

Toward A Cognitive Perspective on Transition*

TONY FU-LAI YU**

Introduction

The dramatic abandonment of central planning as principal mode of organizing economic activities in Russia, Central and Eastern European Bloc and the mainland China has sparked scholars' interest in economics of transition.¹ Unfortunately, more than 10 years after the collapse of the Berlin Wall, we are still relatively ignorant of the economics of transition (Roland 2001). Significant disagreements regarding the issues of transition still remain. Despite growing literature on transition in recent years, there is still little discussion the about concept of transition.² Suffice it to say that there is no theory to guide the practical process of transition, only theories of capitalism and socialism (Havrylyshyn 2001). Kornai (2000) even goes further to claim that

*An earlier version of this paper was presented at the international conference on Evolution of Institutions and the Knowledge Economy organized by the University of Debrecen at Debrecen, Hungary (4 - 5 October 2002). The author acknowledges Dian Kwan for her encouragement for this research and for proofreading this paper. He also benefited from the discussion with Gary Shiu.

** The author holds a Ph.D. in Economics and Management from the University of New South Wales, Australia. His fields of expertise include entrepreneurship, governmental economics, economic development, and Austrian economics. He is currently a professor at the Department of Economics, Feng Chia University, Taiwan, Republic of China.

¹ According to the International Monetary Fund (IMF) (2001), transition economies including Commonwealth of Independent States, Central and Eastern Europe, China and Mongolia account for 17.5 percent of the world output and 27.8 percent of the world population.

² The term "transition economies" seems not yet clearly defined in the literature. Most conventional view implicitly defines a transition economy as an economy moving toward a market style of economy (IMF 2001). IMF (2001) constructs an aggregate transition indicator to show the extent of these economies toward a market economy. In the Austrian perspective, Colombatto (2002) defines "transition as the period of time it takes for new institutions and organizations to be introduced and upheld, for agents to learn how to operate according to a reformed system of property rights and adjust to hitherto virtually unknown rules of the game."

transition by definition does not need a paradigm or theory—only the beginning and end-point systems do.

The mainstream neoclassical economists regard transition economies as suffering from severe economic distortion.³ Therefore, their main objective is to advise these economies “to get the prices right.” Ignoring genuine uncertainty, learning, and the process of change, they equate equilibrium with economic stability.⁴ In the neoclassical view, transition occurs between two equilibrium states and is unstable. Transition economies eventually need to move toward a stable equilibrium. For instance, Roland and Verdier (2000) draw attention to a social coordination problem associated with law enforcement in transition economies. Their model concludes that multiple equilibria can occur. Hence, for Roland and Verdier, a policy prescription for transition economies is to eliminate bad equilibrium. In general, the neoclassical policy package is designed to transform transition economies from centrally planned economies operating under the socialist system into market-type economies operating under the capitalist system in a democratic political framework. Neglecting institutional issue, neoclassical authors believe that “once central planning was swept away, it was taken for granted that the opening of markets would bring with it—rather quickly and painlessly—the needed institutional structures to market the new market system work properly” (Hare 2001). The mainstream neoclassical view has been taken up by influential international policymakers represented by the Washington Consensus⁵ and was dominant at the beginning of the transition period in Central and Eastern Europe. Focusing on allocative efficiency, the Washington Consensus view has strong faith in social engineering (Roland 2001). A striking feature of the economic strategies and policies given to transition economies by these western economic advisors is the extent to which they are grounded in neoclassical economic theory and divorced from the historical legacies, and the related political and social realities (Weisskopf 1997). Built upon the neoclassical price theories and stabilization policy, the Washington Consensus view fails to come to grips with the historical legacy of these societies, and therefore unable

³ In particular, Kierzkowski (1997) argues that transition is a “move from a position well inside the ‘production possibility frontier’ to a more efficient position closer to the frontier.” Similar neoclassical approach is applied by Havrylyshyn (2001).

⁴ For an entrepreneurial critique of mainstream neoclassical policies on development, see Yu (1998).

⁵ The Washington Consensus view is in general associated with the views of the IMF and World Bank. It was initially coined by John Williamson in 1990 (Roland 2001).

to explain many of the phenomena that have occurred in transition economies. Not surprisingly, these policymakers have been shocked by the huge fall in output after price liberalization and the continuous economic decline in Russia and other countries of the former Soviet Union.

