Chapter 2
The Modernization of Non-Western Societies: A Perspective of Constructive Realism

Abstract Based on Vygotsky’s (1987) theory on the social formation of human mind, it is argued that the language games played by people of non-Western countries in their lifeworlds are distinct from those used by scientists in their professional works. A conceptual scheme was proposed on the philosophical basis of constructive realism to highlight the distinction between lifeworlds and scientific microworlds in light of their five aspects, that is, constructor, ways of thinking, types of rationality, modes of construction, and functions of worldview. Habermas’ (Theory of communicative action. Vol. II, Lifeworld and system: A critique of functionalist reason. Boston: Beacon Press, 1978) theory of communicative action was used to explain the evolution of lifeworlds during the process of modernization. Jullien’s (1998) distinction between wisdom and philosophy was cited to discuss the usage of Chinese cultural traditions by Chinese people in their lifeworlds, including Taoism, Confucianism, Legalism, and Martial School.

Keywords Constructive realism • Lifeworld • Scientific microworld • Formal rationality • Substantive rationality • Originative thinking • Technical thinking • Dominative constructive • Participative constructive • Worldview

In Chapter 1, I advocated that in order to attain the epistemological goal of indigenous psychology, non-Western psychologists must have a comprehensive understanding of the nature of their research. Based on Vygotsky’s (1896–1934) theory of cultural development, this chapter will cite a body–mind–spirit model to account for human development and emphasize that an individual needs various kinds of knowledge at different stages of his lifespan. However, in modern educational institutions, people learn systems of knowledge which have mostly originated within Western civilizations. In order to illustrate the features of “modern” knowledge and its distinction from the cultural traditions of the non-Western world, a conceptual framework from constructive realism will be proposed to explain the modernization
of human beings in non-Western societies. By doing so, the author argues for the necessity of understanding Western philosophy of science in order to attain the epistemological goal of indigenous psychology.

The Evolution of Culture

Formation of the Human Mind

Vygotsky was the first psychologist to advocate for the social formation of the human mind. For Vygotsky (1981), the lifeworld of human beings is composed of people, materials, and symbols (knowledge system) with historical origins and social meanings which are culturally constructed. Every activity in the lifeworld is mediated by language and symbols. Language is the carrier of culture. It can be used as the principal psychological tool for mediating not only the external activities of human beings; but also the internal processes that can dialectically transform the functions of human minds into higher levels of development (Wertsch 1985).

The general genetic law of cultural development proposed by Vygotsky (1981) states that the cultural development of children occurs at two levels: first on the social level, and then on the psychological level. It occurs during interpsychological communication that take place in interpersonal interaction. Meanwhile the occurrence of intrapsychological processes are able to transform the structure and function of the mind.

Vygotsky argued that the origin of higher mental function is located in neither the psyche, nor the neural system, but the social history outside of the organism (Luria 1976). Interpersonal social interaction is the foundation of all advanced psychological functioning. Language is the product of, as well as the principal instrument for, interpersonal interaction. For both adults and children, the most important function of language is to influence others through communication and social interaction. Language itself contains cultural and historical meanings. Vygotsky argued that “development” means the process of continuous interaction with others to create meanings through symbols in the cultural context (Wertsch 1985). Human beings participate in various activities by using language with social meanings and at the same time continue to develop their higher-order psychological functions.

The Developmental Model of Body–Mind–Spirit

From the perspective of contemporary development psychology, human development is a continuous process throughout one’s life, from birth to death. An individual has to acquire language tools of various natures to create different social meanings and to develop various psychological functions at different life stages.
The stages of an individual’s development through one’s life span can be illustrated by a developmental model of body–mind–spirit proposed by Chen and Bhikkhu (2003).

The body–mind–spirit model distinguishes three aspects of objective self encountered upon the introspective examination of one’s own existence:

1. **Physical self**: This is one’s self-consciousness focused on the functionings of self which originate from one’s physical needs. Examples include eating when hungry, warming oneself up when cold, resting when tired, pursuing benefit, and avoiding harm. These physical needs can make one aware of one’s own existence as an organism.

2. **Psychological self**: This is one’s awareness of one’s own psychological functioning. It originates from the process that occurs when an individual attempts to acquire social or material resources from the outer world for the sake of satisfying various physical or psychological needs. An individual has to learn various types of knowledge in order to control the outer world effectively, and thereby acquire a sense of self-efficacy.

3. **Spiritual self**: As a human being who is able to think, feel, act, and experience various domains of life, the spiritual aspect of self facilitates a comprehensive understanding of one’s entire life, including one’s personality, values, beliefs, and motives.

These three aspects of self correspond to the three levels of the body–mind–spirit model proposed by Chen and Bhikkhu (2003). According to the model, at the newborn stage an individual is aware of only biological existence. At this stage, a person’s primary motive is to satisfy needs originating from the physical body. Other psychological functions remain undeveloped. Therefore, the body is located on the outermost circle of self, as shown in Fig. 2.1. The maturation of mental functions enables learning of various kinds of knowledge in order to control the outer world and maintain a state of equilibrium during adolescence. Once a person enters the adult stage, mind and body are fully developed, and it is expected that the functioning of physical and psychological activities is under the guidance of the person’s values and beliefs. One’s spiritual self, psychological self, and physical self may coordinate with one another, so that one feels that one’s potential is fully developed with a sense of self-efficacy.

