientation embraces the following:

i. **Life-centering:** designing from a human and cultural perspective for the well-being of living organisms;

ii. **Totality:** where the well being of a society takes precedence over that of the individual. Design is based on human solidarity and respect seen from the “horizontal” or synchronic (familial and societal) and the “vertical” or diachronic (cross-generational) perspectives (Figure 2);

iii. **Reflectivity:** in allowing situations to reveal themselves in terms of design requirements rather than imposing design onto a given situation, and thus enabling users to participate actively in the formation and definition of functions, utilization, and in the relationships between artificial systems and material things; and

iv. **Unification:** through the relationship of human activity, “natures,” and technology as a totality to reorient and liberate human beings from the contemporary reification of technological objects. This will be a new process that I call the “spiritualization of science and technology.”

HC: What is the cultural base for this thinking?
BL: Its roots can be traced to Confucianism, Taoism, and ancient literature, specifically the *I Ching* (begun c. 3000 B.C. and completed c. 2000 B.C.), the *Analects*, and the *Dao Te Ching* (the Warring States period c. 500–300 B.C.).
**HC:** Would it always be necessary to start from ancient thought?

**BL:** No, but all civilizations are the manifestations of lengthy processes of acculturation whereby original concepts, cognition, and thinking inevitably are distorted or lost. To go back to origins is to attempt to revitalize ideas and concepts that we are unaware of or that may have become obscure over time. Such cultural subjectivity should not be regarded as xenophobia, but rather as a search for an alternative to the prevailing system of universal values.

**HC:** Could you clarify how you approached this very complex process?

**BL:** My investigation led me to explore the “inner” levels10 of ancient Chinese culture that explores the “ultimate-nature” of the world, seen as obscured by contemporary rationality and intellect. This proposes that intuition is one of three ways to perceive being and the world. Z. M Liang, refers to Buddhism as providing three cognitive capacities for human perception of the world: “sensation,” “intuition,” and “intellect.”11 While ancient India developed a unique metaphysic out of sensation, China focused more on the life-centered “intuition,” and ancient Greece resolved the ultimate questions of nature and the self by means of intellect and rationality.

**HC:** Such cultural shorthand, while revealing, also might be criticized for essentializing cultural traits. Could this be seen as a problem with your approach?

**BL:** I don’t feel this, because I am not approaching my study as a philosopher, but to provide a point of departure for new design knowledge and new strategies in design thinking. My study of the “inner” levels of cultures, allowed me to uncover fundamental streams of cognition that became normative traits which, in their own time, laid the groundwork for the development of a distinctive material culture.

**HC:** But how can they be applied to our contemporary situation?

**BL:** These three streams of cognition coexisted and predated the modern period, when intellect and rationality gained superiority. At a metaphorical level, they offer three distinct strategies to approach design problems:

1. The transcendent—with sensation as the cognitive mode;
2. The harmonious—where intuition cooperates with rational cognition; and
3. The progressive—with intellect as the major cognitive mode.

The Transcendent strategy is one of avoiding present problems in search of, so-called “scientific” methods12 to focus on “self transcendence,” “deep consciousness,” and “inner spirit” facilitated through methods such as yoga and meditation.
The Harmonious strategy originated in ancient China. Instead of reorganizing the physical world, it dealt with inner human feelings and tried to find the point of equilibrium between man, matter and nature (the Tao), and concentrated on “collective humanity” and “internal ethics.”

The Progressive strategy was adopted by most modern societies, and became the prevailing Western mode of thinking or cognition. Originating in Ancient Greek philosophy, it became a survival mechanism against nature, resolved in the material and through rational thought.

The three streams did not occur diachronically. In the West, the “progressive” strategy was abandoned around the fourth century BC, and replaced by spiritual transcendence in an attempt to salvage decay in the rational world through the religious power from Judaism. It was not until the end of the medieval period that the progressive strategy was readopted consciously by the Western world. Ancient China and India, by contrast, applied the progressive strategy in establishing their agriculture five thousand years ago, and developed the other two strategies later.

If civilizations are perceived organically, three common aspects become evident:
1 The physical or material;
2 The social; and
3 The spiritual.

They represent a logical growth and the temporal progress of wants and needs. Material production initially takes the form of food, dress, and dwelling, then the management of communal resources and social knowledge and finally in spiritual enhancement, or the transcendence of materiality and the search for ultimate values. But over time, each comes to coexist in parallel, and that is the stage at which we find ourselves today in the Westernized world.

Therefore, my proposal of an alternative design cognition based on traditional Chinese thinking developed in response to the complex interrelationships that underpin modern society as a whole. The choice of a new design strategy is not about aggressive “progression,” and spiritual “transcendence,” but about strength-gathering and harmonization, to counter the issues that are byproducts of the speeding techno-economic machine of the world. My study defined the following areas of investigation for product design:

1 "Value" in design—generated by the value systems of the given culture;
2 "Macro-relations"—a combination of the collective behavior of users, the interaction of users and objects, and the interrelationship of users, objects, and environments; and
3 "Micro-relations"—of design interfaces or ergonomics among users, objects, and environments.
I set what was, to me, a workable time frame of three years to investigate each area, and to devise theories and methods, or tools, for designing products.15

HC: Can you explain this further?
BL: To me, verification was as important as the establishment of the theoretical model. So I formulated a series of design events and projects as a means of validating my hypotheses, methods, and tools. Chief among these was the Things East-West design exhibition, which was the most comprehensive and systematic of my design experiments.16 Based on research begun in 1994, it addressed the first level of value. In the early stages, at times the research was perplexing and bewildering, because there were many pragmatic questions relating to materials, approaches, and point of departure.

