

연세대학교 상경대학

경제연구소

Economic Research Institute

Yonsei University



서울시 서대문구 연세로 50

50 Yonsei-ro, Seodaemun-gu, Seoul, Korea

TEL: (+82-2) 2123-4065 FAX: (+82-2) 364-9149

E-mail: yeri4065@yonsei.ac.kr

<http://yeri.yonsei.ac.kr/new>

Hayek in the context of South Korea

Hoon Hong

Department of Economics, Yonsei University

May 2018

2018RWP-120

Economic Research Institute

Yonsei University

Hayek in the context of South Korea¹

Hoon Hong

(Department of Economics, Yonsei University)

Abstract

This paper aims to place Hayek's evolutionary approach in the context of South Korea, focusing on South Korea's socioeconomic development in recent decades. On reviewing his perspective in broad outline, this paper points out some of its weaknesses as regards the following issues: order and rules; units of agency and being; motivation; institutions and rules; knowledge; leadership.

This paper aims to place Hayek's evolutionary approach in the context of South Korea, focusing on South Korea's socioeconomic development in recent decades. In order to set the stage for this exploration, it, first, summarizes Hayek's perspective in broad outlines, and describes basic features of socioeconomic system of South Korea. Second, it examines whether or not and the extent to which his perspective accounts for these features. This paper points out some weaknesses of his perspective as regards the following issues: order and rules; units of agency and being; motivation; institutions and rules; knowledge; leadership.

1. Hayek's perspective and features of the socioeconomic system of South Korea

Hayek is distinguished from other contemporary economists by the fact that he diverged from general equilibrium system and developed an evolutionary perspective (Hayek, 1933[1928], 1931; Hayek. 1960). His evolutionary perspective is based on the idea of cultural or social evolution in which rules or institutions fittest for survival are selected. For this reason, he adopts gradualism as part of his social philosophy. From this perspective the market order is spontaneous. In his account the market order is composed of price mechanism and a few fundamental rules such as contract law, protection of private property and tort(, which are to be

¹ This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (NRF-2013S1A3A2053799).

enforced by the government). He is adamant that market order has made civilization possible and the human kind populous and prosperous (Hayek, 1988).

Since an evolutionary process is open-ended, the formation and reproduction/transformation of a spontaneous order as a self-organizing system entails unintended results of human action and emergent properties. For this reason, aggregate consequences of the system are neither entirely predictable nor entirely controllable. For this reason, he conceives a spontaneous order as lying between ‘instinct and reason’ (Hayek, 1988, chap. 1). And its rules could be understood as a mediator between *physis* and *nomos* or as being socially natural or naturally social (Hong, 2002a; Bouraoui, 2009, p. 1338). At the same time, it is the unintended results and the emergent properties which allegedly constitute objects of research for the social sciences including economics (Hayek, 1967; Lewis, 2012).

Turning to the Korean peninsula, South Korea had recorded rapid economic growth during the 1970’s and 1980’s, in spite of, or because of, its confrontation with North Korea (Amsden, 1989). Moreover, it recovered its democracy in 1987 which was nipped in the bud by the military coup d’état in 1961. Characteristics of the socioeconomic development of South Korea in this era could be roughly summarized as: state-led economic development; collective/group orientation; embeddedness in social relationships; reliance on intrinsic motivation; significance of tacit knowledge; importance of informal rules and organizations; charismatic leadership and elitism (Hong, 2012).

Now, it is to be examined whether or not and to what extent Hayek’s viewpoint meshes with these features.

2. Order and rules: spontaneous or designed

East Asia in general and Korea in particular have adopted thoughts and institutions from Western society throughout the last century. Democracy and market economy would be two important examples. For this reason, a number of social reforms which both North Korea and South Korea have experienced were imported from outside and implanted by their governments and their elites. Although an evolutionary process does not exclude the imitation of rules and technology from outside, it is irreconcilable with reforms imposed by a centralized power. Therefore many social changes and economic reforms in Korea can be hardly interpreted as spontaneous, which does not harmonize with Hayek’s position.

To illustrate, the constitution of the Republic of Korea was not the result of a long evolutionary process, but first drafted in 1948 in imitation of those of advanced Western countries. A more recent case in point are the neoliberal institutional reforms such as outside

directorship for major firms which were implemented after the outbreak of the economic crisis of 1997. In fact, ideologies including democracy, capitalism and socialism were not endogenously generated. These bear witness to the argument that the substantial part of the Korean politico-socio-economic order was not spontaneous but constructed, contrary to Hayek's viewpoint.

On the same ground the role of immanent critique that Hayek advocates is to be discounted (Bellamy, 1994, p. 433). Hayek's tenet of spontaneous order coheres with the English common-law tradition, but not with the continental or French civil-law tradition. On his view, in the former, it is not the legislative power of the parliament but immanent critique which is the way to apply and improve the law (Hayek, 1979; Mahoney, 2001). However, during the last few decades the Korean government, legislative or administrative, has frequently taken the initiative of introducing rules and regulations, often in imitation of those already in force in other countries. Since the Korean legal system tends to be a mixture of a few legal traditions, it does not have a sufficient level of consistency to allow for immanent critique in all cases.

This does not imply that this kind of enforced imitation always produces mechanical duplications of foreign institutions and technology. Rather, it requires reinterpretations and reformulations on the part of Korean elites and assimilations and distortions on the part of Korean citizens. As a result, it tends to bring about incoherence between stipulated or codified rules and actually working rules or between concepts and practices. On the other hand, institutions and rules, once adopted, tend to be rigid and to be transformed into dogma or myths. This explains, in part, why the ideological confrontation on the peninsula is resilient enough to have survived the end of the Cold War and the meltdown of the communist system.

This kind of institutional or cultural inertia or delay is not without precedent in Korean history. Confucianism, once imported, has ruled the society more thoroughly and much longer in the Lee Dynasty (1392-1910) than in its country of origin. Even in the 20th century, many institutions and thoughts, once adopted, have persisted with little modification despite their widening divergence from reality with time.

In broad terms, Hayek himself cannot rule out constructivism when it comes to forming or reforming market order (Hodgson, 1995, pp. 204-205). He would suggest that drastic reforms could be allowed if they are designed to facilitate a move towards a market order. This was actually the case with economic reforms of transitional economies in Eastern Europe after the meltdown and in South Korea after the breakout of economic crisis in 1997. They were implemented with the intervention of IMF or the World Bank. The point is that these reforms must not be spontaneous contrary to Hayek's doctrine of evolution.