In the sunset stage of life, biological desires originating from the physical self slowly weaken. The need for spiritual cultivation may gradually increase. Individuals tend to spend more and more time with spiritual work and thinking about issues related to life and death. In the last stage, the physical self may fade gradually, while the spiritual self becomes more and more apparent and dominates the outermost circle of life.

This developmental model of body–mind–spirit can be viewed as a universal conceptual framework for understanding the process of psychological development in any culture. An individual may go through all five of these stages if, and only if, he does not encounter an accident that interrupts his life. According to Vygotsky’s theory of cultural development, the second stage of development from childhood to
adolescence is the most important stage for the formation of personality. In this stage, most children acquire knowledge and capacities in school which develop their minds. This learning experience has very significant implications for our understanding of how and why we should develop indigenous psychology. This point can be elaborated in terms of Vygotsky’s theory of cultural development.

Social Factors in Pedagogy

The research done by Vygotsky and his students indicates that after the Bolshevik revolution an obvious diffusion of knowledge occurred in children’s everyday thought processes.

The Bolshevik revolution of October 1917 made Vygotsky aware of a qualitative jump or discontinuity between the language and values that students learn from their cultural traditions and families, and the values of communism and sciences taught by school teachers. He therefore argued that the developmental history of society may facilitate not only quantitative, but also qualitative transformation of the mind (Luria 1976).

In his book *Vygostky and Pedagogy*, Daniels (2001) suggests that Vygostsky emphasized the mediation of social factors in pedagogy. While teaching, instructors always intentionally or unconsciously demonstrate the social value and political positions of the mainstream social class in their speech and behavior. This influences the pedagogical orientation and student’s psychological development.
Scientific knowledge and common sense originated from two different sources: the former came from the party and school, while the latter came from one's family environment. All of these messages may interact and transform each other in student’s mind as a consequence of communication between the teacher and students. The spontaneous representation of knowledge may become more and more rich and abstract. It is impossible for science to eliminate prescientific thinking. On the contrary, common sense is a necessary mediator for a school child to assimilate both cultural and scientific representations (Luria 1976).

The problematic situation Vygostky faced with respect to the pedagogy in Russian schools following the Communist revolution is very similar to that faced by non-Western psychologists in developing indigenous psychology. Generally speaking, before receiving formal education, children in non-Western countries have learned both their mother language and many related cultural traditions. As they begin school, they are taught modern knowledge which originates in Western culture. The children must use their mother language as an instrument to assimilate the new knowledge or to modify the structure of their minds to accommodate the new knowledge.

Vygotsky’s major contribution is the development of a general orientation which includes educational activities into the theory of psychological development (Moll 1990). Though he keenly noted that there was an obvious discontinuity between the science and ideology taught by teachers at school and the language tools acquired by students at home, he never did any systematic analysis to distinguish the essential difference between these two types of knowledge. This distinction is fundamentally important for the development of indigenous psychology. Will thus discuss it in the next section.

Constructive Realism

Modern scientific knowledge is a cultural product that evolved within Western civilization following the fourteenth century Renaissance. As such, it is essentially different from the cultures and traditions of non-Western countries. In order to explain the modernization of non-Western countries and their need for indigenous psychology, in my article Constructive Realism and Confucian Relationalism (Hwang 2006), I highlighted the distinction between “lifeworld” and “scientific microworld” and described the differences between them in order to reflect on those issues from the perspective of constructive realism.

Since the 1930s when the Vienna Circle began its advocacy for logical positivism with its subsequent influence on the global scientific community, the philosophy of science has undergone many changes. Wallner (1994, 1997) was thus inspired to propose the philosophy of constructive realism in order to provide a foundation of interdisciplinary integration foundation for various apparently divergent sciences.

While constructive realism can be used to answer the controversial issues encountered by indigenous psychologists, it was not originally conceived with this
purpose thus, it is necessary to make some revisions to the philosophy so that it may satisfactorily address these issues. Therefore, in my article “Constructive Realism and Confucian Relationalism” (Hwang 2006), I proposed a conceptual framework to illustrate the differences between the knowledge of the scientific microworld constructed by scientists and the knowledge used by ordinary people in their daily life. Here in this chapter, I will present the main arguments of constructive realism and my supplements. I will then utilize constructive realism to address the controversial issues faced by indigenous psychologists.

Constructive realism differentiates three levels of reality, the most important of which is called the actuality or wirklichkeit. The actuality or wirklichkeit is the world in which we find ourselves, or the given world that all living creatures must rely on to survive. The given world may have certain structures, or may function according to its own rules. However, humans have no way to recognize these structures or rules. No matter how humans attempt to explain these structures, the explanations, and therefore their comprehensions, remain a kind of human construction. The structures of the world, its temporal and spatial distances, and causal laws, are all hypotheses proposed by humankind.

