

Learning for Sustainability: the individual and the social

Soonghee Han

(professor, Seoul National University)

1. Learning for sustainability

The author of “*Creating a Learning Society*”, Joseph Stiglitz suggests that learning is the criteria characterising the era of modern economic development for recent 200 years comparing with the previous stages. His mention about the nature of learning as the spreader of growth and innovation was primarily on the economic sector, but it was not limited only in the field. Most of the elements that characterise the advancement of a society, such as democracy, human rights, social inclusion and engagement, cultural pluralism and global citizenship, etc. are all the products of active collective learning. Changes of a society is the consequence of the changes initiated by learning, and learning society is a major condition that constructs the development of modern politics, economy, culture, and society.

Korea has been a dynamic learning society. The high capacity of learning among Korean people was the key to accept, adapt to, and lead many possible social changes that we had to face with. It was learning that made the political democracy possible by putting an end to consecutive military coups and authoritarian dictatorships. It was also "learning" that enabled the high technologies with fast economic development and growth of GDP. We still face the unseen challenges that we have never seen before such as fast-growing ageing, low-birth rates, and youth unemployments, and we hope to find ways of learning to get over the issues, through rational social dialogues and consensus.

The challenge of ‘sustainability’ in Korea seems to be one of the most difficult issues to deal with, than any other challenges we have ever encountered. The reason why 'learning the objective of sustainability' is difficult is because it is not a kind of learning that accepts a few

more new knowledge or skills upon our previous experiences, but rather it is the matter of 'un-learning' and 're-learning' the new tasks. Or, because it is the matter of changing the whole framework rather than the parts. Now the 'limitless desire' that drove the production and consumption in the current social economic structure should be 'un-learned' and 're-learn' how to reserve its own desire by itself. It might be a really tough task like giving up the taste of sweets (or smoking habits) that we have ever familiar with for a lifetime, or converting one's religion that we have ever relied upon.

2. “The myth of Change” and the fetishism

One of the social characteristics, brought by a series of new social phenomena like the emergence of information society, knowledge-based economy, and/or the fourth industrial revolution, is that the speed of social changes has been perceived far increased surprisingly. The explosive increase of information and knowledge makes the society changed even faster. The fast changing cycle of information keeps accelerating the cycle of material production and consumption that fastly discards still usable goods and services. As the cycle is getting fast, we become blind followers of 'change'. Since the industrialization in the past 200 years, people give higher value on 'being fast' rather than 'being slow', and build the structure where 'change' takes initiative upon 'stability'. Smart phones are discarded every two years, and the clothes bought this summer are not used next summer. The 'marketing of changes' consistently threatens our customary understanding of reality, and the stress rather pushes us adapted into the culture of changes.

The society producing speedy changes looks wonderful, but the truth is not in reality. The society lacking the ability of controlling the speed of changes simply focuses on producing more products, and 'the sensitivities to changes' becomes one of the competences for the refined culture. The change-driven society creates some group of the members who reproduce their distinguishing, superior images by exclusively appropriating the limited resources for their own. Those who are not sensitive enough to the changes become social losers. To avoid falling in losers, we unconsciously follow the hidden conspiracy. Benefits from changes are dominated by those who have power to control. 'Change' makes the cycle of production and discard of products faster and faster. More products are thrown out to waste, and the environment is getting more abused.

The illusion of change makes us passive followers. The demand of changes disguises itself as something reified, apart from one's willingness, like the voices of undeniable gods whose order is inevitable and irreversable. The logic of change is justified, like "we didn't have any choice but follow the rule of the changes". For example, the world under the fourth industrial revolution is described seemingly as an objective and inevitable condition, given from outside we should adapt to. This kind of reified world view stops us acting like the creator of the logic, bur rather

we just act like a supporting actor of the theatre, responding in passive manner.

The paired axes of 'changes in society' and 'human adaption' we suppose look separable from its origins. As like environmental changes to a system, we perceive the speedy changes as like an environmental changes given to a system that had to adapt to survive. It is like we build a seawall of human adaptation to countermeasure the typhoon of changes. We believe the changes are caused from outside. However, it is not true: the change in society and the adaptation to it both are indeed what we have constructed through human labor and thoughts. The changes are caused and accelerated as a result of human civilization, and the adaptation to them is also the part of the same procedure. Even so, these two dimensions act as if they exist in different extraterritorials. The adaptation counteracts all changes come from outer environment, and the adapted behaviors in turn triggers another changes. It is a kind of chain reaction like atomic responses that keep working inside an atomic reactor. The chain reaction between changes and adaptation keeps working inside the Earth of the atomic reactor. We don't think this reactions a part of human civilization, but rather a part of natural phenomenon. We believe that we cannot control the direction of the chain reaction, like physical chain reactions accelerated in atomic reactor, and it is like a train rushing toward the end of the world that speeds up without a driver. Are we watching the movie 'Snowpiercer(2013)'?