Contributions from new institutional economics⁶

In recent years, new institutional economics, evidenced by the success of China's reform, has gained much ground in the transition debate. Underscoring the process of change and transaction costs, the new institutional theory focuses on one important element of economic change, namely, the structure of property rights, which sets the constraints or rules for people to compete and exchange.⁷ In the new institutional perspective, it can be argued that transition occurs when a set of property rights of an economy transforms into another set, or more specifically, from one type of incentives to another. Since the change in the structure of property rights takes time, the transition period is therefore a long and evolutionary process. Though the new institutional perspective is undoubtedly much closer to reality than the neoclassical mathematical modeling in explaining transition phenomena, it does not escape some neoclassical pitfalls articulated in the concept of efficiency and equilibrium. Using the concept of transaction costs, new institutional scholars argue that the communist regime is inefficient and therefore should be abandoned. They strongly endorse market mechanism, which builds upon the private property rights, as a mean of organizing economic activities. So for new institutional scholars, transition implies a change from the communist regime (communal property rights) to the market system (private property rights). They accordingly prescribe a policy package of liberalization of economies and privatization of state-owned enterprises. Though the new institutional view has provided us with a better understanding of transition, human agency has never been its center of analysis. More specifically, they generally ignore entrepreneurship, human creativity and learning, though some of recent transaction costs literature have begun to pay more attention to a mental construct.⁸ More importantly,

⁶ Roland (2001) terms new institutional economics as the evolutionary institutional view.

⁷ The property rights approach to transition has become very popular in recent years (*Le Journal des Economistes et des Etudes Humaines* 2001).

⁸ For example, see Denzau and North (1994); Mantzavinos et al. (2001).

new institutional economists are never interested in asking why communism was taken place at the beginning. As Popovic (2001) correctly asks in a transition forum, "what is the driving force of an institutional reform?" It should be stressed that it is imaginative human agency that breaks down an old system and creates a new one. Utilizing the transaction costs concept, new institutional economists may be able to explain in general the direction of change, but not the origin of change. Moreover, if we take the notion of human creativity seriously, then all economic systems are unique. No regime in the real world is identical because no two human races interpret things in the same way. In this sense, all transition economies move into an unknown future (see succeeding discussion). Given human creativeness, each transition economy is heading toward something that its people do not know in advance, and the market system may not be the final destination for these transition economies.

In this paper, a cognitive perspective of transition is presented. Hitherto, little research has been conducted in this subjectivist paradigm. The only recent work that I am aware of is by Colombatto (2002), who attempts to explain transition in Austrian economics. Adopting the Hayekian view, he analyzes transition in terms of three criteria: 1) acquisition of knowledge, 2) individual responsibility, 3) and free entry into the market place. In Colombatto's view, transition economies should be subordinate to the analysis of the changes in the opportunity sets and to the willingness of the actors to take advantages of such new opportunities. Accordingly, an external shock is perceived as the moment when new sets of opportunities are made available to the individual. Colombatto has correctly analyzed transition in terms of knowledge problems—the element that Austrian economists always emphasize. However, focusing on opportunities and constraints, Colombatto's arguments look very similar to the new institutional view. Colombatto, unfortunately, has not explained transition in Austrian subjectivism in the full extent. In this paper, transition is defined as a process of transforming the society's stock of knowledge. The novelty of this paper is that transition is explained in terms of cognitive elements such as perception, learning, errors, expectation, experimentation, and creativity.

The cognitive approach to transition developed in this paper builds upon theory of human action and starts with a mental construct. Thus human institutions, or society's stocks of knowledge, are viewed as the unintended consequence of coordinating effort of human ac-

tion.⁹ Transition means change in institutions, which is the result of change in people's perception. Stability in institutions refers to the situation that people collectively articulate the same stock of social knowledge and make similar interpretation to the external world without any difficulty. This framework will shed light on two important issues: 1) the resistance of change during the transition period and 2) the debate between two types of reforms, namely, "gradualism" and "shock therapy." In the section that follows, a theoretical framework of transition in term of human perception, learning, and subjective interpretation is constructed. This framework is applied to explain the meaning and the nature of transition, and some economic phenomena observed in transition economies.

Experience, stock of knowledge and the formation of interpretation framework

The cognitive theory of transition constructed in this paper centres on human agency. Starting from the contributions of Max Weber and Alfred Schutz, it has been argued that action has the meaning attached to it as human agents make sense of their everyday life (Weick 1969; 1995). Making sense of the external world means interpretation.¹⁰ Coordination involves the understanding of actions and interpretation of the meaning of other actors. Everyday life builds on the category of the "other" (Weigert 1981). Individuals find themselves related to the surrounding world to create a meaningful life and share it with others. Therefore, action is essentially inter-subjective, since all human agents find their experiences necessarily reaching out to the existence of other persons. People are taken to be "other I's" just as I am experienced as an "another you." Only in this way can "we" make sense. As Weigert (1981) puts it, "interpretation is a process of perceiving the other and his or her interaction within symbolic frameworks so that we can make some sense out of what the other is doing.... If we cannot make any sense out of the other's interaction, it may be that there is no sense in it, or worse, it may be that there is no sense in me."

⁹ Carl Menger first used the terms economizing man in his *Principles of Economics* (1994[1871]). In the same vein, Hayek argues that human institutions are the unintended consequence of economizing human action. In Austrian tradition, since economizing means coordination (Yu 1999), it is more correct to claim that human institutions are the unintended consequence of coordinating efforts of human action.

¹⁰ There are some differences between interpretation and sensemaking (Weick 1995).

