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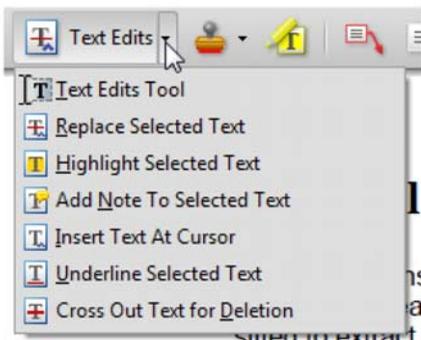


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# Linking Science to Culture: Challenge to Psychologists

Kwang-Kuo Hwang

*Issues about constructing scientific microworlds on the basis of lifeworlds for people of various cultures around the world had never been adequately dealt with since the establishment of the first laboratory of scientific psychology by William Wundt in 1879. Behaviorists eluded cultural issues; cognitive psychologists took Western cultures and assumed their universality for an etic approach in cross-cultural psychology. Taking the research paradigm of individualism–collectivism as an negative example, this article argues that constructing scientific microworlds for linking science to cultures of lifeworlds constitutes the problematic situation for not only indigenous psychologists in particular, but also psychologists in general. The problematic situation calls for a scientific revolution in psychology from the perspective of Western philosophy of science.*

*Keywords: Scientific Revolution; Culture Issues; Indigenous Psychologists; Lifeworlds; Scientific Microworlds*

In response to Prof. Allwood's (2011a) paper discussing the foundation of indigenous psychologies (IPs), I wrote an article entitled "Reification of Culture in Indigenous Psychologies: Merit or Mistake?" and submitted it to *Social Epistemology*. The executive editor, Prof. Collier, was interested in my unique approach to solving problems encountered by indigenous psychologists (IPists), he asked Evenden and Sandstrom (2011) to interview me and inquired about my perspective on various aspects of IPs. The interview, my article, along with another commentary article by Liu (2011) were published simultaneously as a special issue in Vol. 25, No. 2 of *Social Epistemology*.

In his reply to our comments, Prof. Allwood (2011b) raised a series of questions concerning our use of the concept of "culture" in IPs. I do believe that some of his questions might be answered if he had a chance to read my interview or my

Kwang-Kuo Hwang is a professor in the Department of Psychology at the National Taiwan University. Email: kkhwang@ntu.edu.tw

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books (Hwang ~~2009~~, 2011~~,~~) before issuing his reply. Unfortunately, this is in fact impossible.    5

As I stated in my response to Allwood's (2011a) paper discussing the foundation of IPs, the separation between lifeworlds and scientific microworlds is of crucial importance to overcoming difficulties faced by IPists all over the world. Obviously, Prof. Allwood (2011b) does not agree with my viewpoint. He argues that "the separation between lifeworlds (i.e. everyday conceptualizations) and    10 microworlds (science) does not seem to be absolute as claimed by Hwang." "Science may better be seen as linked to, and depend on, the understanding in the lifeworld (2011b, 143)." This is the main disagreement between Prof. Allwood and I.

A clarification of our disagreement aforementioned may facilitate the progress of IPs. Here, in this article I will discuss the difference between scientific micro-    15 worlds and lifeworlds first. Then I will reply to Allwood's (2011b) questions by discussing the nature of his culture concept. My major argument in this article is: both his culture concept and that of most IPists' refer to culture in lifeworlds. The real challenge faced by IPists is how to construct theories or scientific microworlds in linking science to culture. This challenge has been present with-    20 out adequate solution since the early days of the founding of scientific psychology. If we are able to construct scientific microworlds that can represent universal human mind on the one hand, as well as culture-specific mentalities on the other hand, we will be able to resolve most questions about culture raised by Prof. Allwood. Finally, I will illustrate my arguments by using my *Mandala*    25 *model of self* to discuss the difficulty of theoretical construction for linking science to culture in mainstream psychology (MP), IPs, and cross-cultural psychology, respectively.

### Scientific Microworlds and Lifeworlds

Because the construction of scientific microworlds is a unique achievement of    30 Western civilization after Renaissance, the separation of the knowable world into lifeworlds and scientific microworlds is of crucial importance to IPists in problem solving, I discussed the distinction between the types of knowledge constructed in
lifeworlds and scientific microsorlds in my previous works (Hwang 2006, ~~2011~~), in addition to comparing them from five aspects, namely, the constructor, ways of    35 thinking, types of rationality, patterns of construction, and functions of worldview.