**Two Types of Knowledge**

The world as constructed by human beings can be divided into two categories: lifeworlds and microworlds. These two constructions together constitute the world that human beings are able to understand, for they have been figured out by different ways of thinking supported by different types of rationality. The knowledge created within each construction results in different worldviews with distinct functions. These two worlds constitute two levels of constructed reality for human beings (see Table 2.1).

The first constructed reality is that of the lifeworld in which humans live. For the individual, a lifeworld is a primordial world in which everything presents itself in a self-evident way. Before human beings began to develop scientific knowledge, they tried to understand their daily experiences, and to explain, respond to, and delineate structures of their lifeworlds. These explanations and responses belong to a domain of prelogical, pretechnical, and preinstrumental thinking, and the richness of their roots lies in individual life experiences, which are flexible, penetrable, and yet

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unbreakable. Human beings can neither exhaust the contents of their lifeworlds, nor
go beyond their boundaries (Husserl 1970).

Lifeworlds exist inevitably at a particular point in history. The lifeworld’s con-
tents differ by historical age and culture. Economic crisis, war, and civil or political
conflict may lead to drastic changes in the lifeworld. However, while people living
in the same culture experience changes to their lifeworlds, their lifeworlds are con-
stantly sustained by a transcendental formal structure called cultural heritage.

The second world construction is that of the microworld. Any scientific construc-
tion can be regarded as a microworld. A microworld can be a theoretical model built
on the basis of realism, or a theoretical interpretation of a social phenomenon
provided from a particular perspective by a social scientist. Within any given micro-
world, the reality of the given world is replaced by a second order constructed reality
that can be verified by empirical methods.

**Language Games**

Language is the most important carrier of cultural heritage. It is also the medium
through which lifeworlds are comprehended, analyzed, and recorded. As they inter-
act in their lifeworlds people often use language to play language games. A language
game is any kind of human practice or activity shared by people living within a
given culture. Wittgenstein (1945/1958) first used the term in his later philosophical
works in which he asserted that the world is made up of various forms of life, and
that language is mainly constituted of various language games. *Forms of life* refers
to patterns of thinking that manifest in cultural heritage, such as customs, folkways,
institutions, and traditional practices. Language games are inevitably rooted in these
forms of life. They are based on the observance of rules embedded in these customs
and traditions. Any particular game has its rules and must be played according to
those rules. However, the rules can change, and they do not necessarily specify
every detail. While playing a game, people may formulate their own rules and may
change them at any time (Wittgenstein 1945/1958).

The language used in daily life is an open system consisting of large, small,
simple, or complicated language games. These language games are not necessarily
consistent in form, but may be similar to one another in certain aspects, which
Wittgenstein labeled family resemblance. The microworld of scientific knowledge
constructed by scientists can also be viewed as a set of language games. However,
the language games people play within a scientific microworld are distinct from
those they play in their lifeworlds.

Vygotsky’s (1986–1934) cultural psychology emphasized the importance of
language tools. Though he was living in the same era as Wittgenstein, he neither
mentioned the concept of language games, nor distinguished the difference between
them. In fact, language of lifeworld can be regarded as a tool and language used in
scientific microworld can also be treated as a kind of game. We may say that when
Wittgenstein described the characteristics of language games, he was focused on
language used in the lifeworld; meanwhile, when Vygotsky proposed the idea of language tools, his major concern was the scientific microworld.

Though it is very hard to distinguish the lifeworld and scientific microworld by examining language games and language tools, these two worlds can be differentiated using other dimensions: knowledge of scientific microworlds are constructed by solitary scientists; while the language games being played in lifeworlds have been developed by cultural groups over the course of their histories (Wallner and Jandl 2001). In addition, the ways of thinking, types of rationality, modes of construction and worldviews in these two worlds are demonstrated in Table 2.1 in order to note their essential differences:

**Originative Thinking and Technical Thinking**

The lifeworld is the basis for constructing a scientific microworld, which is a completely new entity distinct from the lifeworld. The construction of natural science has been pragmatically motivated in order to control, exploit, and utilize nature. The scientific microworld is not the only thematic world that human beings have constructed. Guided by themes for different needs, human beings have also constructed the microworlds of ethics, aesthetics, and religion. Because each thematic world is constructed under the guidance of a certain theme with a particular way of thinking, all phenomena irrelevant to that theme are excluded. Therefore, each microworld bears a predetermined partiality and narrowness.

The language and thinking style used to construct the scientific microworld are essentially different from those of the lifeworld. People construct the natural language used in a lifeworld within a shared culture over a long-term period of time. In the initial stage of a particular culture, people concentrate on observing and contemplating the nature of every object within their lifeworld. They rid themselves of their own will and intention, and try their best to make all things manifest in the language they create to represent it. Heiderger (1966) labeled this way of thinking *originative thinking* or *essential thinking*.

Because people believe that the essential nature of an object can be presented in the word they have created to represent it, they eventually come to replace the object with the word and presume that the constructed reality is equivalent to the actual reality. When people make statements about a thing, they call it up as if its reality is wholly represented by the language, and the reality of a thing resides in language.