The foregoing is not intended to suggest that the evolutionary perspective of Hayek is of no use. Since it is held that spontaneous order can grow on rules which are designed and imposed from outside, his perspective may remain useful (Harper & Endres, 2012, p. 365). But it is to be taken into account that the evolutionary process may not be entirely endogenously generated but,

from time to time, initiated, accelerated, prevented or delayed, by powers exercised from outside and from above. In light of this consideration, one may propose a dual structure where a limited extent of spontaneity and autonomy on the part of people in their everyday practices coexist and interact with imposition of rules and discretion on the part of elites.

3. Unit of agency and being: individuals or social relations and groups

Hayek lays stress on unintended consequences of human action and the emergent properties of spontaneous orders (Hayek, 1967). For the same reason, he highlights interdependences between parts and interactions among agents (Hodgson, 1995, p. 205). His sensory order rests on connections of stimuli and relations of neurons (Hayek, 1952). In similar vein, the value of a capital good is not determined by its physical properties but by its relation with other capital goods and its position within the overall capital structure as an ordered whole (Hayek, 1941; Hong & Hwang, 2008; Hong, 2009; Harper & Endres, 2010).

Moreover, he has many reservations about neoclassical variant of methodological individualism (Caldwell, 2001). For this reason, one may claim that norms and sociality are internalized or embodied into Hayekian agents (Hodgson, 1989, 2004). A step further, some scholars go so far as to credit Hayek with what they call 'reconstitutive downward causation' which runs from the whole to its parts (Lewis, 2012, pp. 374-376).

Nevertheless Hayek seems to be a methodological individualist (Lawson, 1996, pp. 978-979).² Among other things, he does not view an individual's beliefs and preferences as being amenable to analysis. Moreover, attribution of reconstitutive downward causation to Hayek does not seem to find solid textual evidence in his works. Furthermore, the group selection he propounds does not seem to contradict his conception of individual actors (Vanberg, 1986, pp. 80-89; Butos & Koppl, 1997, pp. 340- 341; Witt, 2008). The net result is that he remains a methodological individualist, although he does not endorse the methodological atomism of neoclassical economics (Zwirn, 2007).³

Due to his individualism, Hayek treats producers, like consumers, as if they were individuals. There are two aspects to this view. First, Hayek seems to view a firm as an individual producer rather than as a hierarchical organization (Hodgson, 1995, p. 206). This is in line with the finding that he downgrades the role of organizations in the reproduction of a socioeconomic system. For the same reason, he takes little note of the production process in a firm and a factory.

² For the definition of methodological individualism refer to Elster (1982, p. 453).

³ Despite their disagreements Caldwell and Hodgson agree that Hayek's methodological individualism is different from that of neoclassical economics in that Hayek does not endorse perfect rationality and perfect information. Moreover, Hayek departs more and more from methodological individualism with the maturity of his ideas. However, these points do not lead them to deny that he is a methodological individualist.

Second, he regards producers or firms as coequal and takes them as competing or cooperating with each other on an equal footing in the market. For this reason, it comes as no surprise that differences between big firms and small firms in terms of power, resources and information are not highlighted in Hayekian market economy. Simply put, he does not make distinction between an automaker and a family-owned restaurant in a small town. In this regard, he seems to keep company with neoclassical economists such as Milton Friedman.

This consideration raises doubts about his doctrine of general, universal and abstract rules of just conduct (Bellamy, 1994, pp. 431-432). In real world politics, rules may be easily distorted and invented in accordance with interests of differentially positioned organizations and groups. Hayek, like Weber, could be criticized for his glorification of formal equality to the neglect of substantive equality (Lewis, 1975).

Overall, although Hayek focuses on dynamic interactions between agents in the market, he tends to neglect the significance of organizations and of production process and power relations between firms. This does not mean that he is unaware of the existence of organizations in general. But he is adamant about the dichotomy between market order and organization. In accordance with this dichotomy, market order is conceived as spontaneous, complex and full of uncertainty, whereas organization is understood as constructed, simple and immune from uncertainty. Consequently he accords neither spontaneity nor emergence to organization.

However, in refutation of his conflation of spontaneity with emergence, a number of studies show that spontaneity does not necessarily go together with emergence and thus organizations could be as complex as markets (Coase, 1992; Simon, 1996; Williamson, 2000; Bouraoui, 2009, pp. 1353-1354). It is widely held that emergent properties can also arise within a firm or even within an apparently technical production process (Harper & Endres, 2012, pp. 363-365).⁴ Moreover, the finding that an informal organization emerges from a formal organization lends support to spontaneity and complexity within an organization (Selznick, 1943, 1947, pp. 26-27).

These points must be faced by any endeavor to apply a Hayekian perspective to South Korea as well as to other countries. Besides, there are additional reasons why Hayek's view engenders a misleading description of the Korean economy in particular. As regards a unit of production, it is well known that state-led and export-oriented economic growth of South Korea has spawned several conglomerates of firms which have now become dominant powers in the Korean economy.

⁴ Schumpeter has the insight of conceptualizing innovation as a new combination wherever it takes place (Schumpeter, 1955, pp. 14-15). This can be interpreted as the emergence of a higher-level entity as low-level entities are combined. The so-called reverse engineering which less developed countries including preindustrial Korea used to resort to as a method of adopting technology takes the opposite direction of attempting to decompose the higher entity into its parts.

Since a firm within a *Chaebol* group commands tens of thousands of employees and has solid networks or linkages with other firms within the same group, it exceeds independent firms in size and bargaining power. Thus if rules are applied equally to these unequally conditioned firms, fair competition would not ensue. More important, this kind of group of interlinked firms deals a blow to the conventional dichotomy between market and government which economists including Hayek endorse. The reason is that the group of firms, especially under the charismatic leadership of their chairmen, must be as centralized and powerful as is any local government.⁵ Given that, it is not obvious that initiatives and innovations on the part of a group of firms contribute more to creating and maintaining spontaneous order than does a local government.

The significance of groups of firms also dilutes the Hayekian distinction between market and organization (as well as the Coasean one). On the one hand, firms within a group provide each other with internal markets for goods, labor and capital. On the other, the existence of groups of firms makes the Korean market economy more ‘organized’, as Hilferding aptly put it (Hong & Hwang, 2008). The existence of groups of firms amidst the market gives credence to the conjecture that the Korean economy is dual and decoupled (which means that it is segmented into two or more nearly independently functioning sectors). These points contribute to discounting Hayek’s presupposition that individual agents compete and interact among themselves on an equal footing in the market.