The microworld of scientific knowledge is constructed by a single scientist, while the language and knowledge used by people in their lifeworlds are constructed by a group of people with the same culture background. In the early times of a particular culture, people concentrated on contemplating the nature of every    40 object in their lifeworlds. They tried their best to manifest each thing through the language they created to represent it. Heiderger labeled this way of thinking "originative thinking" or "essential thinking" (1966). In contrast, the language used by scientists to construct microworlds of scientific knowledge is intentionally created with a specific goal. The language has a compulsory and aggressive character that    45

demands the most gain with the lease cost; it is a product of technical thinking or metaphysical thinking from Heiderger's perspective.

From the perspectives of people in a given society, collective consciousness and social representations are all rational (Durkheim 1912/1965). But, people in their lifeworlds emphasize the importance of substantive rationality, which refers to the value of ends or results judged from a particular position. It is completely different from the formal rationality used by Western scientists to construct scientific microworlds after European Renaissance. Substantial rationality emphasizes the importance of goals or results and provides no clear-cut means and procedures for reaching them. Only a few persons who are familiar with the special means and procedures can use them to pursue the worthy goals. Formal rationality pays attention only to value-natural facts and the calculability of means and procedures that can be used by everyone to pursue personal goals (Brubaker 1984).

Scientists construct their microworlds entailing various aspects of the external world with Cartesian dualism through dominative construction (Shen 1994). In order to attain the goal of controlling and utilizing nature, each of these microworlds has its own specific goal; they are neither permanent nor absolutely certain. When the goal loses importance, or when people are faced with new problems, scientists must construct new microworlds to address these problems. In contrast, people construct knowledge in their lifeworlds by participative construction, especially in pre-modern civilizations(Levy-Bruhl 1910/1966). Most cultural systems of primitive people are constituted on the law of mystical participation, which conceptualizes human beings and nature as parts of an inseparable entity that can be viewed as a consciousness of cosmic holism (Taylor 1871/1929).

As people of a given culture contemplate the nature of the universe and the situation of humankind, they gradually formulate their worldviews with originative thinking in the course of their history. A worldview thus formulated usually answers four broad categories of questions: Who am I? What is my situation of life? Why do I suffer? How do I find salvation? Generally speaking, a worldview describes not only human nature but also the relationship between an individual and the external environment, as well as the individual's historical situation in the world. In addition, it provides a diagnosis for problems and prescribes a recipe for their solution (Walsh and Middleton 1984).

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The worldview in a microworld does not serve such a function. In his lexicon theory, Kuhn (1987) indicated that the scientific lexicon is composed of a set of terms with structure and content. Scientists use terms in the lexicon to make propositions in theory for describing the nature of the world. Theory and lexicon are inseparable. The microworld of a theory cannot be understood with its specific lexicon. Different theories are understood with their varied lexicons. When a theory is changed, its lexicon will change with it. Each lexicon contains a method to recognize the world. Members of the same scientific community must master the same lexicon, understand meanings of each term, and share the same worldview in order to communicate with one another. In order to think about the same problem and engage in related research in the same scientific community, they

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must share the same worldview. However, the worldview of a microworld provides    5
no answers to problems related to the meaning of life. It is essentially different
from the worldview of a lifeworld.

Allwood argues that "science may better be seen as linked to, and depend on, the
understanding in lifeworld (2011b, 143)." His argument is perfectly correct for psy-
chologists working in Western countries, where the cultural tradition of scientific    10
microworlds is deeply rooted and numerous scientific microworlds have been con-
structed on this cultural tradition of Western philosophy. But, if we want to apply
his argument to a non-Western society, we have to reflect on not only the dramatic
difference between scientific microworlds and lifeworlds of non-Western cultures, but
also the ways of dealing with cultural issues in the history of scientific psychology.    15

### Culture in Lifeworlds & Theoretical Construction

In his reply to comments made by Hwang and Liu, Prof. Allwood (2011b, 142)
stated:

> The culture concept that I argued for in my original article is influenced by the
> anthropology of knowledge that deals with the change and reproduction of human    20
> understanding in its natural, social and cultural context. (see Allwood 1987, 1993,
> 1998; Barth 2002)

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### *Culture in Lifeworlds*

Allwood (2011b, 142) highlights the features of his culture concept by saying that    25
"*meaning* should be seen as a naturalistic phenomenon occurring in the *world*
(lifeworld)" and "culture in a society is seen as the understanding held by the peo-
ple living *in that society* (in their lifeworlds)." I mark parts of his sayings in italic
and translate them into my words in the parentheses for the sake of emphasizing
that he is advocating a kind of culture concept which can be named as *culture in*    30
*lifeworlds*. Such a culture concept is widely used by literary theorists, cultural crit-
ics, and cultural anthropologists. But, as psychologists in general, or as IPists in
particular, we are not allowed to be constrained by such a view. Instead, we are
obligated to construct scientific theories on the basis of such a culture concept.