The language and way of thinking scientists use to construct theoretical microworlds are distinct from those used by people in their lifeworlds. Scientific knowledge is not obtained by contemplating the nature of things. Rather, it is intentionally created by scientists in order to fulfill specific goals. So it has a functional, compulsory and aggressive character that demands the most gain and the least cost. Such technical thinking can be considered a degeneration of Cartesian dualism. It has no interest in representing things in the objective world and making things
the object of knowledge. Instead, this type of thinking attempts to exploit natural resources, and to make them subservient to be utilized by human beings.

Technical thinking uses certain ground principles as a foundation, which is also called *metaphysical thinking*. The German term *grundsatz* and the Latin word *principium* both originate from the Greek word *axioma*, which refers to a valuable or very precious thing. In the domain of scientific propositions, *axioma* refers to the first proposition that is metaphysical. The meanings of other propositions must be understood in light of the axiom’s fundamental meaning. Modern people calculate their thinking in reference to a ground principle. Their thinking is rational, and the ground principle serves as the foundation for this rational thinking. Only with such a ground principle can rationality perfectly display its essence (Heiderger 1974).

**Substantive Rationality and Formal Rationality**

What is meant by rationality? Is the originative thinking needed by people in their lifeworlds irrational or lacking in rationality? French sociologist Durkheim (1912/1965) argued that all social representations in any culture, including those of religion and mythology, are rational. All concepts and categories in a particular society are products of the social life of its members. Members of the collective share these concepts and categories, and people take them for granted. Only when people believe a concept is true, does it become true. According to Durkheim, religion, like science, tries to represent reality with a lexicon that aggregates things into categories and sets up internal connections amongst them. There is no fundamental difference between the language used in religion and the language used in science. The basic ideas of scientific logic originated from religion. Primitive religious thinking and modern scientific thinking are two stages of development in the course of history; the latter evolved from the former. Scientific thinking is nothing more than a more developed form of religious thinking.

Durkheim suggested that everything that is social is rational, and everything that is rational is social. From the perspective of insiders living within a given society, collective consciousness and social representations are rational, no matter whether they are related to religion, mythology, or science. In evaluating Durkheim’s arguments, several further questions become evident: Is there any difference between the rationality used in the microworld and that of the lifeworld? Do the rationalities developed by various civilizations of the world share the same essence?

These questions can be answered by considering Max Weber’s (1921/1963) works on comparative religion. It is well known that during his academic career Weber’s work focused on causes for the rise of industrial capitalism in the modern world (Weber 1921/1963, 1930/1992). In order to analyze this problem, he proposed a set of contrasting concepts to highlight the unique features of Western civilization. Weber indicated that with the Renaissance of the fourteenth century, many west European countries experienced an expansion of rationalism in such fields as science, law, politics, and religion. He noted that, after the Renaissance,
European rationalism was uniquely characterized by its formal rational structure. This set it completely apart from the substantive rationality emphasized in other civilizations. Formal rationality emphasizes the calculability of means and procedures that can be used to pursue personal goals, and pays attention only to value-neutral facts. In contrast, substantive rationality refers to the value of ends or results judged from a particular position, and provides no clear-cut means or procedures to reach goals (Brubaker 1984). Only the few people familiar with the special means and procedures are able use them to pursue the ends or goals that substantive rationality defines as valuable.

**Participative Construction and Dominative Construction**

According to Weber’s conceptual framework, all microworlds constructed by scientists contain the essence of formal rationality. In order to control and utilize nature, scientists construct different microworlds to study their subjects in particular domains. Each of these microworlds has its own specific goal. These microworlds are neither permanent nor absolutely certain. When the goal loses importance, or when people are faced with new problems, scientists must construct a new microworld to address these problems. Such scientific microworlds are products constructed by scientists who are conducting research in a specific domain and utilizing the Cartesian reasoning that emerged following the European Renaissance. It is essentially different from the way of constructing knowledge used by non-Western people in their lifeworlds.

This point can be illustrated with Levy-Bruhl (1910/1966) anthropological study of primitive thinking. Influenced by Durkheim’s pioneer work, Levy-Bruhl focused on primitive people’s collective representations as his major research subject. He indicated that the cultural system of any primitive people, including their mythology and religion, is constituted on a basis of the law of mystical participation (Evans-Pritchard 1964), which conceptualizes human beings as parts of an inseparable entity that can be viewed as a consciousness of cosmic holism (Taylor 1871/1929).

In a premodern or primitive culture, the collective representation constituted by the law of mystical participation would seldom be refuted by empirical experience. Tradition and authority protect the culture from challenges by antagonistic information. Members of the community usually experience collective representations with shared sentiment, rather than examining them with empirical facts. Moreover, although people are very sensitive to contradiction, they are not at all sensitive to the inconsistencies that arise within the collective representation constituted by the law of mysterious participation. In some premodern civilizations, submission to the law of mysterious participation is more powerful than elimination of contradiction. Using language as a form of social representation, people in many premodern cultures describe people and objects encountered in various situations with vivid adjectives. By doing so, they develop a rich lexicon in which the meanings of words
are not only flexible, but can also be reshaped with the variation of experiences, people, and objects. Levy-Bruhl believed that the most popular forms of thought in premodern cultures could never transform into the form of human thinking which accompanies modernity.