Experiences from everyday life are accumulated into a stock of knowledge that can be used to interpret incoming events. Human agents find, at any given time, a stock of knowledge at hand that serves as a scheme of interpretation of their past and present experiences, and determines their anticipation of things to come (Schutz 1970). When we experience, our knowledge grows.¹¹ Experiences enter the individual's consciousness via everyday life learning, such as daily contact with our parents, face-to-face interactions with friends and neighborhood, watching television and movies etc. This means that the framework is largely biographically determined (Berger and Berger 1976). These lived experiences are then typified and crystallized into routines or rules of thumb, which can be used as a skill or problem-solving technique in everyday life. As soon as we spot something, we can follow the established interpretative channel and have access to all knowledge (meaning) about that thing (deBono 1980). It is like driving a car. As soon as we are heading on a familiar road, we no longer need to use a map, ask a passerby, or read road signs for directions. Similarly, our interpretation frameworks continue to search for familiar roads that render thinking unnecessary. Furthermore, the stock of knowledge actors possess is by no means homogeneous (Schutz 1970). Because of diverse experiences, human agents will respond differently to the same objectively defined stimulus (O'Driscoll and Rizzo 1985; Yu 1999). In Lachmann's words (1970), "different men in identical situations may act differently because of their different expectations of the future." In short, the interpretation framework developed in our mind allows us to make sense of the world and to live. Without such a system, life would be impossible.

The Hayekian perspective

The Schutsonian arguments developed in the previous section can be restated in the Hayekian perspective. In a classic cognitive work, Hayek (1952) argues that the process of perception of external events is a complicated undertaking, involving the capacity to identify, imitate, and internalize patterns and transfer perception across domains of space and time. Before interpretation is taken place, agents have to identify certain events, some of which may have never been observed before. However, it is unlikely that phenomena are completely novel;

¹¹ For an exposition concerning entrepreneurial learning and the growth of knowledge in the Popperian perspective, see Harper (1996).

rather they are likely to resemble something that has been previously experienced (Hayek 1952; see also Fleetwood 1995). Hayek (1952) describes this sensory perception as “an act of classification.” In other words, the human mind is able to classify sensory elements and recognize patterns as “one of the same kind” even though it has never been experienced before. During the perception process, the mind is building up a record of past stimuli or, more accurately, of associations or connections between stimuli with which to compare new incoming stimuli. In Hayek’s (1952) words:

[W]hat we perceive can never be unique properties of individual objects but always only properties, which the objects have in common with other objects. Perception is thus always an interpretation, the placing of something into one or several classes of objects.

If the event and subsequent stimulus have been repeated with some minimal regularity, a pattern will begin to register in the mind. Each time the same event and subsequent stimuli is experienced, the same response is achieved. This means that the impulse travels via the same route, forming the same linkage and establishing the same following. The result is that these events are classified as the same (Fleetwood 1995). It is worth iterating that perception is founded upon the experience of a person. All that is perceived is immediately confronted with classes of already recorded data. Every perception of a new stimulus, or class of stimuli, will be influenced by previous implemented classifications. A new phenomenon will always be perceived in association with other events with which it has something in common (Hayek 1952).

Rules and institutions: cost-saving device

Due to the limits of our reason, we follow rules. Rules are the device for coping with our ignorance. The whole rationale of rule-guided action is to be found in our inescapable ignorance of most of particular circumstances which determine the effects of our actions (Hayek 1967). Rules facilitate the decisionmaking in complex situations. They limit our range of choice by reducing the list of circumstances which we need to take into account in particular circumstances, singling out certain classes of facts as alone determining the general kind of action which we should take (Hayek 1964). In Hayek’s words (1962):

Rules, tacitly understood and unconsciously followed, will often merely determine or limit the range of possibilities within which the choice is made consciously. By eliminating certain kinds of action altogether and providing certain routine ways of achieving the object, they merely restrict the alternatives on which a conscious choice is required.

The moral rules, for example, which have become part of a man's nature will mean that certain conceivable choices will not appear at all among the possibilities between which he chooses...[The] rules which guide an individual's action are better seen as determining what he will not do rather than what he will do.

Hence, "rules...do not govern only our actions. They also govern our perception, and particularly our perceptions of other people's actions" (Hayek 1962). Institutions or "rules of doing things" can be regarded as *common schemes of behavior*, which simplify the complexity of the world and enable us to operate with a certain degree of predictability. They standardize the world and help to solve problems during social interactions. Different individuals act inside the world and within its limits, which ensure order and a certain regularity through simplification. Transition in the cognitive perspective is thus a process of which new rules replace old rules, or new thinking displaces old thinking. In the next section, we shall explore in detail how the process of transition is initiated and completed.