Prof. Allwood may have noted that, historian Danziger (2006) indicated in his    35
*comment* on findings of the international survey conducted by Allwood and Berry
(2006) that "the historical link to science has been advantageous to the develop-
ment of academic discipline in the West." "Scientific knowledge is regarded as the
only legitimate kind of knowledge in a disciplinary context, although in other life
contexts individual psychologists may well appreciate the value of other kinds of    40
knowledge" (2006, 271).

### *A Point of Departure*

I identify myself as an IPist who sticks to the discipline of psychology in pursuing
scientific knowledge. It seems to me that "literary theorists, cultural critics, cultural

anthropologists," and some individual psychologists belong to the other camp which "well appreciate the value of other kinds of knowledge." The main difference between these two camps lies in their concerns focused on either *culture in lifeworlds* or *theoretical construction* based on culture in lifeworlds. Concentrating on the culture concept in lifeworlds tends to use methods of "qualitative research" to develop IP as a branch of historical-hermeneutic science (Habermas 1968). This approach may lead IPists to endless debates regarding the qualification of IPs as a branch of scientific psychology. But focusing on the construction of scientific microworlds may really solve problems faced by IPists all over the world. In the following sections of this article, I will elaborate my argument by providing some examples to illustrate the differences between the academic approaches of these two camps.

For instance, in criticizing my discourses on the development of culture: "groups of people construct their lifeworlds using language and knowledge from the same cultural background in their course of historical development" (Hwang 2011b, 127), and "As people of a given culture contemplate the nature of the universe and the situation of mankind, they gradually formulate their worldviews with original thinking over the course of their history" (Hwang 2011b, 128). Prof. Allwood (2011b, 146) commented with regret that:

> What is missing in this story is the great flow of people that has occurred in history between societies. In Hwang's description of how cultures develop, it is as if no-one ever left their living quarters to emigrate to a different place. When people move they take their knowledge and understanding with them. For this reason they may function as creative inspirators, or maladjusted newcomers, in their new environment.

## Culture Contact and Culture Change

This is an incorrect conjecture. In fact, culture change caused by contact with foreign cultures has been the major concern of my research works. In the second chapter of my book, *Confucian Relationalism* (Hwang 2009), I discussed the modernization of non-Western countries under the impact of Western culture. In order to help IPists of non-Western countries to overcome the difficulties of theoretical construction in developing IPs, I constructed a *Mandala model of self* in the first chapter of my book entitled "*A Proposal for Scientific Revolution in Psychology.*" In this model, I differentiated two types of knowledge which can be utilized by an individual to solve problems encountered in his/her daily life: The personal stock of knowledge is stored in one's memory; the social stock of knowledge is stored in books, library, or computer networks. Furthermore, I also differentiated two types of identification: personal identification and social identification. *The Mandala model of self* is supposed to be universal. In the following chapters of my book, *Scientific Revolution in Psychology* (Hwang 2011a), I used this model to explain how an IPist of non-Western countries may utilize the knowledge of Western philosophy of science to construct scientific microworlds for promoting progress of their IPs.

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In my discourse on how to solve problems faced by IPists, I totally agree with Allwood's (2011, 142) argument that to "understand the development of human understanding in a society, it is not only necessary to attend to how understanding previously shaped within the society is handled, but it is also necessary to study how meaning content (understanding) from other societies is interpreted, modified, and understood in the society".

*Two Approaches*

It seems to me that the problems faced by IPists are caused by implanting the "meaning content" of psychology from West to non-Western societies. Because it cannot be "understood," therefore, it must be "re-interpreted" or "modified." The sharp contrast between us exists in Allwood's insistence on the clarifying culture concepts in lifeworlds and my enthusiasm for constructing scientific microworlds on the basis of such a cultural concept. Therefore, Allwood (2011b, 150) may worry:

> (If) the indigenous psychologies in general should see themselves as allied with the nation-state. The reason is that they would then obviously risk making it more difficult for the minorities in their nation to make their voices heard and for this reason to be criticized by the minorities in their country as colonial, just as the indigenous psychologies themselves have criticized the West for being colonial also with respect to its way of doing science, including mainstream psychology.

I have confidence that my *Mandala model of self* as a universal framework can be applied to any cultural group including IPists of non-Western countries, nation-states, or any minority group in a country. Unfortunately, because both of my aforementioned books were published in Chinese, and because Prof. Allwood (2011a, 2) admitted that his "article will only discuss the English language literature from the IPs" and "texts that are written in languages that are more domestic to the IPs are not covered," I am sure that he is aware of neither my *Mandala of self* nor my theoretical construction on Confucian Relationalism. Fortunately, a brief version of *Mandala model of self* has been published in an English journal (Hwang 2011a). Next, I would like to explain how IPists may solve their problems by using this model.