In premodern civilizations, people *participatively construct* the knowledge in their lifeworlds (Shen 1994) whereas the scientific microworlds constructed by Westerners using Cartesian dualism can be considered as products of *dominative construction*. Knowledges constructed in these two ways are completely different in nature and mutually incompatible.

**Two Worldviews**

The language games people play in both the lifeworld or the microworld entail a particular worldview. But, what is a worldview? In answer to this question, linguist Whorf (1956) argued that the mind must analyze and synthesize the vivid impressions presented by the changing world through a language system in order to process them. This language system contains a worldview. When an individual learns to speak, he must acquire a lexicon for classifying and naming things in the outer world, and a set of grammatical rules for describing and considering them. In other words, language shapes each person’s specific worldview.

The worldviews in the lifeworld and the microworld are essentially different. People of a given culture gradually construct the worldview of their lifeworld over the course of history as they contemplate the nature of the universe. Walsh and Middleton (1984) indicate that the worldview in a given culture usually answers four broad categories of questions: Who am I? What is my situation of life? Why do I suffer? And how do I find salvation? A worldview not only describes human nature but also the relationship between humans and the world, as well as one’s historical situation. It provides a diagnosis for problems and prescriptions for their solution.

The worldview in a microworld does not share these functions. In his lexicon theory, Kuhn (1987) indicated that the scientific lexicon is composed of a set of terms with structure and content, which constitute an interrelated network. Scientists use terms in the lexicon to make propositions in a theory to describe the nature of the world. In other words, theory and lexicon are inseparable. A theory can be understood only with the aid of its lexicon. Post-Kuhn philosophy indicated that there are two kinds of change in the course of scientific revolutions (Kuhn 1986), namely, change of word meaning, and change in the way of seeing the world. A change of worldview is implied in the change of word meaning. When a theory is changed, its lexicon will change with it. The microworld of a theory can be understood with its specific lexicon. Lexicons of successive theories may share some terminology, while some terms are specific to a particular lexicon. These specific terms are incommensurable, and cannot be translated into the lexicons of other microworlds.

Scientific lexicons inevitably include a system of taxonomic categories. When members of a scientific community are learning their lexicon, they use examples to
learn the stipulated descriptions of these terms, rather than learning definitions of the terms one by one. This systematic method for learning the stipulated terms and their related natural laws by group or set is called local holism. Scientific lexicons learned in this way contain a particular way of seeing the world. Members of the same scientific community must master the same lexicon, understand the meaning of each term, and share the same worldview in order to communicate with one another, think about the same problems, and engage in related research in the same scientific community. The microworld worldview provides no answers to problems related to the meaning of life. It is essentially different from the worldview of people’s lifeworlds.

The Meaning of Modernization

The sharp contrast between the two types of knowledge in the lifeworld and microworld, constitute a conceptual framework that can be used to answer the questions posed in the introduction to this chapter. I begin with the first question: What is the meaning of modernization for human beings?

Scientists began to construct the microworld of scientific knowledge around the time of the European Renaissance in the fourteenth century. The evolution of social representations from the knowledge of substantive rationality to the knowledge of formal rationality is the consequence of a series of qualitative transformations which are discontinuous in terms of both content and cognitive structure (Hwang 2006). As microworlds developed, some of the language, rationality, and thinking entailed by these microworlds penetrated and became infused into people’s lifeworlds. The transformation of substantive rationality and the penetration of formal rationality can result in drastic changes in people’s social lives. However, the process of change may have different implications for Western and non-Western societies.

Evolution of Lifeworld

What is the general impact of the transformation of knowledge on human’s social lives? This question can be answered with Habermas’ (1978) theory of the differentiation of social systems from peoples’ lifeworlds. Habermas pointed out that an individual’s lifeworld is composed of three levels, namely: cultural, social, and individual. People sharing a certain cultural heritage also share the power of reinterpreting it; intersubjective communication may determine the interpretation of cultural tradition. Communication can help people to establish acceptable standards of behavior, identify with their community, and strengthen social integration. Growth and learning resulting from constant communication enables individuals to strengthen their capacity for action and helps them to maintain the integrity of their personalities.

During a society’s evolution, some of its social systems can become differentiated from people’s lifeworlds, causing people to live in two completely different
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worlds. The differentiated systems are not only different from people’s lifeworlds, but the two are also antagonistic to one another. The three functions of communication in an individual’s lifeworld are: mutual understanding, coordination of action, and socialization. These functions of communication satisfy three kinds of social needs: cultural reproduction, social integration, and individual socialization.