I strongly believe that this reified defeatism is an illusion. In fact, all the changes are not induced from Mars, or from big bang, but from the inside of us. We made changes, and we adapt to them. We merely feel like that the materialized natural phenomenon seems to be out of our control because of its chain reaction between changes and adaptation. It might seem not to be impossible to stop and 'to change the changes' since all changes have been made by human beings, and it is not so difficult since it is not as understanding a kind of rocket sciences.

Now, let's summarize what we have talked about. We human perceive that the world is irreversibly changing within the swirl of agnosticism in that changes is alienated from ourselves, and believe that the role of us in this consistent swirl is to merely adapt to the changes. However, this belief of the mental set of change and adaptation itself is just a alienated illusion. It is a kind of secular religion. We need another symbolic keyword which can replace the blinded and destructive chain reaction between changes and adaptation with another kind of chain reaction. "Sustainability" might possibly be a magic wand that cut the mystified and reified chain reaction and build a new one to secure human sustainable future.

3. Sustainability: all about belief system

According to UN, sustainable development is development that balance economic development, stability and integration of the society, and environmental preservation based on sustainability, and "sustainability" is to meet the needs of the present without compromising the ability of

future generations by wasting economic, social, and environmental resource to meet their own needs (UN Brundtland Report('87))

In Korea, Framework Act on Sustainable Development is established, and based on this law the Ministry of Environment designs the general planning and assessment for sustainable development every two years. Based on the plan, each local government such as Seoul Metropolitan Government or Gyeonggi Province makes and enacts its own sustainable development indicators. For instance, Seoul Metropolitan Government makes 30 indicators including (1) the increase in environmental recovery, (2) the improvement of social equity and cultural vitality, (3) the creation of employment in economy, and Gyeonggi Province designs 6 goals and 17 strategies including 'the switchover into green economy'.

Needless to say, sustainability is the concept accompanying a holistic change in human belief system, so it cannot be reduced to the sum of individual aggregate of dozens of small indicators. For example, though each 30 indicators of Seoul are clearly helpful to raise sustainability, the achievement of sustainability cannot be reduced to these indicators. Too many scattered goals and strategies, with probably some self-contradictions in a way, can simply add up confusions interrupting the fundamental spirit and philosophy.

The way we understand the notion of 'sustainable development' might be harnessed by the way we understand the notion of 'sustainability' and 'modern development'. The concept of 'sustainable development' is a combination of the concept of 'sustainable' and the notion of 'development', and the meaning turns out to be totally different depending on which part is stressed. When the part of 'development' is focused, it means to be a passive approach saying that "we want to continue current way of development as we have done, so we are going to find the way to make the way a bit more sustainable". I guess the meaning of the sustainable development in most societies seem to be closer to this meaning. On the other hand, when the part of 'sustainable' is significantly reconsidered, it implies a thorough turn over of the attitude that "we are going to change our current value of development entirely to fulfill the meaning of sustainability". It is a total innovation, requiring totally new re-learning. Assuming that no more sustainability of the global ecology is possible until we give up the current pattern of development framework, we should take boldness to change the whole belief system to continue to survive in the earth.

In retrospect, the issue of sustainability has been caused by the conflicts between 'limited available resources' and 'limitless human desire'. Supposed that no way to expand available resources is possible, it is inevitable that we have to control the level of human desire. Education is the most effective means to control human desire, and the issue of sustainability should be totally up to the shoulder of education. It is required to create 'cultivated desire' modified by values and ethics. It is necessary, through the intervention of values, to changes the biological desire into re-learned desire. The human desire needs to be rehabilitated. The biological desire

should be cultivated with the help of humanities and ethics. These task can be performed effectively by educational practices.

However, we see more complexities if looking inside. It is because we can find there the invisible social structure is functioning between the limited resources and limitless human desire, and makes them irreconcilable: that is, social devices or social apparatuses that reproduces the ideology of inevitable changes and socializes individuals into the frame. Some, or most of individual ideas are just small pieces in the huge gearwheel of social devices. What seemingly looks like an individual needs is what in fact is bloated by social collective madness. It is like Nazism that those who once loved Goethe, Hegel, Beethoven, and Brahms had to helplessly surrender. It also looks like what Reinhold Niebuhr said, the contradiction between 'Moral Man and Immoral Society'.