**Linking Science to Culture in the History of MP**

Prof. Allwood (2011b) argued that "science may better be seen as linked to, and dependent on, the understanding in the lifeworld." This argument sounds plausible. Most people may agree with this argument. However, I would like to emphasize that linking science to culture in lifeworld is a very delicate task which has not been adequately accomplished since the founding of scientific psychology by Wundt (1832–1920).

### The Elusive Goal of Psychology

When Wundt established his first laboratory at Leipzig in 1879, he conducted experiments on consciousness using the scientific methods of the so-called *Physiological psychology* (Wundt 1874/1904). Recognizing the difficulty of linking science to culture, he studied cultural issues of *Völkerpsychologie* with historical methods (Wundt 1916). Cultural psychologist Cole (1996) indicated the problematic situation left by Wundt:

> In recent years interest has grown in Wundt's "second psychology," the one to which he assigned the task of understanding how culture enters into psychological processes … My basic thesis is that the scientific issues Wundt identified were not adequately dealt with by the scientific paradigm that subsequently dominated psychology and other behavioral-social sciences … cultural-inclusive psychology has been … an elusive goal. (1996, 7–8)

In the early days of behaviorism, some Western psychologists tried to elude the cultural issues by excluding the content of consciousness from the domain of psychological study, advocating a positivistic approach of science. For example, Watson (1913) claimed at the beginning of his famous article that:

> Psychology as the behaviorist views it is a purely objective experimental branch of natural science. Its theoretical goal is the prediction and control of behavior. Introspection forms no essential part of its methods, nor is the scientific value of its data dependent upon the readiness with which they lend themselves to interpretation in terms of consciousness. The behaviorist, in his efforts to get a unitary scheme of animal response, recognizes no dividing line between man and brute. The behavior of man, with all of its refinement and complexity, forms only a part of the behaviorist's total scheme of investigation. (1913, 158)

Culture has no position at all in the behaviorist's total scheme of investigation. When the trend of MP has switched from behaviorism to cognitive psychology, most Western psychologists still eluded or ignored the cultural issues and assumed that theories of Western psychology (WP) are universal.

### Emergence of the IP Movement

Mainstream WP has been exported to non-Western countries in accompany with the victory and expansion of Western capitalism and colonialism over the last few centuries. It has been accepted by non-Western intellectuals with an earnest motivation to learn advanced modern sciences. However, because the discipline of MP has stemmed from European-American culture, and because the task of linking science to culture has not been adequately dealt with by the scientific domain that dominated psychology, many scholars and practitioners in non-Western countries have found the imported theories of WP irrelevant, incompatible, or inappropriate in trying to understand their own people. Moreover, knowledge generated by WP cannot be used to solve their daily issues. Therefore, some psychologists decided to develop IPs in reaction to the dominance of WP.

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According to an international survey conducted by Allwood and Berry (2006), the indigenization movement of psychology has taken place in different regions all over the world since the 1980s. According to Kuhn's (1969/1990) philosophy, the emergence of the indigenization movement in psychology implies that the implantation of Western paradigms in non-Western countries has encountered numerous anomalies, awaiting a scientific revolution.

**Linking Science to Culture in IP**

In terms of Allwood's (2011b) culture concept, when IPists found the "meaning contents" of imported MP cannot be "understood" by people in non-Western societies, they tried to reinterpret or modify the knowledge of psychology by developing their own IPs. For instance, Allwood (2011b, 141–42) cited Ho's definition of IP:

> An indigenous psychology is the study of human behavior and mental processes within a cultural context that relies on value concepts, belief systems, methodologies and other resources indigenous to the specific ethnic or cultural group under investigation. (Ho 1998, 94)

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Allwood (2011a, 2011b) criticized such culture concept shared by many IPists. But, it seems to me that such culture concept is exactly the same as that advocated by Allwood (2011a, 2011b) himself, in the sense that both of them refer to culture in lifeworlds. The real challenge faced by IPists is: how to construct scientific microworlds on the basis of such culture concept?

*Bottom-up Model Building Paradigm*

In terms of my *Mandala model of self* (Hwang 2011a, 2011b), most IPists have adopted the so-called "approach of naïve positivism" from their *personal stock of knowledge*, and advocated for a bottom-up model building paradigm (Kim 2000, 265) that treats people "as interactive and proactive agents of their own actions" that occur in a meaningful context (Kim, Park, and Park 2000, 71). They perform a "scientific study of human behavior (or mind) that is native, that is not transported from other regions, and that is designed for its peoples" (Kim and Berry 1993, 2) in order to develop a "culturally appropriate psychology" (Azuma 1984, 53), "a psychology based on and responsive to indigenous culture and indigenous realities" (Enriquez 1993, 158), or a psychology whose "concepts, problems, hypothesis, methods, and tests emanate from, adequately represent, and reflect upon the cultural context in which the behavior is observed" (Adair, Puhan, and Vohra 1993, 149).