HC: How then did you select your methods and research tools?
BL: I began with the “spatial perspective of culture” devised by He.17 This was followed by the “goal-attainment” process, in which I drew my analogy from archery. Finally, I arrived at the “cultural integration” design method, which helped to clarify the design approach.

HC: Can you provide more details of these methods and tools?
BL: He’s “spatial perspective of culture” provided a manageable framework (Figure 3) to visualize and capture the fluid concept of culture, and helped me to identify the research focus. Using this framework, I concentrated the research on to the “inner” level of traditional Chinese culture. This led to the formation of the concept of “value orientation,” and hence the consolidation of the four key criteria:
1 Life-centering,
2 Totality,
3 Reflectivity,
4 Unification.

HC: I can see that the perspective of “cultural space” offered a simple framework for the study of culture, but did it provide sufficient tools for directing the focus of the research?
BL: No, the “cultural space” framework alone was not adequate. Next, I developed a matrix model (Figure 4) to replace He’s “layers.” It is a more elaborated and embracive tool, constructed on a vertical axis from the material to the immaterial, and a horizontal one from behavior to thought to form four quadrants of cultural space that equate with the four general axes of the research:
1 Material/design, style (a particular physical form, or generated from a certain philosophy or ideology),
2 Behavior, the individual acts and social interactions affected by using artifacts,
3 Institutions, customs (behavior passed through forms of regulation or traditions), and
4 Philosophy or ideology, (structured thoughts, such as philosophical concepts, accumulated over time).

The Things East West design research was initiated to particularly investigate the quadrant of philosophy within the matrix.

**HC:** How did this matrix guide the research process?
**BL:** For research that was potentially so vast and complex, it was important to have a clear sense of direction. I drew the analogy with goal-attainment in archery. This led to the identification of three key research components or anchors: core knowledge, which referred to the essential cultural cognition or point of orientation for the archer, design criteria that equated with the value orientation that the archer applied, and (design) methods that directed the firing of the arrow at the given target (Figure 5).

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HC: You also mention “cultural integration” as part of the design method, what do you mean by “cultural integration”?

BL: Cultural integration concerns the hybridization of a particular culture with the contemporary Western or “global” culture that forms a kind of artificial acculturation of the particular and the universal. However, the key issue is the choice of cultural elements. Here I utilized the “cultural space” framework again, with its three levels (thinking, behavior or institution, and the material). (Figure 6)

Different levels of integration can be generated in the process of mutual acculturation. In the Things East West design experiment, the intention and motive of cultural integration was to revitalize and renovate the parent (Chinese) culture, to instill it with vitality, and to evolve a new model of product design practice by incorporating methodologies current in contemporary Western culture.

HC: This method of “cultural integration” is fascinating—have you applied it anywhere?

BL: Yes, the Double-happiness condiment set was one of my earlier experimental pieces that fused the outer (material) level of classical Chinese paper-cutting (applied to the figures) with the mid (behavior) level of Western food culture—the practice of making salt and pepper available at the table to flavor food. (Figure 7)

For Things East West, I evolved a series of experimental designs (Figure 8). Here the elements of Chinese culture are not made visually or materially explicit, but rather they are deeply embedded and underpin the design philosophy that generates the products (the inner level), as shown in the following three examples:

Timed-Words (Figure 8a)
“Timed-Words” is an electronic device designed to facilitate communication and to bond relationships among generations via electronically “time” messages. Timed messages can be stored in custom-made jewels such as “solid-state memory” pieces to be given to friends or newborn babies, to be reopened at a designated date in the future to provide a bonding tool, especially with previous generations.

Nature Radio (Figure 8b)
“Nature Radio” electronically captures the wonderful sounds of nature and transforms them into corresponding tunes inside the home. Natural melodies can be infused and shared publicly as a means of heightening the sense of awareness of, and concern for, the natural world.
"Story Telling Device" is a digital game that is specially designed to inspire children’s imaginations. It encourages children to record interesting stories from their daily lives as an alternative to taking photographs. Later, they can share and discuss their feelings and perceptions about the world with their parents and others.

HC: How would you sum up this work?
BL: These designs deal with issues that originate in everyday life. They particularly are intended to address the lack of communication within families (which is surprisingly common in Hong Kong), heighten awareness of and concern for nature (far from an everyday experience in the city), and to encourage the careful utilization of and respect for objects (that is lacking in a consumer culture). These are human-oriented designs intended to develop new value orientations by harnessing traditional and contemporary culture based knowledge through the vehicle of science and technology. They are predicated on a deeper knowledge of Chinese cultural values than has been evident in many recent “Chinese style” objects. The forms of Timed-words, Nature Radio, and Story-Telling Device were designed to combine symbolic, semantic, and functional language. Forms were used as a medium in the pursuit and dissemination of a value system (which is culturally based). Its aim is to counterbalance the prevailing modern design consciousness that stresses transitory and superficial commodities.

HC: What are your future plans for this research?
BL: I have spent five years on the inception of the ideas, practical design experimentation, and the construction of the theoretical prototype. The findings are still at an elementary stage and they are awaiting further evaluation and verification. Nevertheless, the work to date has convinced me of the potential of cultural research and cognition for the development of new design theories and models. The problems that have arisen have provided the challenge for me to continue.

I am now working on two further developments: Things East West — II and Beyond Things East West. They are devoted to the resurrection of Chinese aesthetics, and the synthesis of alternative design methodologies and interactive theories for product design practice. I sincerely believe that cultural-based knowledge can provide new ways of thinking and designing which may be able to save us from contemporary ethical dilemmas. Human beings exist within culture and nature, as well as in the man-made environment. Through cultural transference, over time we may be able to redress imbalances which have served to divide humans from one another and from the natural world.