The destructive social devices we should challenge consist of the two following elements: one is the 'selfish production system' of the global capitalism that survives by accelerating massive consumption, and the other is the 'unequal, stratified reproduction system of a society' that provides exclusive status to those self-flaunting and subject to the massive consumption. The destructive production mode is consistently reproduced by the interaction between the production and reproduction systems. Put it in different way, it is the interlinked structure between the selfish production system and self-flaunting consumption system mediated by polarized power structure of the society. In this sense, the issue of sustainability is far beyond the matter of simple resource saving, but rather the fundamental matter about fixing the malfunctioning capitalism and the reproduction of unequal social stratum through conspicuous consumption.

Sustainability is not to compensate the defects of current development policy, but rather to confront out the fundamental philosophy. It is because we should give up what we have believed in as development for the sake of sustainability. It is a matter of 'choice,' and you cannot pick two at the same time when deciding to turn left or right. For example, while 52-hour workweek is a choice having sustainability in mind, also it supposes to change one's way of thinking, i.e. from 'fast' to slow', from 'more income' to 'less income'. In other words, sustainability is a value system and one need to be decisive and brave enough to sacrifice for the the sake of another direction of lifestyle. When we look at the sustainable indicators of environment, economy, and society in Seoul, for example, every value of indicator is relatively positioned, or one-way-or-another choice issues. To expand green transportation, diesel or gasoline cars should be restricted. To decrease the amount of greenhouse gas emission, the amount of energy use should be reduced. To increase women's labor participation rate, men's labor participation rate should decrease. To expand the public park area per person, private land should be reduced. However, don't get me wrong. This is not a choice between angels and demons. In fact, these are conflicts of individual private interests, and it is unavoidable to deal with political negotiations in the process to solve the conflicts of the mutual interests.

In this respect, the issue of sustainability is not the matter individuals can control but the matter that the operation system of a society need to cope with. In every stage of process, the momentum of social changes is required, in that the implicit political conflicts in this process is upgraded to the cultivated learning process of collective wisdoms. This can go on to be the evolution of institutional governance beyond the change of individual consciousness. What is important is that education should work with institutional governance to interlink changes between the members and the society. The matter of sustainability is connected to making the appropriate social devices and being accustomed to the devices by learning. It is a task to consider how social changes can be done, being emergent far beyond the level of individuals. To deal with this matter, I suggest the concept of 'learning society' is necessarily brought into, which is explained more in the next passage.

4. Sustainability and the double binding of innovation and learning: the introduction of learning society

UN's SDG2030 presents 17 key goals, which also consist of many sub-lists of actions. The achievements of the goals are continuously monitored. Maybe, the SDG goals are somewhat imperfect, including some tasks conflicting with each other. However, it is clear that these tasks are a meaningful global consensus of social devices, as of now, sincerely designed to achieve sustainability in global scale. Despite the incompleteness, it is expected to be improved and re-interpreted consistently. The point here is that we came to have an institutional level of global framework beyond the individual practices, and this framework will also be improved through consistent monitoring.

I'd like to put it this way: our 'social system' is gradually learning to better fit into pattern of social adaptation. Social system learns, as individual does. It does not just change the institutions, but rather the people inside learns how to communicate and how to be combined through the changed institutions. It is a total set of societal learning per se. If we can say that, one the one hand, human learning of individuals results in the change of neurons, and new cognition and behaviors as the output, on the other hand, learning of social systems results in the institutional changed stability and its consistent improvement. This improvement includes manifested institutional changes that results in increased performance. I would say that this change in societal level is a form of societal learning or a learning of social system. The 'institution' is a kind of cultural device creating conventional repetition and stabilization of individual human behaviors. It is not a few lines of laws and regulations, but more inclusive to the holistic and collective learning of the related group of people: learning how to re-think, re-live, re-communicate with, and re-connect in the new future.

Let's talk about learning society as a major tool of establishing sustainable future. Learning society is the product of lifelong education discourse. The frame of learning society based on Swedish educational reform in 1970s by Husen and the concept of learning society from the UNESCO report "Learning To Be" in 1972 were the background logic to trigger educational reform and evergoing lifelong education practices. After that, numerous studies and reports have been succeeded. The American economist, Joseph Stiglitz explained learning society as the double connection of 'innovation' and 'learning' in his book 'Creating a Learning Society'. Social changes are possible through innovation of the whole frame, and the innovation is amplified, expanded, and realized by learning. Logically, at least once we deal with innovation, then learning should come together. This is why innovative economy and learning society are the two sides of the same coin.