In contrast to lifeworlds, the major aim of sustaining most social systems in modern societies is material reproduction, and the criterion for evaluating system evolution is the enhancement of social control. In order to achieve this goal of material reproduction, each system must be paired with the most efficient microworld of scientific knowledge. People working in the system have to use the technical thought entailed by the microworld to solve the problems they encounter in their tasks. Because of the replacement of originative thinking with technical thinking, money and power replace the position of language in lifeworlds, and become the media for system integration. Seeking consensus through communication and coordination may also take into consideration the one-dimensional motivation of reward and punishment. Systems in the lifeworld are liberated from regulation by social norms, and become more and more autonomous. Finally, the new order of the social system begins to instrumentalize the lifeworld. Habermas (1978) calls this process colonization of the lifeworld by the system.

The Coexistence of Modernity and Traditionalism

The emergence of indigenization movements in non-Western countries cannot be fully explained by a spirit of anticolonialism. Another reason for the occurrence of these movements is the coexistence of traditional and modern cultures in the lifeworlds of non-Western people. This coexistence is a quintessential postmodern phenomena. Children learn traditional patterns of thinking and behaving by acquiring language in their lifeworlds. This shapes their personality orientation with originative thinking. As they grow up and attend school, they begin to learn scientific knowledge which originated in the West. Knowledge from different origins with different natures becomes mixed in their cognitive systems, and helps them to deal with problems in different situations of their lifeworlds.

When adults in non-Western countries are engaged in production work in a social system, they are likely to use knowledge from a scientific microworld as well as technical thinking with formal rationality to solve the problems encountered in their tasks. It is a matter of course that this kind of knowledge may penetrate into lifeworlds of ordinary people through various channels of communication. However, for most nonprofessional laymen, though they may learn fragments of scientific knowledge and use it in their daily life, this kind of knowledge remains a type of common sense for them. It is very hard for ordinary people to utilize such knowledge systematically and engage in production work as a professional or expert does.
Because scientific knowledge is characterized by instrumental rationality, it is different from substantial rationality in nature. It can neither be used as a guide for an individual’s value orientation, nor can it answer problems about the meaning of life. In many circumstances, it can not replace the knowledge one derives from cultural traditions, such as values, views toward life, philosophies about life, ethics, and morality. People in non-Western societies certainly use the various microworlds of scientific knowledge that they learned in school to engage in production work. They may also use the knowledge that they inherited from their cultural tradition to deal with problems in their lifeworlds.

Because of the coexistence of traditional and modern cultures in the lifeworlds of non-Western people, some non-Western psychologists have argued that the implantation of Western theory as well as the research findings obtained from replicating Western paradigms may not be compatible with the mentalities of local people. Findings based on transplanted theory may lack social or cultural relevance in seeking solutions to local problems. Therefore, a number of non-Western social scientists have tried to advance a movement for indigenous psychology. However, their advocacy has aroused debates not only within their own camp, but also with mainstream psychologists. In Chaps. 2 and 3, I analyze these debates from the perspective of Western philosophy of science, with an emphasis on constructive realism, which has some important implications for settling these debates. From my analysis, it is clear that the contents of the debates concerning the development of indigenous psychologies in Taiwan and other non-Western countries is essentially the same and can be solved with the same epistemological strategies.

The Modernization of Chinese Society

Having established an interpretation of the modernization of non-Western societies from the perspective of constructive realism, we are now able to discuss the modernization of Confucian societies. As I mentioned above, scientific microworlds are constructed by scientists on the basis of philosophy of science which is a product of Western civilization, and is essentially different from the knowledge prevalent in traditional Confucian society. In this section, I will first cite the French philosopher Jullien’s distinction between philosophy and wisdom in order to elaborate on the difference between these two types of knowledge. Subsequently, I will explain the modernization of Chinese people in Confucian society in terms of a metaphor proposed by Wang Yang-ming.

Philosophy Versus Wisdom

In his book *Un sage est sans idée: ou l’autre de la philosophie*, French philosopher François Jullien (1998) indicated that Chinese traditional thought, including Daoism,
Confucianism, and Buddhism – are fundamentally different from that of Western philosophy. The teaching of Confucian, Daoist, and Buddhist sages should be called wisdom instead of philosophy. Western philosophy is deduced using dialectical reasoning based on certain a priori concepts. The term a priori concept originates from the ancient Greek word axiom which Heidegger named the principle of ground. It is used as the first principle for deduction. On the contrary, Chinese traditional wisdom emphasizes “no speculation, no absolute definitude, no inflexibility, no selfishness.” There are no prior concepts, no fixed positions, and no individual self. All concepts proposed by the sages can be regarded as statements existing on the same plain rather than prior or posterior.

Because Western philosophy is deduced via dialectical reasoning on the basis of certain prior concepts, philosophers may develop philosophies on the basis of different presumptions. Therefore, there is a history of development in Western Philosophy. The explanations for certain things in a given domain made by different philosophers are often progressive, evolving step by step. In contrast to this, there is no history of wisdom. Nobody can write a history of the development of wisdom. A sage may say different words from different perspectives, but what he says represents an entire self-contained unit of wisdom, which could be interpreted again and again.