New opportunities, mental process, and economic transition

Human agents are not passive robots. They do not only adapt themselves to the external world but also adjust the environment to their needs through deliberate and conscious choices. Besides being diffusers and users of knowledge, agents are also a source of knowledge. In other words, they are a builder and user of knowledge, creator of economic possesses and, above all, the engine of change (Hayek 1952; Rizzello 1999, 2000). In this sense, economic change is connected with the fact that human agents constantly create the reasons for their own existence, try to have influences as much as possible and thus determine the future states of the world in a direction that favors their own development (Rizzello 2000). Suppose an external event creates im-

pulses to the perception process. New impulses will not be acted upon immediately in a stimulus-response manner or this would produce erratic behaviour. Instead, they will be assessed by the mind to see how these new events fit into the total picture of the agent's mind. Selection of the appropriate response involves not only responding to one impulse with one action, but also drawing upon previous record of associations (Fleetwood 1995). If some completely new pattern of events cannot be classified, then the mental process enters a transitional stage. Agents are unable to perceive and classify action that they may have never seen before, and thereby initiate an appropriate response action. It follows that a mechanism of sensory pattern transfer is in operation. In other words, a pattern learned in one format is transferred to another so that a pattern is recognised in a different format. Without the capacity to transfer a pattern across fields, agents would be incapable of perceiving any kind of novel behavior (Fleetwood 1995).

However, the established linkages of the mental map often fail to give an adequate account of the current or immediate-future environment in which agents find themselves (i.e., a wrong prediction). In other words, the stock of existing rules is inapplicable to the new events. If this is the case, the agent is in a state of conflicting experience, those of the model conflicting with those of the mental map. The result is a gradual reclassification of the linkages and new rules are re-established (Hayek 1952; Fleetwood 1995). It takes a long period of time for the process to be completed. This reclassification process which triggers new rules is the foundation of understanding transition. A transition economy, in the cognitive perspective, is thus defined as the situation where its people's current interpretation framework is outdated and is unable to cope with the rapidly changing external world. At the same time, a new framework for interpreting new events or solving new problems has not yet fully developed in their minds. As a result, a mental gap occurs. In other words, peoples' interpretation framework is in a vacuum state. This framework vacuum is transition.¹²

The process of transition: from perception to market selection

Although transition is a state of chaos, it does not mean that economic activities in transition economies are at a standstill. On the contrary,

¹² Thus, my cognitive perspective on transition is consistent with Hare's view (2001). He describes transition economies as the economies where important institutions have not been created and that the relevant laws were incomplete, imperfectly enforced, or still subject to serious political controversy.

transition should be viewed as a dynamic process in which people are struggling to reestablish a new interpretation framework. In this section, we try to explore what will happen during the process of transition or more precisely, how "the act of reclassification" leads to the change in the society's stock of knowledge and, consequently, reestablishes new institutions. To do so, we utilize Hayek's theory of spontaneous order (1967).

Actors' subjective interpretation of incoming events and the choice of an option are subject to social tests. Social selection in economic perspective, analogous to natural selection in biology, consists of three parts: variation, selection, and retention.¹³ Variation occurs through human agency. Selection in the economy operates over objects that vary from time to time by rules or paradigms and through the realization of cost and benefit. Through filtering processes, those whose chosen option happens to lead to benefits will be weeded in. Otherwise, those whose chosen option happens to lead to losses will be screened out. Self-interest governs social selection. Once new ways of doing things are found to be feasible, people will use them repeatedly. In other words, these rules are adopted. As mentioned, rules are the device for coping with our ignorance. They facilitate decisionmaking in complex situations. By trial and error, learning and experimenting, new rules emerge and serve as a new stock of knowledge. A dynamic theory of transition is thus based upon the conceptualization of processes of perception, experimentation and social learning. From this cognitive perspective, we are now able to say something about the length of the transition period. Firstly, the deeper culture, and social knowledge are embedded, the longer time agents will need to unlock old systems and, therefore, the longer the transition period will be. Where culture is so deeply rooted, moderate reform package to enhance unlearning or change may be rendered ineffective. Thus, a more radical approach is required to unlearn. Such

¹³In biology, organisms were traditionally regarded as the objects of selection. Recently, genes became the main objects of selection. Variation occurs in each generation. It implies that the array of objects present at any time is heterogeneous. Some objects can adapt to the current environment better than others and therefore will have more "successes." They are more likely to be "selected" by the system whereas others will be more likely to be rejected. Greater fitness traditionally implied (probabilistically) differential reproductive success. Today, fitness is given by Hamilton's concept of "inclusive fitness." Retention is memory. To survive, selected variations must persist somehow. Retention is achieved mostly through genes (Langlois and Koppl 1994).

radical approach may take in the form of political revolution and violence which are unavoidably painful and bloody. Secondly, the longer time it takes for people to interpret external events, unlearn obsolete knowledge and learn new things, the longer the transition period will be. This argument can be evidenced by the fact that the European Union (EU) accession countries¹⁴ learn faster than most Commonwealth of Independent States (CIS) (IMF 2001). The reason is essentially a problem of mental perception, classification and learning. Those nations which are closer to EU and therefore with significant understanding of a market-based economy will learn the western style of market system faster. In contrast, most of the CIS countries have no obvious alternative model to follow. With almost 70 years of central planning, these CIS nations have little knowledge of the operation of a market-based economy and therefore learned new capitalist way of doing things in a much slower pace.