The discourses of learning society has been discussed in two dimensions. One is to understand it as a social support system that expands the supply of individual learning accessibilities and educational program provisions. Learning is the task of individual members, so what the society can do is to make societal managerial devices to expand the opportunities of each member to lifelong education, to increase supply of educational provision, and to mobilize the necessary resources. It is the same logic that a society faces the needs of individuals to expand their learning, so it replies with by establishing the social devices to meet the conditions. The policies of learning cities, up to now, has mostly been thought of based on this presupposition. The notion of learning society in the context of learning cities have usually been understood this way. This model brings various practical methods forward, such as enhancing the individual's opportunities for lifelong education and its accessibility, expanding the supply of education, especially of public sector programmes, encouraging learners to participate in more nonformal education opportunities operated by schools and universities, developing innovative ways of new supply of education including online learning, and applying recognition, validation, and accreditation programs to informal learning outcomes. It also contains building lifelong learning centers in each city and expanding the public base of adult learning.

Another way to understand the notion of learning society is to regard that learning society is a phenomenon that 'the society as a supra-organization itself is learning', not an aggregate of individual learning, and social changes are the learning outcome that a city or a society has performed. It sounds strange that a society can be an agent of learning activities. Even Peter Jarvis, in his various articles and books, argues that learning is eventually the activity of individuals, and society cannot be the agent of learning. He says that learning is an activity that can be done by conscious living creature. Even Paulo Freire says that we cannot change the world directly; instead we can change people and the people can change the world. In this context, he insists that a society or an organization cannot be an agent of learning activity, but just the backgrounds or conditions of individual learning. In their perspectives, a new type of learning, i.e. lifelong learning, is required to meet the new existential context, and learning society can be perceived as a conditional concept to activate such changes.

However, is it true that a society cannot be the agent of learning activities? Here, there might be another perspective possible to understand the nature of learning society. That is, "learning society is a society that learns". In the same point of view, "a learning city is a city that learns". Of course, learning we refers to here is not a psychological cognitive process of entities as it is commonly known, but rather it is relatively permanent changes of systems the society makes and the followed collective alternation of consciousness and its modifications of the members. We need to re-define the concept of learning. Also, we need to re-define the meaning of human-being, with the meaning of learning.

5. Learning Society: self-evolution of society equipped with sustainability

I would say that the history of human civilization is one whole history of education. We can recognize that societies has been changed through the history of human civilization. The concept of nation-state has emerged out of tribal societies, following the invention of social devices of education to maintain and reproduce them. Getting elaborated, another social devices were invented to make societies balanced in power, which we call it democracy. Except a few, it is uncommon that these devices are degraded. All of these are the consequence of what societies have learned. In the early of 20th century, which had to face the century of wars, so mankind devised various devices that can effectively prevent a war. Now due to the devices, the world wars are hardly about to break out. Even Trump, Kim Jong-un, or Abe cannot ignite any kind of wars into practice easily. Now the awareness of global environment is also increased, so the concept of plastic products and carbon dioxide emissions appears in the center of every policy. We cannot deny still we exploit the nature more than ever, but no one still believes that this globe can last forever. Separate garbage collection, the ban on using plastic products, and greenhouse gas emission control etc. are now working as social devices. All of these are the social outcome of what societies have learned.

As mentioned at the very beginning, it is learning that characterises the era of modern economic development for recent 200 years comparing with the previous stages. The birth of 'the schooled society' is a major symbolism that represents how human learning in popular form has been institutionalized to play a key role in modern history. In the past 200 years, education has opened a new chapter in human history by expanding who the learners are and the way they is taught, the way the form and organizations are defined, how institutions and culture are structured, and how the resources are mobilised and distributed.

Some social devices that education has invented indeed brought on epoch-making changes in human civilization. Written languages and literacy are one of representative inventions that has given a huge impact on the pathway of the history of civilization. Popular literacy rapidly cultivated political democracy through general education, so the scheme of 'ochlocracy' or 'mob rule' does no longer find a place. This schooled society created new lifestyle where people spend

their quarter of life living as a full-time student, or even further recently, and by all people ought to finish at least secondary education as compulsory, education came to one of the most important social policy of governments to plan, maintain, and innovate. Simultaneously, the society invented new connection between school and labor market. Also, the establishment of higher education dramatically changed the way knowledge is formed and reproduced, in which teaching and researching are interconnected under unified synergic loop.