Equally as regards the unit of human agency or being, it is widely held that East Asians are embedded in social relationships and their self is interdependent rather than independent (Hofstede & Bond, 1988; Triandis, 1989; Triandis & Gelfand, 1998; Markus & Kitayama, 1991, 2010). Moreover, it is very often claimed that they rely heavily on diverse groups. In South Korean society three major types of ties, that is, regional ties, family ties and school ties, provide the basis for social relationships and groups. Needless to say, these are at odds with Hayek’s methodological individualism.⁶

It is to be forewarned that social relationships which are prevalent in the Korean society are to be distinguished from relationships which come into being in individualist societies (as well as, partly, from social relations à la Marx). The former is more than a repeated game of short-term choices and must be ‘thick’ in many senses.

Foremost, the three kinds of ties tend to complement and reinforce each other. They combine to bring about *Hakbol* and *Chaebol*. *Hakbol* stands for close-knit associations of alumni, whereas

⁵ For the same reason the attempt to interpret the balance of power in international politics as spontaneous order is futile (van de Haar, 2011).

⁶ This partly accounts for the alleged role of clans in the East Asian governance structure (Ouchi, 1980; Boisot & Child, 1988, 1996). Although Hayek allows for various kinds of rules, he does not seem to go so far as to highlight informal rules embedded in personal relations.

Chaebol means a group of firms interlinked in terms of sale and purchase and investment.⁷ They differ in their composing units, as they are individuals for the former and firms for the latter. But they have the commonality of relying on interrelated and interdependent, not independent, units and on collectives. Both have persisted for several decades with little change in their basic structures. Of more significance, *Hakbol* has contributed towards formation of *Chaebol*, not to mention that of the elitist bureaucracy of South Korea.

Moreover, the persistence and stability of social relations entails that they are internalized into the minds of agents. As a consequence, an agent does not function as an individual who later enters into a relationship with another person. Instead, the agent functions as he or she externalizes his or her internal relationships. Furthermore, they get agglomerated into a hierarchical structure such as a group, an organization or a collective (cf., Granovetter, 1973). It is equally important to note that most social relationships and groups are founded on ties that exist prior to individuals. In other words, regardless of their choices or volitions, Koreans are already embedded in specific relations or groups. These imply that the conception of individuals as units of social being is not so convincing for Korea as for the West.

It is thus quite likely that Korea's rapid economic growth is based on social relationships and group orientation. Analogous to downward causation from the whole to its parts, social relationships and groups can be conceived not merely as constraining, but as constructing, preferences, cognitions, and behaviors of Koreans by means of ingraining habits (Hodgson, 2002, pp. 168-172). This has the implication that the identity of Koreans may be understood as having three layers: personal, relational and collective (Brewer & Gardner, 1996). It should be emphasized that the concept of identity is fundamental for economic agents and citizens, since changes in their identity entail changes in their utility functions and preferences (Akerlof & Kranton, 2000, 2010; Ainslie, 1992).

It follows that not only Koreans' personal ego, but also their relational ego and collective ego must have been mobilized during the decades of Korea's rapid economic growth. This could be more fundamental than labor mobilization to which its economic growth has often been attributed (Krugman, 1994; Young 1995). This is illustrated by the episode that in 1983 the engineers of 64K DRAM team of Samsung Semiconductor walked 64km in the mountains as a means of enhancing their collective spirit (Song, 2012, p. 118).

It goes without saying that these formal or informal relationships and organizations have merits as well as demerits. Externalities, moral hazard, the 'too big to fail' phenomenon, crony capitalism and so on are enumerated as their demerits (Lin & Si, 2010). In any case, it is a far cry from Hayek's evolutionary system, as it is supposed to work smoothly on its own as a result of interactions between rational individuals with little constraint of personal social relations or

⁷ Take note that *Hakbol*(學閥) and *Chaebol*(財閥) have the common second character of *Bol*(閥), while the first characters *Hak*(學) and *Chae*(財) represent 'learning' and 'property', respectively.

informal groups. This reinforces doubts about the relevance of Hayek in the context of South Korea.

From the foregoing it is not to be deduced that Hayek pays little attention to interdependence among parts of a system and interactions between agents. On the contrary, his sensory order and the value of capital goods rest on relations and structure of its elements. Allowance for the evolution of relations and structure among material kinds, however, does not lead Hayek to deny the primacy of individuals as human agents over social relations or groups of individuals. To put this another way, he does not concede possibly emergent properties to a collective of individuals, in contrast with his wide acceptance of emergent properties in respect of a collection of things (Harper & Endres, 2012). In this regard, the argument to the contrary, which claims that he takes into account internalized relations between humans, must be far-fetched (Lawson, 1997; Zwirn, 2007).

Needless to say, Hayek is seriously concerned with the origins and the consequences of rules, which are, in general, social in their nature. However, from this it does not necessarily follow that he is fully aware of sociality of human agents. Acknowledging the significance of rules or even accounting for the emergence of rules is not equivalent to going so far as to allow for the role of social structure and social relations. In this regard, take note that Friedman, a Chicago economist, lays stress on the importance of rules in a market economy, although he is not interested in the origins of rules.

4. Motivation: intrinsic or extrinsic

Hayek, like neoclassical economists, tends to lay one-sided stress on extrinsic motivation or monetary incentives, as is evidenced by his emphasis on cash nexus. In disagreement with his view, recent studies show that people are more productive and creative and feel happier when they are intrinsically motivated than when they are extrinsically motivated (Deci, 1971; Iyengar & Lepper, 1999; Frey, 1994; Bénabou & Tirole, 2003). People (e.g., wage laborers) are extrinsically motivated if they work or study in return for money or for the sake of various types of reward. By contrast people (e.g., Mozart or warriors) are intrinsically motivated if they do it for its own sake either because they like it or because they are devoted or committed to the task.

At first glance, the Korean socio-economic system seems to have depended almost entirely on extrinsic motivation. But, on closer examination, it turns out that it has resorted to intrinsic motivation in the form of group motivation. As mentioned, most Koreans are prone to identify themselves with a collective, such as a family, a firm or a group of firms, a university, a church or a country. Thus Koreans get strongly motivated by becoming part of a collective and thereby display 'selfless work and devotion', which is also observed in Japanese economic growth (Sen, 1993, p. 50).

For this reason, targets in the form of exports or income used to be proposed more often at the level of a collective than at the level of an individual. It is the government of South Korea that used to set the annual target level of exports for the whole country and to assign its portions to big firms as their goals (Heath et al., 1999). Winners in this export contest were rewarded with medals and bank credit by the government under financial control, as was reported by the World Bank (World Bank, 1993).

There are several aspects in which a goal for a group or a collective is more appealing to Koreans than is a goal for an individual. Generally speaking, the process of economic development at its initial stage tends to give rise to conflicts between adherence to traditional values and pursuit of material interests. The reason is that pursuit of material gains such as exports or income does not look as virtuous or other-regarding as personal maturity, temperance or harmony.