The future of transition economies: a journey into the unknown

Where are these transition economies heading? For most neoclassical and new institutional scholars, the answer is toward a market economy. In fact, most policymakers including the staffs of IMF and the World Bank believe that these economies should develop a form of western style of market economy. For IMF (2001), "building effective market-economy institutions is central to long-term growth prospects in all countries, but is particularly relevant for the transition economies, given the inadequacy of their pretransition institutional arrangements." Hence for IMF, the role of the government in the transition economies should shift from direct intervention in economic activities to an agency involving the establishment and enforcement of the "rules of the game" (IMF 2001). Moving toward a western style of market economy is only one of many possible destinations. In fact, as Hare (2001) points out, some of the transition economies may not even wish to transform themselves into market-type economies. In our subjectivist perspective, the answer is that these economies do not necessarily move to the western style of market economies or return to previous communist regimes. Instead, they take on a journey into the unknown. This is the essence of Austrian evolutionism.

¹⁴ The EU has accepted 10 transition economies as full candidates. They are Bulgaria, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic, and Slovenia (IMF 2001).

According to Carl Menger, there are two types of institutions, namely, designed and undesigned.¹⁵ While both are created by human agents, they differ in one essential way, that is, whether they were anticipated or not. The former type arises because of a common will directed toward its creation, and the result is more or less anticipated. The latter is “the unintended result of innumerable efforts of economic subjects pursuing individual interests” (Menger 1985[1883]). It is the unanticipated consequence of purposive human action.

A striking feature of the Austrian theory of transition is that human agents are creating a system which they do not know in advance. Though manmade, that is, the result of economizing actions, institutions are largely not designed, nor the intended product of these actions (Hayek 1979). In fact, Hayek contends that human agents are creating something they *never* know, regardless of whether the emerging systems are efficient or not. In Hayek’s words (1979):

...Many of the greatest things man has achieved are the result not of consciously directed thought, and still less the product of a deliberately coordinated efforts of many individuals, but of a process in which the individual plays a part which he can never fully understand.

This argument sharply contrasts with the new institutional belief that human institutions are constructed as a result of the maximization of human choice under constraints. Rather, they are the result of a long-term evolutionary process of learning, creating and experimenting. For this, Weisskopf notes (1997):

What is striking is that, in a number of important spheres, the economic reforms have worked out in a different way than initially intended...popular values and expectations rooted in Russian culture have reacted to the shock therapy reforms in such a way as to generate a new economic situation that is neither a normal western-style capitalist system nor a traditional Soviet-style socialist system.

¹⁵ Based on Carl Menger, Langlois (1986) argues that institutions can be pragmatic or organic. Pragmatic institutions comprise rules directed toward specific ends. Conscious intentions play an important role if the institution is not very complex and confined to a relative short time perspective, so that the original intentions of the founder can influence the shape of the institution. However, institutions can also be the unintended consequence of human action. The rules of thumbs operating evolve over time into an institution that no one has expected to emerge, although it is the result of the human economizing effort.

In Peter Earl's words (1998), transition economies are "heading for a journey into the unknown." Assisted by IMF or World Bank, these transition economies may move to the western style of market economies, but they are indeed evolving into something that no one knows, just like the time when human agents created the astonishing communist regime in 1917.

Resistance to change during transition

Russians reported resisted the unfolding change in Russia in recent years due to the dramatic fall in the economic output. Suffering from poverty amid a chaotic economy, some Russians expressed a wish to return to the "good old days" of the communist regime. To explain the resistance to change, new institutional economists stress transaction costs and capabilities.¹⁶ For a capabilities explanation of institutions and inertia, see Langlois and Robertson (1995).

Public Choice school emphasizes rentseeking activities.¹⁷ For Cheung (1982), institutional change depends on two types of transaction costs: 1) the costs of operating the system (costs of delineating and policing rights, negotiating, and enforcing contracts), and 2) the costs of institutional change encompassing costs such as discovering alternative institutions or persuading people to adopt change.¹⁸ In Cheung's view, the broader the range of methods or techniques for making production decisions, the lower the cost of production. Cheung (1982) concludes that the relative lack of institutional choice under communism means that the costs of operating the system are necessarily higher than those of a private enterprise system. His arguments imply that if the cost of discovering alternative institutions or persuasion is relatively high, then existing institutions will persist.

In the evolutionary literature, persistence of institutions is largely explained by the concept of path dependence, which suggests that lock-in effects and inefficient behaviors may persist and that history matters in explaining institutional deficiencies (Arthur 1989; David 1995).¹⁹ Path dependence plays an important role in North's (1992)

¹⁶ For a capabilities explanation of institutions and inertia, see Langlois and Robertson (1995).

¹⁷ For public choice scholars, adherence to reform trap is attributable to rent seeking activities. To escape the under-reform trap, Aslund, Boone and Johnson (2001) suggest inducing competition to break monopoly.

¹⁸ Langlois and Robertson (1995) refer to the costs of discovery, persuading, and teaching other market participants as "dynamic transaction costs."