The bottom-up model building paradigm implies a methodology of inductive approach. Some IPists advocate for the usage of qualitative and ethnographic methods to collect idiosyncratic data on some culture-specific phenomena. Nevertheless, because the discipline of scientific psychology asks for quantitative

verification or falsification of a theoretical proposition (Liu 2011), the qualitative approach has been questioned by some MPists concerning its qualification as a branch of "scientific psychology."

On the other hand, because languages used by people in their lifeworlds constitute the so-called language game, any core concept in a given culture may have many synonyms, while the same core concept may be expressed by a series of polysements with delicate variations among them. Many related concepts are characterized by the feature of "family resemblance" without clear-cut definitions (Wittgenstein 1945/1953). Those IPists who insist on using such quantitative methods of "scientific

psychology" such as survey, questionnaire, experiments, etc. may accumulate numerous empirical data which are too fragmentary to be understood by outsiders of that particular culture.

Therefore, findings of unsophisticated use of this approach have been criticized by mainstream psychologists. For example, Triandis (2000) pointed out that anthropologists have used a similar approach for years. Accumulating anthropological data with an idiosyncratic approach may not have much significance in terms of contribution to the development of scientific psychology. Poortinga (1999) indicated that the usage of the plural "IPs" by many IPists suggests an implicit restriction on the potential for the development of IP. The development of multiple psychologies not only contradicts the scientific requirement of parsimony, but also makes the demarcation of cultural populations a pending problem. If every culture has to develop its own psychology, how many IPs should there be? How many psychologies would have to be developed for Africa? What is the optimal number of IPs? What is the meaning of an IP developed in a specific culture to people in other cultures?

## Untangle the Link between Individualism and Universalism

With a careful examination over the historical origins, current problems and future perspectives of the IP movement provided by 15 contributors to the international survey conducted by Allwood and Berry (2006), historian Danziger (2006) voiced a crucial challenge to all the IPists:

> Adherence to the ideal of "a universal psychology" seems almost as common as a rejection of the "individualism" of Western psychology. Yet, in the history of Western psychology, individualism and the search for universal laws have been closely linked: Psychological laws would be considered universal insofar as they applied to all individuals along a common set of dimensions. Is it possible to break this link between individualism and universalism, as the remarks of several contributors seem to require? (2006, 272)

Danziger (2006) indeed indicated the real problematic situation encountered by IPists all over the world. In other words, it seems to me that the real challenge faced by IPists is how to untangle the link between Individualism and Universalism, but not their definition of culture.

It is a widely recognized fact that most theories of MP have been constructed on the basis of some particular groups from cultures of Individualism. For instance, Henrich, Heine, and Norenzayan (2010a, 2010b) reported findings of their research which indicated that 96% of the samples of psychological research published in the world's top journals from 2003 to 2007 were drawn from Western, Educated, Industrialized, Rich, and Democratic (WEIRD) societies, which house just 12% of the world's population. They reviewed the comparative database from the behavioral sciences, and found that the WEIRD subjects are particularly unusual compared with the rest of the species across diverse domains, including visual perception, fairness, cooperation, spatial reasoning, moral reasoning, reasoning styles, self-concepts and related motivations, and the heritability of IQ. They thus concluded that there is no obvious a priori ground for claiming that such a particular psychological phenomenon is universal based on the sampling of such a single subpopulation.

### Presumption of Individualism

Theories of MP constructed on the presumption of Individualism with such a WEIRD subpopulation should not be claimed as universal. As such, I argued that:

> Acknowledging that most western theories of psychology are constructed on the presumption of individuality, but that most cultures of the world are not individualistic, many indigenous psychologists have attempted to construct theories to describe various aspects of their own cultures. (Hwang 2011b, 130)

It seems that Prof. Allwood (2011b, 143) was preoccupied with his primary concern of culture concepts, thus he totally misunderstood my arguments and made incorrect conjecture again with his *personal stock of knowledge*:

> It is not clear what this is intended to mean, but possibly Hwang suggests that if the society in question is assumed to have a collectivistic character, the culture concept used when studying that society should also have a collectivistic character. The assumption seems to be that the definition of culture should follow the researcher's speculations about the character of the society studied and thus that individualistic societies should be studied with one type of culture concept and collectivistic societies with another type of culture concept. However, no clear reason is given why cultures in societies that are assumed to differ in character need to be studied with different culture concepts.