However, if it were not material gain of a an individual but the survival of the whole family, the entire firm or the entire country that is conceivably at stake, then export drive and profit making would look nobler. Moreover, in this case, those who are engaged in commerce or production look less selfish. This argument is consonant with the observation that, in Korea, winning a contract in an international market used to be depicted by the government and mass media as a patriotic act rather than as the pursuit of material gains.

Given this background, one may conjecture that targets in terms of export or income, although they per se constitute extrinsic motivation, may be transformed into intrinsic motivation for an individual, if the target is not offered as one for an individual but offered as one for the entire collective of which he (or she) is a member. If one thinks of oneself as part of a group and the goal is set for the entire group, one can adopt the goal more easily than otherwise. Put another way, goals or extrinsic incentives for a group may have turned into intrinsic motivations for its group members and may have inspired their devotion and commitment to their tasks.

In Aristotle's terms production (*poesis*) aims at an end which is external to itself, whereas action (*praxis*) has its end within itself and thus is done for its own sake (Hong, 2011). It follows then that, for Koreans, production is transformed into action, if it is carried out for the whole collective or community. This, in combination with oppressive methods of exploitation or sophisticated techniques of management, might have contributed towards extracting effort or labor necessary for economic growth.

This does not necessarily imply that an incentive or a target is 'really' set at the level of a collective. In some cases it may be sufficient that an incentive or a goal is 'framed' or 'contextualized' as one for the entire group to which people belong rather than for an individual (cf., Kahneman & Tversky, 1984). This contextualization takes place through a socio-political process of self-deception and ideological reproduction where manipulation has been triggered by political and business leaders and magnified by major channels of mass media (Anderson, 1993,

pp. 22-26; Sunstein, 2003). A recent example is found in the nationwide movement of “gold collection” which was staged, nationwide, by more than three million participants after the outbreak of the economic crisis in 1997 (*Hangere* 21, May 21, 1998).

Needless to say, besides ideology for collectivity, other types of ideology have also been prevalent in Korea. Among others, market ideology, nationalism and anti-communism have also been reproduced from the period of economic growth onwards. Unlike nationalism or anti-communism, market ideology has often run into conflict with the ideology of collectivity, because it basically upholds individualism and liberalism. Due to the possible conflict between market ideology and collectivity, slogans concerning market economy have been interpreted and transmitted in a selective way that is more compatible with the Korean emphasis on collectivity and social relations. In particular, they have been framed in terms of livelihood, survival and national wealth rather than in terms of gains, profits and pleasure on the part of individuals. This history has molded Koreans’ outlook on economic activity to such an extent that even now there are few Korean business leaders who openly proclaim that all they do is make profits.

5. Institutions and rules: formal or informal

Although Hayek seems to disregard the role of informal institutions and rules, it is commonly argued that most formal organizations or systems are not self-sufficient but dependent on informal associations or personal relationships which arise spontaneously from formal ones (Selznick, 1943, 1947, pp. 26-27; Diefenbach & Sillince, 2011). Moreover, informal social relationships feed back into formal relationships (Uzzi, 1997, pp. 41-42).

Some scholars go to some lengths to argue that a community which is based on informal organizations serves as a third organizational mode between market and hierarchy. Admittedly, community, as it enhances trust, takes the forms of relational contracting, high-trust hybrid firms (M-form, keiretsu-type) or even clans (Ouchi, 1980; Adler, 2001, pp. 217-219). Thus informal organizations and rules, sometimes, complement, and, at other times, substitute for, formal rules or organizations (Gulati & Puranam, 2009).

The resilience of informal rules and institutions derives from their flexibility or malleability. It is widely known that formal organizations, especially of a bureaucratic kind, are prone to be rigid. This holds to a stronger extent in Korea than in other advanced countries. The reason for the rigidity of rules in Korea may be traced to the aforementioned history that many codified rules which range from constitutions down to traffic regulations have not derived from everyday social practices but have been either introduced via Japan during the colonial period or imported directly from the Western world after its independence. Since they have not been rooted in everyday social practices, there have been persistent conflicts between rules and practices which they are supposed to govern.

This situation results in strict adherence to the letter of a specified rule, on the one hand, and in employment of ad hoc devices in the application of the rule, on the other. This kind of decoupling has been so pervasive in Korean society ever since the end of 19th century that it has created the dual structure of its socioeconomic system (Meyer & Rowan, 1977). This also is conducive to widening the room for the formation and intervention of various informal relationships and organizations and reinforces the persistence of informal relationships.

Organizations in Korea find their specificity in being provided with informal relationships out of preexisting school ties as well as family ties and regional ties.⁸ These ties lay the foundation for informal hierarchy and social relationships in most organizations. Korea's school ties, not to mention its family ties and regional ties, are imbued with naturalistic determination and remain informal, personal and imperfectly rationalized (cf., Adler, 2012, p. 251, 254). Therefore at the initial stage of economic development, these ties must have played the critical role of building trust and have thus helped pave, accelerate, or even provide ready-made, the process towards forming business relationships. Moreover, they would make transactions more heuristic-based than calculative (Uzzi, 1997, p. 44).

6. Knowledge: explicit or tacit

Hayek draws heavily on his idea of knowledge to buttress his tenets (Hayek, 1945). For the purpose of demonstrating the impossibility of centralizing knowledge, he places emphasis on the dispersion of knowledge among individual agents. Furthermore, he seems to make a distinction between information and knowledge, as he allows for the role of subjective interpretation in obtaining knowledge (Boisot & Canals, 2004).

More specifically, Hayekian agents, unlike neoclassical agents, are imperfectly rational due to the following reasons: lack of complete knowledge and information about their environment and about their interacting partners at their time of decision-making; imperfect knowledge and mere pattern prediction about the aggregate consequences of their decisions and actions; unawareness or invisibility of the rules they abide by (Hong, 2002b; Bouraoui, 2009, p. 1344).

It is also noteworthy that Hayek, following Michael Polanyi (1958), distinguishes from explicit knowledge tacit knowledge as unarticulated and uncodifiable. The emphasis on tacit knowledge is not specific to Hayek. This concept is not only crucial for evolutionary economics (Nelson & Winter, 1982) but also responsible for the recent proliferation of knowledge management literature (Nonaka, 2007; Lamm, 2000). Moreover, it constitutes one of the building blocks in the theory of an embedded economy (Karl Polanyi, 1944; Maskell & Malmberg, 1999

⁸ Even linkages between university and industry with respect to technical change have been mostly informal, which corroborates the prevalence of informal relationships or elite networks in Korea (Lee & Yoo, 2007, p. 460; Sohn & Kenney, 2007, p. 996).