¹⁹ For a discussion of the effect of path dependence on the transformation of Central European countries, see Chavance and Magnin (1997).

adaptive efficiency framework. For North, the complementarities, economies of scope, and network externalities bias change in favor of the interests of the existing organizations. In North's view (1992).

...The interests of these existing organizations, which produce path dependence, and the mental models of the entrepreneurs, which produce ideologies, rationalize the existing institutional matrix and therefore bias the actors in favor of policies conceived to be in the interests of existing organizations.

Our cognitive perspective casts light on institutional inertia or resistance to change during transition. Persistence of an old system is fundamentally associated with mental thinking. As mentioned earlier, the society's total stock of knowledge is a product of mental interpretation, reclassification and learning. Agents' interpretation process has a certain time sequence that allows thinking to follow a routine perception track. In other words, agents see things in a certain way and expect things to be worked out in a certain way. Once the incoming information is organized into a (mental) pattern, then the agents' subjective interpretation framework no longer has to analyze or categorize incoming information. All that is required is to have enough information to trigger the pattern. The mind then follows along the pattern automatically in the same way as a driver follows a familiar road. Over time, a habit develops because the actor simply uses his or her interpretation system routinely. Resistance to change means that actors' thinking is locked up in old interpretation structures, concepts and institutions (deBono 1992).

Two other points are worth mentioning. Firstly, once agents take the stock of knowledge for granted, then perception becomes even more important, because how they look at a situation will determine what they can do about it. Secondly, unless another competing pattern is developed in the agent's interpretation framework, anything similar to the established pattern will be treated just as if it were that pattern. It is just like the watershed to a valley. Unless there is a competing valley, water will gather into the centre of the single valley. When an economy's stock of knowledge is seen as a product of social construction, rules or moral norms are then followed relatively unconditionally, since the behavior prescribed by them is considered "right." If individuals act against these rules, then they will have a "bad con-

science." Hence, an institution is reinforced during the process of socialization when individuals learn to behave according to the "right" rules of the game that constitute the society they live in (Ackermann 1998).

It may be argued that to prevent institutional inertia and accelerate transition process, whenever interpreting incoming events is necessary, actors should not take their experience or knowledge for granted. Unfortunately, as Allen and Haas (2001) notes, all psychological change is very hard to bring about. Often, individuals are unwilling to let go of existing concepts, perceptions or institutions in their desire to put both previous and recent experiences into a new perspective. As this paper has explained, rule following has its merits. After a period of time, as the pattern in agents' minds survives for too long, it will become nonseparable and resist disruption. In other words, over time each piece of knowledge works together, forming an integrated part of the thinking pattern, and is reinforced by social norms, customs, and routines. By that time, changing patterns will become extremely difficult (deBono 1992). This is the case of North Korea. Unless there are Schumpeterian innovations which revolutionize the way of doing things, old thinking will persist as long as agents take experiences for granted unconditionally and interpret the external world in a routine manner.

Two routes of economic reform: gradualism vis-à-vis shock therapy²⁰

If we accept the argument that economic transition is a matter of change in mental perception, then our framework can shed light on the understanding of two types of reform, namely, gradualism, as exemplified by the reform in mainland China; and the shock therapy, as exemplified by the reform in Russia. Gradualism is notably incremental in nature. In the 1980s, the Chinese government steadily introduced the economic reforms. Rather than admitting the acceptance of capitalism, the Deng government subtly termed the reform modernization, or "adoption of a market system under socialism." This gradual reform policy had one advantage. Chinese people could partially maintain their old thinking while at the same time learn new ways of doing. Starting in the agricultural sector, the government de facto introduced

²⁰ Due to limitations of space, my application here can only be illustrative. Further research along this line of reasoning is called for.

a private property rights system labeled "agricultural responsibility system." This new policy served as a small impulse to the people's minds. Innovative opportunities began to be perceived by farmers and rural workers. At first, farmers did not know what to do. During that time, they were still using the same old interpretation framework to deal with new events. Many of them dared not move ahead. This was especially true for those people who suffered intense hardship during the Cultural Revolution. With socialist thinking being still in force in most farmers' mind at the early stage of the reform, those people moving ahead and behaving as rural entrepreneurs were condemned by other farmers as capitalists' devils. However, as many rural entrepreneurs became wealthy and did not suffer from any political condemnation, old thinking started to give way. As more farmers learned, new policies were found feasible. More precisely, Chinese people slowly constructed a new framework to deal with the capitalist way of doing things. Such mentality gained ground and was reinforced by continuous rewards. With the success in the rural sector, similar reforms were then extended to the industrial sector under the name *Bao Chan Dao Hu* (a contracting system).²¹ More and more people accepted the new way of doing things. Even most conservative communist cadres were later willing to unlearn and learn. They gave up their radical communist ideology. They participated in the market ways of doing things and joined private enterprises. A new social stock of knowledge was steadily being built up as these activities were extended to the whole economy. Chinese people developed the ability to interpret new global events without much difficulty. As they shared the same expectation, economic activities in China could be coordinated at relatively lower costs. This explains the success of China's reform.