In order to think dialectically, Western philosophy requires a clear definition for each core concept, so that one can use them to and recognize the external world exactly. Philosophers can use various methods to examine the correctness of a proposition about objects in a given domain in order to approach the so-called “truth.” By contrast, sage wisdom is expressed in the form of sayings without fixed definitions. These can remind people to see through the “Dao” (way) of ordinary things or events that is otherwise frequently taken for granted. An individual may be inclined to ignore the Dao because his sights are so obscured by prejudice that he can see only one side of the issue. A sage’s words of wisdom may enable him to become aware (Wu, enlighten) of the entirety of things or events rather than learning a new framework for knowing the world.

**The Chinese Cultural Tradition**

Using Jullien’s distinction between philosophy and wisdom, we can see the essential difference between traditional Chinese and modern Western culture. In my book *Knowledge and Action* (Hwang 1995), I pointed out that one of the major purposes of Western philosophy is to pursue objective knowledge, whereas that of Chinese philosophy is to provide practical wisdom. In spite of the essential difference, it is possible for Chinese social scientists to construct objective knowledge about Chinese traditional culture by various methods as long as s/he is familiar with Western philosophy of science.

The most idiosyncratic legacy of traditional Chinese culture is the series of thoughts including Daoism, Confucianism, Legalism, and the Martial School as
well as Buddhism, which was imported into China around 65 AD. In *Knowledge and Action* (Hwang 1995), I analyzed the inner structure of Confucianism from the perspective of social exchange theory and structuralism. I then used it as a basis to interpret the development of Chinese cultural tradition from Daoism to Buddhism. According to that book, with the exception of the imported Buddhism, Daoism was the first Chinese cultural tradition to develop. It is said that Confucius asked Laozi, the founder of Daoism, about propriety (*li*), and developed his thoughts on the basis of benevolence (*ren*). One of Confucius’s student, Mencius, elaborated his theory of righteousness (*yi*), while another follower Xunzi emphasized *li*. All three constructed a Confucian ethical system of *ren-yi-li*, while Legalism stressed laws, strategies, and power (*fa*, *shu*, and *shi*). Subsequently, the Martial School emerged. This sequence demonstrates the dialectic development of Chinese cultural tradition, within which the later schools inherited some previous thoughts and creatively developed their own ideas. This is what Laozi said in his words, “when the Dao was lost, its attributes (*de*) appeared; when its attributes were lost, benevolence (*ren*) appeared; when benevolence was lost, righteousness (*yi*) appeared; and when righteousness was lost, the proprieties (*li*) appeared” (*Dao-de-jing*, Ch. 38). We may further say that, “when the proprieties was lost, laws (*fa*) appeared; when the laws were lost, strategies (*shu*) appeared; when strategies were lost, power (*shi*) appeared.” If even power did not work, the final solution was war.

The developmental sequence of these four schools also represents a process of secularization. Following this order makes an individual to become mediocre in lifeworld. However, Daoism teaches a person to revert to the authentic state of origin, so that one may be integrated into the Dao and thereby become extraordinary.

**The Recapitulation of the Cultural Developmental Process**

Under the influence of Daoism, Confucianism, Legalism, and the Martial School, the ontogenesis of an individual almost recapitulates the developmental process of cultural development. An individual may reexperience this process even over the course of one day and night. As Wang Yang-Ming (1472–1528 AD) said: “People may not be aware that they are experiencing all the history within one day. Before daybreak, they do not see, do not hear, do not think, do not work, and are as pristine as in King Fu-Xi’s age. In the dawn, they feel as brisk and harmonious as in King Yao and King Shuen’s age. In the morning, they act in good manners with proper order, just as in the Period Xia–Shang–Zhou. In the afternoon, their energy goes downward, and their social activities become complicated, as in the Warrior-States after Spring-and-Autumn Period. When the night falls, it is an empty world in which everything is tranquil. If an intellectual always follow his conscience and is not disturbed by his mental state, he can live as in King Fu-Xi’s age.”

What Wang meant by “King Fu-Xi’s age,” “King Yao and King Shuen’s age,” “Xia–Shang–Zhou Period,” “Spring-and-Autumn and Warrior-States Period,” and
“an empty world” roughly corresponds to ideal states of Daoism, Confucianism, Legalism, the Martial School, and Buddhism respectively. In spite of the fact that Chinese societies all over the world have transformed into industrial or commercial societies, Wang’s words still resonate in many people’s life. Viewed from the framework of Knowledge and Action, an individual may create a harmonious King Yao and King Shuen’s time in which he or she feels brisk after getting up in the morning and interacts with his or her family members according to Confucian ethics. In contemporary industrial or commercial society, various organizations have been established, and many people’s positions are situated within these organizations. Some workplace leaders may manage their organizations on the basis of Legalism in order to establish a social order like that in the Xia–Shang–Zhou Periods. Meanwhile, members of the workplace may take strategies from the Martial School to compete against each other inside or outside of the organization, just as people did during the Warrior-States after the Spring-and-Autumn Period. When they return home after work, they can revert to the authentic state of origin or the empty world in which everything is tranquil, which is the ideal state of Daoism or Buddhism, and thus dwell in King Fu-Xi’s time.

