Environmental Awareness and Environmental Practice in Korea

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Abstract

As the environmental crisis has become more serious, enhancing environmental awareness and practice is crucial. However, for modern-day people who are accustomed to manufactured spaces, civilization-friendly behavior is regarded as normal and environment-friendly behavior as abnormal. If societal members recognize that the expansion of manufactured space brings about environmental destruction, then it is safe to assume that environment-friendly behavior will increase. As found in the Korean case, where the expansion of manufactured space is stressed without noticing the results it will bring, environmental information is not sufficient; given this situation, environmental awareness and environmental practice in Korea seem far from sustainable.

Keywords: civilization-friendly behavior, environment-friendly behavior, organized irresponsibility, global warning, environmental information, sustainability, externalization of burden

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Crisis of the Natural Ecosystem and Environmental Information

Modern-day people live in isolation from the natural environment. In cities where modern civilization is concentrated, people can live their whole lives without ever walking an entire day on real soil, or without feeling either hot weather or cold temperatures. They cannot imagine life separated from civilization or manufactured spaces.[1] They tend to regard separation from the natural environment or the creation and expansion of manufactured space as progress and have illusions about the infinite expansion of manufactured space.

With the development of modern civilization, the enjoyment of modern conveniences is regarded as normal, while environment-friendly behavior grounded on environmental awareness is considered abnormal. Put another way, while civilization-friendly behavior is located at the center of a normal distribution curve, environment-friendly behavior is located at the extreme left and right of the curve. This means that civilization-friendly behavior is regarded as socially accepted while environment-friendly behavior is not.

Manufactured space exists within the bounds of the environment. That is, manufactured space can expand as long as it is accommodated within the capacity of the environment. But it pushes this limit, as if to transcend environmental boundaries. Breaking environmental boundaries is unimaginable, because manufactured space can exist and remain stable only within the bounds of the environment.

Although the environment is fixed in size, manufactured space continues to expand, exceeding the capacity that the environment can accommodate. Such is the nature of the conflict between the infinite expansion of manufactured space and the finite environment. The conflict will continue as long as manufactured space expands, which will mean greater environmental destruction.

As German sociologist Ulrich Beck's concept of *organisierte Unverantwortlichkeit* (organized irresponsibility) signifies (Beck 2003), modern people are not interested in the consequences of the expansion of manufactured space. The fact that civilization-friendly behavior is seen as normal and defines the center of the normal distribution curve means that people do not call each other to account for their irresponsible behavior and attitude towards environmental destruction. They refuse to accept the fact that manufactured space and civilization-friendly behavior cannot expand indefinitely and that expansion is limited by the finiteness of nature. This is a denial of both the environment and the foundation of human existence. The attachment of modern people to manufactured space accelerates the destruction of the foundation of existence for all life forms. The environment surrounds the exterior of manufactured space, the expansion of which destroys the foundation of its own existence.

The cause behind "organized irresponsibility" lies in the fact that societal members have to act in accordance with the modern social system, which operates on the principle of infinite expansion. Subsystems that do not expand drop out of it. Almost all modern people who do not want to lose out act according to the expansion principle of the modern social system, and the outcomes of their acts further reproduce this expansionist ideology (Lee 2004).

More concretely speaking, reproduction of the expansion principle entails the expansion of manufactured space. If people do not act according to the expansion principle, they cannot maintain the same living standards as others and thus fall behind. They have no choice but to act according to the expansion principle if they want to maintain their customary living standards. The harder they try to do so, the larger the manufactured space becomes (Lee 2002).

Societal members need to be provided with the "environmental information" that environmental destruction stems from the infinite expansion of manufactured space beyond the capacity of the environment to sustain, that is, the conflict between infinite social ecosystem and finite natural ecosystem. It also voices the need to restrict the expansion of manufactured space on behalf of the finite environment (Jo 2001, 372).

1. Urbanization hovers at around 87 percent in Korea. It reaches about 90 percent in most industrialized countries. See Yang (2000, 186).

In other words, environmental information points to the need to give up modern conveniences and accept an inconvenient life, signifying a critique and denial of civilization. Furthermore, it imposes a tough decision on modern people who live in manufactured spaces and are inured to it. Thus, it can be said that the more abundant environmental information is, the more environment-friendly behavior will increase. This is because environmental information helps societal members reflect upon the negative results of civilization-friendly behavior.

Environmental information fosters environmental awareness, which promotes good environmental practice. Environmental awareness takes issue with civilization-friendly behavior and organized irresponsibility, such that action based on environmental awareness becomes environmental practice. Environmental practice requires a shift from civilization-friendly to environment-friendly action. Environmental awareness is formed by environmental information. Thus, as more environmental information becomes available, environmental awareness increases, which can thereby be more easily translated into practice.