The fact that the role of tacit knowledge is specific neither to Hayek nor to evolutionary theory in general opens up the possibility that the existence of tacit knowledge does not necessarily lend support to Hayek's liberalism. Especially, tacit knowledge which constitutes local knowledge for an embedded economy would transform or delay the process of globalization, as the process presupposes standardized, codified and abstract knowledge (Adler, 2007). Since globalization of market order must also be the basic tenet of Hayek, the importance of local and tacit knowledge may conflict with his perspective.

It is, however, encouraging to find that knowledge in the East Asian society apparently has not been codified to a sufficient degree, as emphasized by Boisot and Child (1988, 1996). Still, the distinction between the types of knowledge has to be reinterpreted to be applicable in the Korean context. Western ideas and institutions which have been adopted by the Koreans have supposedly been grafted onto the historical and cultural tradition of Korea. It is thus suspected that Western ideas constitute explicit knowledge of Koreans which may have pushed the traditional perspective into the backyard of tacit knowledge. As a result, for Koreans, Western knowledge and the East Asian perspective correspond to explicit and tacit knowledge, respectively. For this reason, Koreans may have suffered from a chasm between explicit knowledge and tacit knowledge. In common parlance, there is a wider gulf between what is taught at schools and what is employed in everyday practices in South Korea than there is in the Western societies.

At the same time it is to be noted that several cultural-psychological studies show that Western ways of thoughts are analytic, whereas those of East Asians are holistic (Peng & Nisbett, 1999). At a more concrete level, literature in the area of knowledge management conveys the message that knowledge creation is dependent on a holistic perspective as well as on social relationships and community of practices, especially in the East Asian society (Nonaka, 2007). Taken together, it follows that cognition on the part of Koreans which lays the groundwork for institutional and innovational system of Korea are based on explicit and analytical knowledge, on the one hand, and tacit and holistic perspective, on the other.

7. Leadership: transactional or transformational

Hayek does not explicitly discuss leadership, but his case for spontaneous order implicitly presupposes a specific type of leadership. It is most likely to be democratic, laissez-faire, or transactional leadership. By contrast, most successful political leaders including the Presidents and business leaders in Korea have proved to be transformational or charismatic. On the surface, the three kinds of leadership, i.e., traditional, bureaucratic-legal and charismatic, as classified by Weber, have existed side by side in Korean society. However, it is charismatic leadership which seems to be most salient during the 1970's and 80's, as compared to modern Western leadership.

According to recent organizational studies, charismatic leadership exerts ‘transformational’ effects on its followers by means of: appeals to self-sacrifice for the interests of a collective and to the importance of a goal as a basis of group identity; prioritization of moral value over material incentives; heightening of valence of effort; enhancement of self-esteem; intrinsic motivation and unconditional personal commitment; the display of confidence on the part of leaders and followers; and frame alignment (Shamir et al., 1993).

The charismatic leader is understood as ‘transforming followers from an individual-oriented, hedonistic, rational-economic mode of operation to a collective, moral and value-oriented mode of operation’ (Shamir et al, 1993, p. 579). This transformational leader, in contrast with a transactional leader or a laissez-faire leader, inspires his followers to transcend their self-interest for the sake of the common goal or mission by impacting their self-concept (Bass, 1990, 1997). This impact intrinsically motivates and empowers the followers, which, in its turn, reacts on the leader and empowers him (Howell & Shamir, 2005, pp. 105-106). Among three levels of the self, this impact relates more to the relational and the collective self than to the personal self (Kark & Shamir, 2002; Howell & Shamir, 2005, pp. 99-100). This transformation could be understood as the process of reducing the gap between individuals and groups and of alleviating the problem of free-riding in the works of Hayek.⁹

Charismatic leadership, once combined with group orientation and dependence on social relationships, tends to generate a unified sense of goal and a strong intrinsic motivation for people, all of which may have resulted in high level of economic growth. In fact, Korean leaders have relied on family ties, regional ties and school ties.¹⁰ Moreover, the era of economic growth was inundated with such slogans as: ‘Modernization of Our Fatherland’; ‘The Historical Duty of the Revival of the Nation’. These slogans are characterized by: the dominance of the nation over individuals; the superiority of morality and patriotism to material interests; the glorification of labor and effort for export promotion. These aimed to enhance or reinforce collective identity and self-esteem of the Korean people in line with charismatic leadership (Shamir et al., 1998, p. 389).¹¹

One of the major arguments advanced in the previous section was that setting a goal for the group tends to create intrinsic motivation for Koreans. Consonant with this hypothesis it is here

⁹ After making it clear that Hayek’s tenet of cultural evolution relies on invisible hand explanation and methodological individualism, Vanberg (1986) points out the gap between Hayek’s methodological individualism and his concept of group selection. In order to overcome a functionalist fallacy and to account for the free-rider problem, Vanberg rightly claims that Hayek needs a process which connects the one to the other, which cannot rule out deliberative sanctions or organized enforcement (p. 96).

¹⁰ Steve Jobs must be understood as a charismatic leader (Lashinsky, 2012). Nevertheless Jobs seems to differ from a typical Korean business leader in that he and his organization Apple had rarely relied on social relations and collectives. Moreover, neither has Apple held informal meetings on a regular basis to resolve organizational conflicts nor has it developed informal rules alongside official regulations.

¹¹ This must be easier than transforming followers entirely down from an individual-oriented, hedonistic, rational-economic mode of operation up to a collective, moral and value-oriented mode of operation.

suggested that transformational leaders of Korea have ‘transformed’ extrinsic motivation into intrinsic motivation for their followers by means of appealing to their relational or collective self.

Due to its reliance on social relations and groups and charismatic leadership, efforts to achieve Korean economic growth are nearly analogous to preparations for a war in that they require common goals and teamwork not only at the level of the firm but also at the national level. This state of affairs has been reinforced by the military standoff on the peninsula which has provided the hotbed for competition between the two Koreas not only in military terms but also in economic terms.

Needless to say, exercises of charismatic leadership and imposition of social frames do have their own costs. In particular, charismatic leadership has solidified authoritarianism and has left its mark on every kind of micro-organization even after the democratization of 1987. In simpler terms, we used to have dictatorial Presidents but now we are faced, in the course of everyday life, with authoritarian presidents (with small p), chairmen or heads within a wide range of organizations. Therefore, it is governance structure within an organization that is now more at issue in Korea.¹²

However, prioritizing producers over consumers or independents over dependents may run counter to the position of Hayek, for he does not subscribe to elitism and the role of leadership as much as socialists or conservatives do (Griffiths, 2007, p. 205). Besides, it is less justifiable to ascribe the role of entrepreneurship to Hayek than it is to ascribe it to Mises (Kirzner, 1997, p. 67).¹³ Moreover, elites, as allegedly conceived by Hayek as well as by Nietzsche and Schumpeter, are likely to be individuals freed from social relationships and organizations. If this is true, Hayek’s viewpoint is not relevant for the explication of the Korean society.