I agree with neither Prof. Allwood's speculation that "if the society in question is assumed to have a collectivistic character, the culture concept used when studying that society should also have a collectivistic character," nor his conclusion: "cultures in societies that are assumed to differ in character need to be studied with different culture concepts." In fact, I am not so concerned with culture concepts as does Allwood, my real concern is how to construct theories to link with the world's various cultures, and not with cultures of an Individualistic nature only.

5      As I said in my answer to an interview conducted by Evenden and Sandstrom (2011) for *Social Epistemology*, in order to attain the epistemological goal of IPs, it would be better to follow the principle of cultural psychology "one mind, many mentalities" as suggested by Shweder et al. (1998) and do our best to construct theories which represent not only the universal mind of human beings, but also

10    the specific mentalities of people living in a given culture. In other words, my viewpoint on this issue is "cultures in societies that are assumed to differ in character need to be studied with theories constructed in accordance with this principle of cultural psychology." In his comments on an earlier version of this article, Allwood argued that: "I do make such assumptions as part of the culture concept

15    I suggest." In the 2011 *Social Epistemology* paper, I assumed that: (1) meaning and understanding should best be seen as naturalistic phenomena, (2) culture can be seen as the sum of individuals' understanding in a society, (3) meaning and understanding are the same or closely related, and (4) meaning content always needs to be attached to some sort of substrate (e.g. a brain, printed text, etc.).

20    *Mandala Model of Self*

Among the four assumptions, the fourth is the most problematic one; particularly, he gave "a brain" and "printed text" as examples of the so-called "some sort of substrate." He may cite these two examples in an inattentive way. But, a careful differentiation between them is very crucial for us to understand the difficulty of

25    incorporating culture into psychological research. In my *Mandala model of self* (Hwang 2011c), I emphasized the difference between person, self, and individual

AQ11   which was proposed by anthropologist Harris (1989). She indicated that these three concepts have very different meanings in Western academic tradition which holds the individual as a biological concept. It regards individual human beings as

30    members of the human species who are no different from other creatures in the universe.

"Person" is a sociological or cultural concept. A person is conceptualized as an agent-in-society who takes a certain standpoint in the social order and plans a series of actions to achieve a particular goal. Every culture has its own definitions of

35    appropriate and permitted forms of behaviors, which have been endowed with specific meanings and values that can be transmitted to an individual through various channels of socialization.

"Self" is a psychological concept. In my *Mandala model of self*, self is the locus of experience which is able to take various actions in different social contexts, and

40    is able to indulge in self-reflection when blocked from attaining goals.

The meaning of "a brain" belongs to the biologistic level which can be revealed

AQ12   by social scientists as the deep structure of universal mind (~~Levy-Bruhl 1910/1966~~), while "printed text" belongs to the sociologistic level which can also be analyzed and studied by social science methods as the surface structure of particular

45    mentalities in a given culture. For example, my *Mandala model of self* (Hwang

AQ13   2011a, 2011b) and *Face and Favor model* (Hwang 1987, 2011d) represent the

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universal mind of human beings (i.e. "a brain") for *self* and *interpersonal* relation-ships, respectively. When I used them as frameworks to analyze Confucianism (i.e. printed text), I constructed scientific microworlds for studying Chinese "self" and "interpersonal relationships" in their lifeworlds. By doing so, we may derive a ser-ies of hypotheses to be tested by either qualitative or quantitative methods of research. This is exactly what I have done in the previous 30 years (Hwang 2011).    5

**AQ14**

The ambiguity of Allwood's fourth assumption indicates his lack of sophistica-tion in contemplating the difficulties faced by psychologists in general, in addition to that encountered by IPists in particular. Moreover, he knows that "the distinc-tion between the qualitative and quantitative research approach is a deeply prob-lematic and vague distinction that preferably should be avoided" (see: Allwood 2011). The distinction between qualitative and quantitative research methods is problematic. *Quality & Quantity*. Advance online publication. Doi: 10.1007/ s11135-011-9455-8. His first two assumptions tend to lead psychologists or IPists to focus on the culture concept in lifeworlds.    10    15

**AQ15**

### Linking Science to Culture in Cross-Cultural Psychology

Prof. Allwood (2011b, 145) concluded in his speculations that:

> In general it will be easier to relate and compare results from different indigenous psy-chologies if the same culture concept is used in the different indigenous psychologies.    20

He then cited a series of cross-cultural researches accomplished with the culture concept of individualism-collectivism to support his arguments. Nevertheless, it seems to me that the research paradigm of individualism-collectivism represents a negative exemplar which had been constructed on the ethnocentric presumption of individuation without genuine consideration of non-Western cultures. This is exactly the reason IPists all over the world have to develop their own IPs. There-fore, I would use it as an example to provide an in-depth critique on cross-cultural research of this type.    25