The Lifespan Development of Body–Mind–Spirit

Wang’s metaphor illustrates how an individual may recapitulate the ontogenetic process of traditional Chinese culture within one day. Furthermore, one may recapitulate the ontogenetic process across one’s life span as well.

In view of the developmental model of body–mind–spirit mentioned above, the person Wang Yang-Ming describes is an adult situated in stage 3 who has passed the chaotic stage 1 and the learning stage 2. His body, mind, and spirit are fully matured, so he can apply Chinese cultural wisdom to deal with others of various relationships in different fields.

When an individual ages, he may learn Qigong, Taiji Quan (shadow boxing), or Waidangong – which originated with Daoism – in order to maintain the equilibrium of his body–mind–spirit. He may also use Zazen, Buddha worshipping, or sutra intoning to calm his mind and spirit. Even if none of these practices remain useful, Daoist and Buddhist teachings can help him to face the end of life peacefully, just as Master Jikiouchikan said, “leaving everything and going, the way is plain.” That is what we mean by saying that the ontogenesis of an individual recapitulates the process of Chinese cultural development.

Expert and Laypeople

Regardless of the potential to recapitulate Chinese cultural development in one’s life, the influence of traditional culture should not be overestimated, and the impact
of Western culture should not be ignored. In the postcolonial era, globalization leads cultures to interact with one another more and more frequently. The postmodern society is characterized by “mutual penetration among moving cultures” (Hermans and Kempen 1998). It is very hard to find a self-sufficient and consistent cultural system in the life world (Eldridge 1999). There are many sets of knowledge that coexist within any individual’s cognitive system, some originate in the West, while others are inherited from their cultural tradition. For any given problem, people will tend to use the most appropriate knowledge to resolve the problem. However, they may not know what the origin of that knowledge is.

This phenomenon can be further explained with Vygotsky’s (1978) theory of cultural development. Since officials of the Qing Dynasty abolished the examination system for civil service in 1905, Chinese began to teach Western knowledge instead of Confucian classics in schools. Generally speaking, instructors teach language tools that contain not only instruments for problem solving but also wisdom for proper action in various domains of life. But even the teachers may not know how to differentiate knowledge from these two origins.

Viewed from the perspective of psychology, when an individual learns either a language game or language tool from his social environment, what he learns may become one of his personal implicit theories. Hong et al. (1997) terms these domain-specific cultural theories. In other words, the implicit theories originating in various cultural traditions are generally useful only in specific domains. In some domains, we may use scientific microworld knowledge for production work; in other domains, we may use our traditional cultural wisdom to deal with day-to-day problems. One of the major goals of indigenous psychology is to clarify which cultural theory is most likely to be used in certain situations.

It should be emphasized that scientists within modern society continue to construct more and more scientific microworlds in various domains. Compared with the past, the implicit theories that an individual may learn in school today are varied not only in quality but also in quantity. Generally speaking, the higher educational level an individual has, the more microworlds of knowledge he may learn, and the more likely he is to be able to solve problems in some specific domains via systematic thinking. Implicit theories about beliefs acquired from his cultural tradition may also change correspondingly.

The experience of receiving modern education may increase the efficacy of an individual’s cognitive capacity as well as his cultural beliefs in some domains. If an individual has received comprehensive formal education and is performing production tasks in certain social systems using knowledge from some kind of scientific microworld, his cognitive systems may become increasingly complex due to repetitive processing of relevant information that enables him to solve related problems better and better. Finally, he may become an expert in a specific field, and become able to use professional language tools to solve problems within that specific domain. Some may have special cognitive systems that enable them to describe their implicit theories clearly and thereby transform them into “explicit theories.”
Conclusion

This line of reasoning enables us to understand the mission of non-Western indigenous psychologists and indigenous social scientists. It should be emphasized that following contact with Western civilization, psychology research institutes including universities and graduate schools in most non-Western countries, were established according to the Western model. The literature cited in psychological research is mostly imported from the West and is characterized by its use of scientific microworld knowledge as mentioned above.

In every culture, one of the major human concerns is humans themselves. During the process of cultural evolution, humans have created a variety of “psychological” theories and concepts to help them deal with their daily problems. When Western psychology microworlds are translated into local languages, they may have tremendous discrepancies with the language of local “psychological” knowledge. Sensing this situation, some psychologists may initiate indigenous psychology movements in order to better understanding their own existence.

We should recognize that the construction of scientific microworlds is a product of modern Western civilization, while philosophy of science provides the rules for constructing scientific microworlds. In contemporary universities and research institutes, if indigenous psychologists are motivated to construct systems of knowledge characterized by features of the aforementioned microworlds in order to understand local people’s psychology, they must be familiar with Western philosophy of science. The next chapter will demonstrate that the main way for non-Western psychologists to develop indigenous psychology is to construct formal theories about the deep structure of the human mind on the basis of philosophy of science. This can describe universal psychological functions of human minds on the one hand, while on the other hand describing the particular mentality of people within a certain culture.

References