More controversial is the issue whether and to what extent Hayek would endorse authoritarianism and transitional dictatorship. For Hayek, the “opposite of liberalism is totalitarianism . . . the opposite of democracy is authoritarianism” (Farrant et al., 2012, p. 523). As a liberal, he is on an all-out war against totalitarianism. However, due to his reservations about unlimited democracy, he endorses authoritarianism in some cases, in particular, where “there are no recognized rules, rules have to be created”(op cit., p. 522). Thus he is prepared to endorse dictatorships such as the Pinochet regime on the condition that they are necessary for the future liberalism.

¹² In contradiction to this *prima facie* interpretation, Romar (2008, p. 61) comes close to uncovering transformational leaders in the work of Hayek. In his interpretation Hayek’s free independents are similar to Nietzsche’s noble men (*der Übermensch*) in that they determine and create values for the entire society. In his interpretation there is little difference between Hayekian businessmen and Schumpeter’s entrepreneurs, either.

¹³ Even Kirzner’s rendition of Mises may be ill-balanced, since Mises shows equal respect for consumers and entrepreneurs in the market economy (Mises, 1949, pp. 270-271, 291-297, 325).

As an extension, he would approve neoliberal reforms being imposed by elites such as the ones for South Korea in 1997, as was mentioned in section 2. For the same reason, he may not rule out a big bang type of reform for the road from serfdom (cf., McKinnon, 1992, p. 33). In this account, Hayek seems to suggest that an enlightened king or a benevolent dictator has to serve as a rule maker in a society where and when an evolutionary process is oppressed. However, he does not point out the difficulty in making dictators step down when they become less benevolent, as in the cases of South Korea. Regaining control over dictators would be more difficult than it is to dismantle protective tariffs once they are instated.

8. Implications: rationality, duality and sociality

To take stock, this paper characterizes the Korean socioeconomic system as: coexistence of personal, relational and group selves; interactions among intrinsic and extrinsic motivations; combinations of formal and informal social relationships; combinations of formal and informal organizations; dual economy composed of big and small firms and segmented labor market; decoupling between official rules and daily practices; interactions between explicit and tacit knowledge; coexistence of holistic and analytical ways of thinking. Moreover, relational self and group self can be classified into one in distinction from personal self. In similar vein, relational motivation and group motivation can be merged into one against personal motivation. On this basis one can make the conjecture that it is duality of humans and society which runs through these ideas.

This conjecture encourages us to refer to the dual system theory of psychology and behavioral economics (Stanovich & West, 2000; Kahneman, 2003). According to this theory the imperfect rationality of human beings is attributed to the dual system of cognition. The system I is allegedly featured by instincts, habits and social context, whereas the system II is governed by rationality, as dictated by expected utility theory. In the system I, they resort to fast and frugal heuristics, while, in the system II, they allegedly behave and choose on the basis of cold calculation. As people swing back and forth between the two systems, they do not always act in a rational way, but may sometimes act instinctively and react in a semi-automatic way. The dual system may be more relevant in the Korean context in the sense that Koreans tend to have a multi-layered ego.

Going beyond the bounds of behavioral economics and experimental economics, researches highlight the importance of context and interactions between humans. Studies in the fields of social psychology and political psychology, especially, social dominance theory and system justification theory, strongly suggest social nature of humans and opens up the possibility of a more holistically social approach to socioeconomic phenomena (Jost & Banaji, 1994; Sidanius et al., 2004).

To conclude, it is true that Hayek's evolutionary perspective is more viable than the neoclassical concept of equilibrium and his view of human rationality is realistic and richer than that offered by neoclassical economics. But his individualistic position does not seem to accommodate a multi-layered personality which is historically and socially conditioned.

Bibliography

- Adler, P. S. (2007) The Future of Critical Management Studies: A Paleo-Marxist Critique of Labour Process Theory, *Organization Studies*, 28:9, pp. 1313-1345
- Adler, P. S. & C. X. Chen (2011) Combining Creativity and Control: Understanding Individual Motivation in Large-Scale Collaborative Creativity, *Accounting, Organizations and Society*, 23:1, pp. 244-266.
- Adler, P. S. (2012) The Sociological Ambivalence of Bureaucracy: From Weber via Gouldner to Marx, *Organization Science*, 23:1, pp. 244-266
- Ainslie, G. (1992) *Picoeconomics*, Cambridge University Press
- Akerlof, G. & R. Kranton (2000) Economics and Identity, *Quarterly Journal of Economics*, 115:3, pp. 715-753
- Akerlof, G. & R. Kranton (2010) *Identity Economics*, Princeton University Press
- Amsden, A. (1989) *Asia's Next Giant: Korean and Late Industrialization*, New York: Oxford University Press
- Anderson, E. (1993) *Value in Ethics and Economics*, Cambridge, Massachusetts: Harvard University Press
- Bass, B. M. (1990) From Transactional to Transformational Leadership, *Organizational Dynamics*, 18:3, pp. 19-31
- Bass, B. M. (1997) Does the Transactional-Transformational Leadership Paradigm Transcend Organizational and National Boundaries?, *American Psychologist*, 52:2, pp. 130-139
- Bellamy, R. (1994) 'Dethroning Politics': Liberalism, Constitutionalism and Democracy in the Thought of F. A. Hayek, *British Journal of Political Science*, 24:4, pp. 419-441
- Bénabou, R. & J. Tirole (2003) Intrinsic and Extrinsic Motivation, *Review of Economic Studies*, 70:3, pp. 489-520
- Boisot, M. & J. Child (1988) The Iron Law of Fiefs: Bureaucratic Failure and the Problem of Governance in the Chinese Economic Reforms, *Administration Science Quarterly*, 33, pp. 507-527
- Boisot, M. & J. Child (1996) From Fiefs to Clans and Network Capitalism: Explaining China's Emerging Economic Order, *Administration Science Quarterly*, 41, pp. 600-628
- Boisot, M. & A. Canals (2004) Data, information and knowledge: have we got it right?, *Journal of Evolutionary Economics*, 14:1, pp. 43-67
- Bouraoui, A. (2009) Hayek, l'"Ordre Spontané" et la Complexité, *Revue économique*, 60:6, pp. 1335-1358
- Brewer, M. B. & W. Gardner (1996) Who is This "We"? Levels of Collective Identity and Self Representations, *Journal of Personality and Social Psychology*, 71:1, pp. 83-93
- Butos, W. & R. Koppl (1997) The Varieties of Subjectivism: Keynes and Hayek on Expectations, *History of Political Economy*, 29:2, pp. 327-359
- Caldwell, B. (1997) Hayek and Socialism, *Journal of Economic Literature*, 35:4, pp. 1856-1890
- Caldwell, B. (2001) Hodgson on Hayek: a critique, *Cambridge Journal of Economics*, 25, pp. 541-555
- Coase, R. H. (1992) The Institutional Structure of Production, *American Economic Review*, 82:4, pp. 713-719
- Deci, E. (1971) Effects of Externally Mediated Rewards on Intrinsic Motivation, *Journal of Personality and Social Psychology*, 18:1, pp. 105-115