#### Research Paradigm of Individualism/Collectivism

Hofstede (1980), a well-known Dutch organizational psychologist, was the first to conduct researches on individualism-collectivism. When he was a director in the Department of Human Resource Management at IBM, Hofstede constructed a 32-item scale to measure work goals or values. He administered this scale to equiva-lent and stratified samples of IBM staff in 40 countries, calculated means of the endorsement on 32 work values for samples from each country, and created a cor-relation matrix amongst the 32 average nation-values. Four factors were thus obtained as a result of factor analysis: individualism, power distance, masculinity, and uncertainty avoidance. Factor scores of the 40 countries were marked to show their positions on the map of space constituted by any two of these four dimen-sions, respectively.    30    35    40

His empirical mapping of the world's 40 major countries on these four cultural dimensions attracted great attention from the community of psychology. Inspired by this research, many psychologists began to conduct research on related topics in the following decades. Tremendous research works have been done on the dimension of individualism-collectivism. An intensive review by Oyserman, Coon and Kemmelmeier (2002) showed that psychologists had constructed at least 27 distinct scales for measuring individualism-collectivism (IND-COL) tendencies, and completed numerous empirical studies on related topics in the last two decades.

## Research Approach of Positivism

Most researchers engaging in this research topic generally consider collectivism as the opposite of individualism. They assume that the social structure of Western societies shaped by Protestantism and the process of civic emancipation contributed to such psychological traits of individualism as individual freedom, right of choice, self-realization, and so on (Triandis 1995). The countries or ethnic groups that inherited a Protestantant tradition should demonstrate more characteristics of individualism as opposed to the traditional non-Western cultures. Individualism is more prevalent in industrialized Western countries than in other countries, especially in contrast to the more traditional societies of developing countries. Therefore, the individualistic tendencies of European Americans in the USA should be higher than those of other minority groups, and their tendencies for collectivism should be lower than that of other minority groups (Osyerman, Coon and Kemmelmeier 2002).

Researchers in this field mostly follow a research orientation of positivism. They adopted the method of trait approach in personality psychology, conceptualized individualism or collectivism as a kind of psychological syndrome, and constructed various scales to measure the traits and to test their hypotheses. Some researchers attempted to induce theories after a certain degree of empirical data accumulation.

When a researcher attempts to induce theories from findings of empirical studies about individualism-collectivism, s/he may encounter many difficulties as other positivists do. Triandis (1994) from the University of Illinois was the first psychologist who attempted to do this. Hofstede (1980) adopted an ecological factor analysis method to conduct his study on a cultural level, and conceptualized individualism (IND) and collectivism (COL) as two opposite poles of one dimension. In contrast to this, Triandis and other psychologists conceptualized individualism and collectivism as two independent dimensions which can simultaneously exist within an individual to varying degrees according to different cultural contexts.

## Characteristics of the Antithetical Other

In order to emphasize the difference between the individual level and the cultural level, Triandis (1994) proposed a set of contrasts between idiocentrics and allocen-

trics as a way to indicate the concept of individualism-collectivism at the individual level. When Triandis (1994) attempted to define allocentrics with a group of attributes, he often used the antithetical attributes of the idiocentrics to define the personality disposition. This method of theoretical construction inevitably invites questioning: Is this a correct way to describe behaviors in the so-called collectivist cultures?

Stated in a more explicit way: psychologists studying individualism-collectivism have taken European-American psychological characteristics as a frame of reference in constructing their images of other cultural groups. European-Americans are situated at one end of the dimension with their cultural and psychological characteristics as coordinates of reference for understanding other ethnic groups around the world. The latter are situated at different locations along the dimension, suggesting that their cultural identities are so vague that their own psychological characteristics can be understood only if they are described in contrast to Americans. Therefore, Fiske (2002) criticized previous individualism-collectivism researches indicating that individualism is the sum of cultural characteristics by which Americans define themselves, while collectivism was formalized to show characteristics of the antithetical other in accordance with the American ideological understanding that "[w]e are not that kind of person" (84).

### The "Catchall" Collectivism

A careful examination of any individualism-collectivism scale may reveal a second problem inherent in the trait approach of personality psychology. The trait approach for developing the individualism-collectivism scale adopted the method of the so-called behavioral sampling to select representative items to construct the scale. Many psychologists have pointed out that this approach attempted to use a "catchall" way to present various forms of cultural differences (Bond 2002; Hofstede 1994; Hui and Yee 1994; Kagitcibasi 1997; Rohner 1984; Triandis 1994). An examination of various scales in terms of these components demonstrated that their contents vary substantially. If this is the case, what are the adequate attributes for representing the personality dispositions of individualism-collectivism?