Contrary to the gradualist approach, the shock therapy (or big-bang strategy) requires people to give up entirely all their existing stocks of knowledge at one time. Actors totally unlearn old ways of doing things and learn new things in a very short period of time. This involves revolutionary learning.²² In Russia, it means that people aban-

²¹ Many types of contracting system were practiced during the experimentation period. For a detail discussion, see Shiu (1997).

²² Revolutionary learning can be seen as "a process of deinstitutionalization or unlearning in which anomalies with established knowledge embedded in structuration principles and properties are discovered" (Stein 1997).

²³ An old way of thinking is a strong desire for equal distribution of income. Another example is speculation. Speculation was also regarded as a criminal activity and was condemned. On the other hand, in Commonwealth of Independent States countries, no living memory of a market economy remains. For a review of old ways of thinking, see Allen and Haas (2001).

done all communist teachings which they had taken for granted for many years and accepted capitalists' ways of doing things.²³ This had created a shock in the mental process. The Russians suddenly found that their stocks of knowledge were incapable to solve their daily problems. In other words, shared expectation disappeared. Coordination failed. As a result, production and economic activities were in chaos. This explains the fact that in the transition economies of Central and Eastern Europe, the Baltics, Russia, and the other countries of the former Soviet Union, output fell by more than 40 percent on average. Such real output loss was accompanied by severe dislocations, large redistribution of income, and severe income losses by many people (Fischer 2001).

Given the dramatic fall in the output and suffering from extreme hardship during the reform, a lot of Russians with their old interpretation framework being still in force in their minds may perceive that it is easier to cope with everyday life under the communist system than in the transition stage. Therefore, some of them started to miss their good old Bolshevik days. Their minds still strongly valued economic stability and desired security under the communist regime (Weisskopf 1997). This explains why some Russians resisted the economic reform. As stated earlier, a successful economic reform requires a change in mentality. After all, a human institution is not "an objective physical phenomenon, but a human mental construct" (Stein 1997). On this, a policy reform package that aims to help people to learn new things is of utmost important.

Conclusion

The cognitive approach presented in this paper represents an alternative to social engineering approach prescribed by the mainstream neo-classical school and property rights perspective articulated in the evolutionary institutional paradigm. This cognitive approach attempts to understand transition and institutional change in the theory of human action. It starts with humanist elements, including perception, learning, errors, expectation, and experimentation, and extends the humanistic analysis to economic phenomena in transition economies. In this way, understanding transition has its arguments firmly rooted in human agency. So far, the cognitive approach to understand transition and institutional change is rare and this paper provides only a schematic explanation of some transition issues. Further cognitive research in transition is called for.

References

- Ackermann, R. 1998. Institutional path dependence, history and reform. A paper presented at the European Association for Evolutionary Political Economy (EAEPE) Annual Conference, 5-8 November, Lisbon, Portugal.
- Allen, M. and R. Haas. 2001. The transition in Central and Eastern Europe: the experience of two resident representative. In *IMF staff papers* 48 (Special issue on transition economies: how much progress) edited by Stanley Fischer. Washington D.C.: International Monetary Fund.
- Arthur, W.B. 1989. *Increasing returns and path dependence in the economy*. Ann Arbor: University of Michigan Press.
- Aslund, A., P. Boone and S. Johnson. 2001. Escaping the underreform trap. In *IMF staff papers* 48 (Special issue on transition economies: how much progress) edited by Stanley Fischer. Washington D.C.: International Monetary Fund.
- Berger, P. and B. Berger. 1976. *Sociology: a biographical approach* (revised edition). Middlesex: Penguin.
- Chavance, B. and E. Magnin. 1997. Emergence of path-dependent mixed economies in Central Europe. In *Beyond market and hierarchy: interactive governance and social complexity* edited by A. Amin and J. Hausiner. Cheltenham: Edward Elgar.
- Cheung, S.N.S. 1982. An economic theory of institution change. In *Will China go 'capitalists'?* Hobart Paper No. 94. London: Institute of Economic Affairs.
- Colombatto, E. 2002. Is there an Austrian approach to transition? *Review of Austrian Economics* 15(1):61-74.
- David, P.A. 1995. Clio and the economics of QWERTY. *American Economic Review* 75(4):332-237.
- De Bono, E. 1980. *Opportunities*. Middlesex: Penguin.
- _____. 1992. *Serious creativity*. New York: Harper Business.
- Denzau, A.T. and D.C. North. 1994. Shared mental models: ideologies and institutions. *Kyklos* 47(1):3-31.
- Earl, P. 1998. Consumers goals and journey into the unknown. In *The active consumer: novelty and surprise in consumer choice* edited by M. Bianchi. London: Routledge.
- Fischer, S. 2001. Ten years of transition: looking back and looking forward. In *IMF staff papers* 48 (Special issue on transition economies:

- how much progress) edited by Stanley Fischer. Washington D.C.: International Monetary Fund.
- Fleetwood, Steve. 1995. *Hayek's political economy: the socioeconomics of order*. London: Routledge.
- Hare, P.G. 2001. Institutional change and economic performance in the transition economies. *Economic Survey of Europe* 2:77-95.
- Harper, D.A. 1996. *Entrepreneurship and the market process: an inquiry into the growth of knowledge*. London: Routledge.
- Havrylyshyn, O. 2001. Recovery and growth in transition: a decade of evidence. In *IMF staff papers* 48 (Special issue on transition economies: how much progress) edited by Stanley Fischer. Washington D.C.: International Monetary Fund.
- Hayek, F.A. 1952. *The sensory order*. Chicago: University of Chicago Press.
- Hayek, F.A. 1962. Rules, perception and intelligibility. Proceedings of the British Academy 48:321-344. Reprinted in F.A. Hayek. 1967. *Studies in philosophy, politics and economics*. New York: Clarion Book.
- _____. 1964. Kind of order in society. *New Individualist Review* 3(3):3-12.
- _____. 1967. *Studies in philosophy, politics and economics*. New York: Clarion Book.
- _____. 1979. Purposive social formations. In *The counter-revolution of science*. Indianapolis: Liberty Press.
- International Monetary Fund. 2001. *World economics outlook*. Washington D.C.: International Monetary Fund.
- L'institut Européen Des Etudes Humaines. 2001. *Le Journal des Economistes et des Etudes Humaines* 11(1).
- Kierzkowski, A. 1997. The assessment: economics of transition in Eastern and Central Europe. *Oxford Review of Economic Policy* 13(2):1-21.
- Kornai, J. 2000. The system paradigm. In *Paradigms of social change: modernization, development, transformation, evolution* edited by W. Schekle, W. Krauth, M. Kohli and G. Elwert. New York: St. Martin's.
- Lachmann, L.M. 1970. *The legacy of Max Weber*. London: Heinemann.
- Langlois, R.N. 1986. Coherence and flexibility: social institutions in a world of radical uncertainty. In *Subjectivism, intelligibility and economic understanding* edited by I.M. Kirzner. New York: New York University Press.
- Langlois, R.N. and R. Koppl. 1994. When do ideas matter? a study in the natural selection of social games. *Advances in Austrian Economics* 1:81-104.

- Langlois, R.N. and P.L. Robertson. 1995. *Firms, markets and economic change: a dynamic theory of business institutions*. London: Routledge.
- Mantzavinos, C., D.C. North and S. Shariq. 2001. Learning, institutions, and economic performance. Max Planck Working Paper 2003-13. Bonn, Germany: Max Planck Institute.
- Menger, C. 1985. *Investigations into the method of the social sciences with special reference to economics* (1883). New York: New York University Press.
- _____. 1994. *Principles of economics* (1871). Grove City, PA: Libertarian Press.
- North, D. 1990. *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- _____. 1992. *Transaction costs, institutions, and economic performance*. San Francisco, California: International Center for Economic Growth.
- O'Driscoll, G. and M.J. Rizzo. 1985. *The economics of time and ignorance*. London: Blackwell.
- Popovic, D. 2001. Discussants' comments on Professor Hare's Paper. *Economic Survey of Europe* 2:95-97.
- Rizzello, S. 1999. *The economics of the mind*. Aldershot: Edward Elgar.
- _____. 2000. Economic change, subjective perception, and institutional evolution. *Metroeconomica* 51(2):127-150.
- Roland, G. 2001. Ten years after...transition and economics. In *IMF staff papers* 48 (Special issue on transition economies: how much progress) edited by Stanley Fischer. Washington D.C.: International Monetary Fund.
- Roland, G. and T. Verdier. 2000. *Law enforcement and transition*. Discussion Paper No. 2501. London: Centre for Economic Policy Research.
- Schutz, A. 1970. *On phenomenology and social relations*. Chicago: The University of Chicago Press.
- Shiu, G. 1997. Searching for stones to cross the river: the micro-experimental approach to economic reform—lessons from China. Ph.D. thesis. Department of Economics, George Mason University.
- Stein, J. 1997. How institutions learn: a sociocognitive perspective. *Journal of Economic Issues* 31(3):729-740.
- Weick, K.E. 1969. *The social psychology of organising*. Cambridge, Massachusetts: Addison-Wesley.
- _____. 1995. *Sensemaking in organisations*, Thousand Oaks: Sage.
- Weigert, A.J. 1981. *Sociology of everyday life*. New York: Longman.

- Weisskopf, T.E. 1997. Economics without history: the effort to westernize the east. In *Borderlands of economics: essays in honor of Daniel R. Fusfeld* edited by Nahid Aslanbeigui and Young Back Choi. London: Routledge Press.
- Yu, T.F. 1998. Economic development in latecomer economies: an entrepreneurial perspective. *Development Policy Review* 16:265-280.
- _____. 1999. Toward a praxeological theory of the firm. *Review of Austrian Economics* 12(1):25-41.