Recently we are observing the emergence of a new symbolic stage of education, which is lifelong learning system in that a new educational system is constructed beyond schooling. It is momentum to replace the previous schooled society with the learning society, in which adult education and lifelong learning are expanded and institutionalized. Learning society, in this vein, emerges a new stage of educational system, invented to promote and integrate various forms of learning in a whole society as well as throughout the whole lifespan. The practice of learning cities are part of this discourse.

All these changes are the social emergence of societal learning, more than the aggregate of individual learning. This is the way a system learns. It is the mode of a society that learns. Once a society has adapted, saying, a new environment protection policies, it does not mean that all members unanimously agree the direction. Many oppose to the direction and show other opinions. Despite the controversies, though, the policy keeps its direction collectively. It is a kind of sustainability. Some people reach the understanding of social issues through systems thinking, but most people do not. some urges the necessities to convert individuals into systematic thinking. Though not reaching the final destination, it is necessary to invent social conditions and momentum to switch individual thinking into a part of systems thinking.

6. A social system that learns

The meaning of what society learns is that a society constructs a way to react to a certain environmental changes, and have a way to customize or stabilize them. In other words, the newly "learned" way of social operation is stabilized enough to maintain for a quite long period of time. As like individuals doing, a society customizes the once-learned-adaptation-pattern over time. We call the changes 'learning', and the outcome 'institution'". So, in this manner, a learning in societal level is a merged combination of institutionalization and its re-adaptation.

To meet the goals of global sustainability, what we had focused mostly was of individual learning dimension. We have taught individuals ESD as a subject: about what sustainability of the Earth is and why it should be learned under the name of Education for Sustainable Development (ESD). We supposedly believed that those activities are sufficient enough to bring sustainability in reality. In fact, this was what schools and education had devoted. However, a society's new trait of 'sustainability' is a total different story from the accumulation of

individual mindsets. Let's consider this issue with some help of some premises of complex systems theory.

The premises are as follows: first, (1) a society consists of individuals. (2) But, the society is more than the aggregate of individuals. Based on the first premise of the complex systems, that is, the premise 'the whole is greater than the sum of the parts', a society include changes far beyond the simple sum of individuals. In other words, the aggregate of individual learning is not enough to explain the changes in the society. (3) The society is comprised of the relationships between individuals. Relationships occur between at least two independent persons, so an individual cannot solely control or manage the whole relationship entirely. A society consists of the relationships, and the relationships have the multiple structures which are not controlled by a few individuals. (4) This multiple complexity of structures provides individuals only limited rationality about the society. Individuals can predict or design only a part of the changes of the society with imperfect rationality. (5) Despite the imperfection, a society consistently makes new collective adaptation patterns little by little, and the individuals observe the adaptation patterns, reflect them, and communicates to improve them. These collective adaptation patterns are, at least in terms of individuals, 'a status of emergence'. That is, the new trait which had not been existed before suddenly emerges to be gradually improved in the level of whole society. In this process, the imperfect rationality of individuals slowly approaches to a likely perfect rationality through collective experiences and reflective social thoughts.

Of course, don't expect this process will be as smooth as silk. It surely is accompanied by inevitable political value conflicts and interest confrontations. However, don't be disappointed. This wonderful process of inevitable value conflicts can be re-written as a process of collective and democratic learning process rather than a political contestation, so we can experience self-evolution and self-learning through the very existence of social dilemmas and double bindings (We call this process as expansive learning recently). Here, 'emergence' refers to the new trait of social systems acquired by learning a new pattern of adaptation to the double binding. What we call 'leaning society', in this sense, is a model society in which the collective learning process is prevalent, so the society is equipped with competency to solve the problems inside by itself through consistent emergent evolution and learning.

Mostly, the emergent appearances are represented as a process of institutionalisation in society. In other words, a society creates a new institutionalisation in the process of solving a problem. For instance, we can make new indicators and goals, and systems and policy for pursuing the value of global sustainability. Yet, this process does not end up immediately with a few lines of laws, vision papers, or action plans. One system keeps learning in the process with consistent revision and improvement through the participation of the people. Say, once a system refers to a mechanism for stabilization and perpetuity of chosen human behaviors, the sustainability also should be realized clearly through the institutional evolution consistently.

Many further studies and experiments are required. Still, we educationists do not have enough knowledge and study experience on that type of learning society theories. We have just accumulated theories through individual learning, and not familiar to making the society learn, which can be compared to city as 'a giant' consisting of individuals. Instead of making the giant move by rolling it unnaturally, now we should let the giant wake up, walk by oneself, and learn autonomously. Learning society is a learning giant. I am looking forward to the giant's step toward sustainability.

(end)