- Diefenbach, T. & J. A. A. Sillince (2011) Formal and Informal Hierarchy in Different Types of Organization, *Organizational Studies*, 32:11, pp. 1515-1537
- Elster, J. (1982) Marxism, functionalism, and game theory, *Theory and Society*, 11:4, pp. 453-482
- Farrant, A, E. McPhail & S. Berger (2012) Preventing the “Abuses” of Democracy: Hayek, the “Military Usurper” and Transitional Dictatorship in Chile? *American Journal of Economics and Sociology*, 71:3, pp. 517-538
- Frey, B. (1994) How Intrinsic Motivation is Crowded Out and In, *Rationality & Society*, 94:6, pp. 334-352
- Granovetter, M. (1973) The Strength of Weak Ties, *American Journal of Sociology*, 78:6, pp. 1360-1380
- Griffiths, S. (2007) ‘Comrade Hayek’ or the revival of liberalism? Andrew Gamble’s engagement with the work of Friedrich Hayek, *Journal of Political Ideologies*, 12:2, pp. 189-210
- Gulati, R. & P. Puranam (2009) Renewal through Reorganization: The Value of Inconsistencies Between Formal and Informal Organization, *Organization Science*, 20:2, pp. 422-440
- Harper, D. & A. Endres (2010) Capital as a layer cake: A systems approach to capital and its multi-level Structure, *Journal of Economic Behavior and Organization*, 74, pp. 30-41
- Harper, D. & A. Endres (2012) The anatomy of emergence, with a focus on capital formation, *Journal of Economic Behavior and Organization*, 82, pp. 352-367
- Hayek, F. A. (1933[1928]) *Monetary Theory and the Trade Cycle*, London: Jonathan Cape
- Hayek, F. A. (1931) *Prices and Production*, London: Routledge & Kegan Paul
- Hayek, F. A. (1941) *The Pure Theory of Capital*, London: Routledge & Kegan Paul
- Hayek, F. A. (1945) The Use of Knowledge, *American Economic Review*, 35:4, pp. 519-530
- Hayek, F. A. (1952) *The Sensory Order*, Routledge & Kegan Paul
- Hayek, F. A. (1960) *The Constitution of Liberty*, Chicago: The University of Chicago Press
- Hayek, F. A. (1967) *Studies in Philosophy, Politics and Economics*, Chicago: The University of Chicago Press
- Hayek, F. A. (1979) *Law, Legislation and Liberty*, Vol. I, II, III, Chicago: The University of Chicago Press
- Hayek, F. A. (1988) *The Fatal Conceit*, The Collected Works of F. A. Hayek, Vol. 1, ed. by W. W. Bartley III, London: Routledge
- Heath, C, R. P. Larrick & G. Wu (1999) Goals as Reference Points, *Cognitive Psychology*, 38, pp. 79-109
- Hodgson, G. (1989) Institutional economic theory: the old versus the new, *Review of Political Economy*, 1:3, pp. 249-269
- Hodgson, G. (1995) The Political Economy of Utopia, *Review of Social Economy*, 53:2, pp. 195-213
- Hodgson, G. (2002) Reconstitutive Downward Causation, Chapter 10, *Intersubjectivity in Economics: Agents and Structures*, ed. E. Fullbrook, London: Routledge, pp. 159-180
- Hodgson, G. (2004) Hayekian evolution reconsidered: a response to Caldwell, Notes and Comments, *Cambridge Journal of Economics*, 28, pp. 291-330
- Hofstede, G. & M. H. Bond (1988) The Confucius Connection: From Cultural Roots to Economic Growth, *Organizational Dynamics*, 16:4, pp. 5-21
- Hong, H. (2002a) Marx's value forms and Hayek's rules: a reinterpretation in the light of the dichotomy between *physis* and *nomos*, *Cambridge Journal of Economics*, 26:5, pp. 613-635
- Hong, H. (2002b) Keynes and Hayek, Chapter 13, *Keynes's Economics* (in Korean), ed. Man-Seop Park, Seoul: Dasan Books
- Hong, H. (2009) *Economics and Liberalism* (in Korean), Seoul: Yonsei University Press
- Hong, H. (2011) Aristotle and Marx on Money, Production and Slavery, *Journal of Greco-Roman Studies*, 44, pp. 177-208
- Hong, H. (2012) Towards a Korean Socioeconomic Model: Collective, Relationships, Knowledge, Motivation, Leadership and Value, Manuscript, presented at the 24th Annual Conference of SASE
- Hong, H. & J. Hwang (2008) Hilferding and Hayek on business cycles and reproduction, *Manuscript*
- Howell, J. M. & B. Shamir (2005) The Role of Followers in the Charismatic Leadership Process:

- Relationships and their Consequences, *Academy of Management Review*, 30:1, pp. 96-112
- Iyengar, S. S. & M. R. Lepper (1999) Rethinking the Value of Choice: A Cultural Perspective on Intrinsic Motivation, *Journal of Personality and Social Psychology*, 76:3, pp. 349-366
- Jost, J. & M. Banaji (1994) The role of stereotyping in system-justification and the production of false consciousness, *British Journal of Social Psychology*, 33:1, pp. 1-27
- Kahneman, D. (2003) Maps of Bounded Rationality: Psychology for Behavioral Economics, *American Economic Review*, 93:5, pp. 1449-1775
- Kahneman, D. K. & A. Tversky (1984) Choices, Values, and Frames, *American Psychologist*, 39:4, pp. 341-350
- Kark, R. & B. Shamir (2002) The Influence of Transformational Leadership on Followers' Relational versus Collective Self-Concept, *Academy of Management, Proceedings*, OB:D1-D6
- Kirzner, I. (1997) Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach, *Journal of Economic Literature*, 35:1, pp. 60-85
- Krugman, P. (1994) The Myth of Asia's Miracle, *Foreign Affairs*, 73:6, pp. 62-78
- Lamm, A. (2000) Tacit Knowledge, Organizational Learning and Societal Institutions: An Integrated Framework, *Organizational Studies*, 21:3, pp. 487-513
- Lashinsky, A. (2012) *Inside Apple*, New York: Business Plus
- Lawson, C. (1996) Holism and Collectivism in the Work of J. R. Commons, *Journal of Economic Issues*, 30:4, pp. 967-984
- Lawson, T. (1997) *Economics and Reality*, London: Routledge
- Lee, S. H. & T. Yoo (2007) Government Policy and Trajectories of Radical Innovation in *Dirigiste* States: A Comparative Analysis of National Innovation Systems in France and Korea, *Technology Analysis and Strategic Management*, 19:4, pp. 451-470
- Lewis, J. (1975) *Max Weber and value free sociology: a Marxist critique*, London: Lawrence and Wishart
- Lewis, P. (2012) Emergent Properties in the Work of Friedrich Hayek, *Journal of Economic Behavior and Organization*, 82, pp. 368-378
- Lin, J. & S. X. Si (2010) Can *guanxi* be a problem? Contexts, ties, and some unfavorable consequences of social capital in China, *Asia Pacific Journal of Management*, 27, pp. 561-581
- Mahoney, P. (2001) The Common Law and Economic Growth: Hayek Might Be Right, *Journal of Legal Studies*, 30:2, pp. 503-525
- Markus, H. R. & S. Kitayama (1991) Culture and the Self: Implications for Cognition, Emotion and Motivation, *Psychological Review*, 98:2, pp. 224-253
- Markus, H. R. & S. Kitayama (2010) Cultures and Selves: A Cycle of Mutual Constitution. *Perspectives on Psychological Science*, 5:4, pp. 420-430
- Maskell, P. & A. Malmberg (1999) Localised Learning and Industrial Competitiveness, *Cambridge Journal of Economics*, 23, pp. 167-185
- McKinnon, R. (1992) Spontaneous Order on the Road Back from Socialism: An Asian Perspective, *American Economic Review*, 82:2, *Papers and Proceedings*, pp. 31-36
- Mises, L. (1949) *Human Action; A Treatise on Economics*, New Haven: Yale University Press
- Nelson, R. R. & S. G. Winter (1982) *An Evolutionary Theory of Economic Change*, Cambridge, Mass.: Harvard University Press
- Nisbett, R., K. Peng, I. Choi & A. Norenzayan (2001) Culture and Systems of Thought: Holistic Versus Analytic Cognition, *Psychological Review*, 108:2, pp. 291-310
- Nonaka, I. (2007) The Knowledge-Creating Company, *Harvard Business Review*, July-August, pp. 162-171
- Ouchi, W. G. (1980) Markets, Bureaucracies, and Clans, *Administrative Science Quarterly*, 20, pp. 129-141
- Peng, K. & R. E. Nisbett (1999) Culture, Dialectics, and Reasoning about Contradiction, *American Psychologist*, 54:9, pp. 741-754
- Polanyi, K. (1944) *The Great Transformation*, Boston: Beacon Press

- Polanyi, M. (1958) *Personal Knowledge*, London: Routledge & Kegan Paul
- Romar, E. (2008) Noble Markets: The Noble/Slave Ethic in Hayek's Free Market Capitalism, *Journal of Business Ethics*, 85, pp. 57-66
- Schumpeter, J. A. (1955) *The Theory of Economic Development*, trans. R. Opie, Cambridge, Mass: Harvard University Press
- Selznick, P. (1943) An Approach to a Theory of Bureaucracy, *American Sociological Review*, 8:1, pp. 47-54
- Selznick, P. (1948) Foundations of the Theory of Organization, *American Sociological Review*, 13:1, pp. 25-35
- Sen, A. (1993) Does Business Ethics Make Economic Sense?, *Business Ethics Quarterly*, 3:1, pp. 45-54
- Shamir, B., R. J. House & M. B. Arthur (1993) The Motivational Effects of Charismatic Leadership: A Self-Concept Based Theory, *Organizational Science*, 4:4, pp. 577-594
- Shamir, B., E. Zakay, E. Breinin & M. Popper (1998) Correlates of Charismatic Leader Behavior in Military Units: Subordinates' Attitudes, Unit Characteristics, and Superiors' Appraisals of Leader Performance, *Academy of Management Journal*, 41:4, pp. 387-409
- Sidanius, J, F. Pratto, Colette van Laar & S. Levin (2004) Social Dominance Theory: Its Agenda and Method, *Political Psychology*, 25:6, pp. 845-880
- Simon, H. (1996) *The Sciences of the Artificial*, Mass., Cambridge; MIT Press
- Sohn, D. & M. Kenney (2007) Universities, Clusters, and Innovation Systems: The Case of Seoul, Korea, *World Development*, 35:6, pp. 991-1004
- Song, S. (2012) An Analysis on the Characteristics of Technological Development in Korea: Focusing on POSCO and Semiconductor in Samsung, *Korean Journal for the History of Science*, 34:1, pp. 109-138 (in Korean)
- Stanovich, K. & R. West (2000) Individual differences in reasoning: Implications for the Rationality Debate, *Behavioral and Brain Sciences*, 23:5, pp. 645-665
- Sunstein, C. (2003) What's available? Social influences and behavioral economics, *Northwestern University Law Review*, 97:3, pp. 1295-1314
- Thaler, R. & C. Sunstein (2008) *Nudge*, New Haven: Yale University Press
- Triandis, H. C. (1989) The Self and Social Behavior in Differing Cultural Contexts, *Psychological Review*, 96:3, pp. 506-520
- Triandis, H. C. & M. J. Gelfand (1998) Converging Measurement of Horizontal and Vertical Individualism and Collectivism, *Journal of Personality and Social Psychology*, 74:1, pp. 118-128
- Uzzi, B. (1997) Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness, *Administrative Science Quarterly*, 8:2, pp. 109-125
- van de Haar, E. (2011) Hayekian Spontaneous Order and the International Balance of Power, *Independent Review*, 16:1, pp. 101-118
- Vanberg, V. (1986) Spontaneous Market Order and Social Rules, *Economics and Philosophy*, 2, pp. 75-100
- Williamson, O. E. (2000) The New Institutional Economics, *Journal of Economic Literature*, 38:3, pp. 595-613
- Witt, U. (2008) Observational learning, group selection, and societal evolution, *Journal of Institutional Economics*, 4:1, 1-24
- World Bank (1993) *The East Asian Miracle*, Oxford University Press
- Young, A. (1995) The Tyranny of Numbers: Confronting the Statistical Realities of the East Asian Growth Experience, *Quarterly Journal of Economics*, 110:3, pp. 641-680
- Zwirn, G. (2007) Methodological Individualism or Methodological Atomism: The Case of Friedrich Hayek, *History of Political Economy*, 39:1, pp. 47-80