### Two Types of Behavior Categories

Earley and Gibson (1998, 291) pointed out that there are no parallels in the content measured by individualism and collectivism. They spoke bluntly that, looking at the highly varied operational definitions of individualism and collectivism, regardless of their underlying constructs, these scales seem to measure irrelevant constructs. Osyerman, Coon, and Kemmelmeier (2002, 28) did a content analysis of the 27 individualism–collectivism scales most widely used in cross-cultural studies. Their results showed that individualism is comprised of seven components: independence, individual goal striving, competition, uniqueness, self-privacy, self-knowledge, and direct communication; while collectivism embodies eight

components: relatedness, group belonging, duty, harmony, seeking advice from others, contextualization, hierarchy, and preference for group work. The lack of parallels between the components of individualism and collectivism suggests that it is not feasible to compare them directly.

Therefore, Osyerman, Coon, and Kemmelmeier (2002) indicated that there is considerable heterogeneity among conceptual definitions of collectivism and measuring scales. The cultural difference in this respect may reflect its multifaceted nature in the way an individual connects with others. After an intensive review of previous literatures, they pointed out that:

> American and Western psychology are infused with an understanding of human nature on the basis of individualism, raising the question of our ability to separate our current way of understanding human nature based on individualism from a yet to be developed approach of collectivism. (Osyerman, Coon, and Kemmelmeier 2002, 44–5)

With a careful review and reanalysis of the data in previous literature, Schimmack, Oishi, and Diener (2005) indicated that the conceptual definition of individualism is clear, instruments for measuring it are significant, and it is a valid and important dimension for measuring cultural differences. However, the definitions of collectivism are ambiguous and varied, and the validities of instruments to measuring it are undetermined. Therefore, they suggested that it is necessary for cross-cultural psychologists to reevaluate the meaning of collectivism.

## Conclusion: Making Science of Culture in Lifeworlds

As I have intended to show in this article, linking science to culture so as to make a culture-inclusive psychology has been a challenge for psychologists in general and for IPists in particular, since the day the discipline of scientific psychology was founded (Cole 1996). Indeed, it is of extraordinary importance for us to establish a global community psychology of multiculturalism in today's changing world (Marsella 1998). In order to make a culture-inclusive psychology, in my book, *Confucian Relationalism: Philosophical Reflection, Theoretical Construction and Empirical Research*, I advocated that the epistemological goal of IP is to construct a series of theories that represent not only the universal mind of human beings but also the particular mentality of people within a given society. On the basis of this premise, I explained how I have constructed my theoretical model of *Face and Favor* which was supposed to represent the universal mind for social interaction, then I analyzed the inner structure of Confucianism and discussed its attributes in terms of Western ethics. In the following chapters of that book, I constructed a series of theories based on the presumption of relationalism to integrate findings of empirical researches on the concepts of social exchange, face, achievement motivation, organizational behaviors, and conflict resolution in Confucian society.

In Chapter 4 of *Confucian Relationalism*, I illustrated how the four kinds of interpersonal ties discussed in the *Face and Favor* model, namely, *expressive ties*, *mixed ties*, and *instrumental ties*, as well as the *vertical relationship* between a

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petitioner and resource allocator, are corresponded with Fiske's (1991) four ele-
mentary forms of social behavior, i.e. *communal sharing, equality matching, market
pricing*, and *authority ranking*.

Fiske is an anthropological psychologist. He argued that the four elementary
forms of social behavior represent the universal mind in dealing with various kinds
of interpersonal relationships which can be found in cultures all over the world.

Viewed from this perspective, the Western ideal of individualism emphasizes
and exaggerates only the relationships of *market pricing* or *instrumental ties*. It is
biased in the sense that it neglects or ignores other kinds of interpersonal
relationships.

As Shweder (1991) indicated in his book, *Thinking through Culture*, the main
finding of a universalistic approach to cross-cultural psychology has been the
repeated failure to replicate Western laboratory findings in non-Western settings.
Taking the most widely used research paradigm of individualism-collectivism as an
example, it can be seen that any theory constructed on a biased presumption will
suffer from a crisis of infinite regress, while a theoretical model of psychology
which has been constructed on the intricate structure of human mind may be
more robust for empirical examination.

My arguments may or may not convince Prof. Allwood. Fortunately, the pub-
lisher Springer has promised to publish the English version of my book, *Confucian
Relationalism*, with a new title "Foundations of Chinese Psychology: Confucian
Social Relations;" in addition, a partial version of my Mandala model has been
accepted for publication by Psychological Studies (Hwang 2011c). I hope the pub-
lication of my works in English will help more readers to understand my approach
to meet the challenges of linking science to culture.

AQ16

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