Market-Oriented versus Environment-Oriented

Environmental awareness and environmental practice are interrelated. In general, a higher level of environmental awareness produces better environmental practice, and the former is determined by the quantity of environmental information available. Also, the quantity of environmental information is usually determined by the orientation of the society, which differs from country to country. Some societies have a large amount of environmental information and others have less. Typically, the availability of environmental information differs between countries in which development is a relatively high societal priority and those in which the environment is a relatively important factor. It also differs between countries that maintain a well-established welfare system and those that do not.

Economic growth and the environment are opposing values, as are the market and the environment. Because the expansion of private space cannot go hand in hand with the maintenance of shared space, the expansion of private space must be restricted in order to preserve shared space. The expansion of the market and the preservation of the environment cannot be sought simultaneously. In this sense, the concept of sustainable development is self-contradictory (Yi 2000).

The environment is a shared space, and environmental destruction means its destruction, which has already progressed rapidly with the creation of modern society. The center of modern society is the market, and since a basic principle of the market is the expansion of the private space, this means the destruction of shared space. This corresponds exactly with the rapid environmental destruction that has taken place since the emergence of modern society. The self-regulatory function of the market is concerned only with the expansion of the private space and does not consider shared space, and its corollary, environmental protection.

Figuratively speaking, the market works on the connection and operation of a system in which the small and large teeth of a wheel interlock and go into gear. The scale of this system is immense, as it organically links domestic and international markets. The whole world is integrated into a system existing beyond national boundaries and industrial attributes. A primary condition for their integration into a global or national system is the teeth that are connected to the market system being able to reach the average expanded reproduction rate[2] operating on it. Those that do not meet the average expanded reproduction rate cannot remain connected to the entire

2. An average expanded reproduction rate is a concept similar to economic growth rate. While the latter refers to a point already reached, the former refers to a point societal members should reach in the future. Average expanded reproduction rate puts pressure on a society. The current year's expanded reproduction rate is estimated based on the economic growth rate of the previous year and acts as an operational principle for societal members as well as all social organizations, including enterprises.

system and thereby disappear altogether. Systems with many teeth not up to the average rate cannot maintain connection to other systems and disintegrate, dropping out of the system of modern industrial capitalism. Similarly, societal members cannot continue on as elements comprising the system any more.

There are several reasons for this. One is that the system does not produce goods that sufficiently satisfy utility, nor does it distribute goods to consumers effectively enough. A system is taken out of the race if it fails to reach the average social profit rate. This is because the ratio of profit to total capital and labor invested for the constitution of the system falls below the average social profit rate.

This is the central principle and overarching rule of the market, which also acts as an operational principle applied to almost every sphere of society. Systems that do not meet the average social profit rate drop out of the system altogether, while those that do remain well connected with one another. Systems that do not follow the rule of the market lose connection with other systems, while those that obey maintain connection with others.

But the problem lies in that the operation of the system and the actions of members following the rule of the market cause environmental crisis. The rule of the market is to expand at a certain rate each year, and thus, the operation of the system and the actions of members expand the social ecosystem, i.e., the manufactured space.

This is the dilemma of modern society. It can be described in terms of the following contradiction: If the modern social system does not follow the survival rule dominating it, it will collapse in the short term. But if it follows the rule, it will reach the limits of the environment, and the entire system will collapse in the long term. While the short-term collapse threatens the survival of humankind, the long-term collapse means the extinction of all living beings on earth.

A logical solution to the dilemma might be found in following the survival rule as applied to the modern social system in the short term, but not in the long term. One scenario might include the modern social system being freed from the controlling force of the expanded reproduction rate, i.e., the rule of the market that influences the system. In order to resolve this dilemma facing modern society, information must be made widely available. The widespread provision of systematic and objective environmental information can be an important mechanism with which to make people realize that domination of the expanded reproduction rate cannot go on indefinitely. Without it, people cannot be expected to take environment-friendly actions.

Generally, environmental information is abundant in countries that emphasize the necessity of maintaining shared space, i.e., countries that do not leave environment at the disposal of the private space. Countries that accept the environment as a shared space and understand that restricting the expansion of the private space is crucial for environmental protection usually have an abundance of environmental information available. Meanwhile, countries that stress expansion of the private space and regard the environment as a means toward its expansion do not have much of this information. In comparison to those countries that leave many things up to the market, welfare states in Western Europe and countries with abundant environmental resources (such as Switzerland, Australia, New Zealand, and Canada) tend to be replete with environmental information and are advanced in environmental awareness and environmental practice.

Environmental Problems in Market-oriented Korea

Climate Change in Korea and Global Warming

Climate change is progressing rapidly across the world, with Korea experiencing the same problem in recent years. One notable change in Korea is the decreasing hours of sunshine. In 2003, the number of hours of sunshine was reduced by one-third of an average year in Korea,[3] while it increased one and a half times in some nations. Due

3. According to the Korea Meteorological Administration's data, the average number

to this abrupt change, agricultural crops are decreasing rapidly worldwide.

From the mid-1990s to 2003, summer in Korea rarely had clear days. In late July of 2002, the peninsula was hit by a series of typhoons, bringing strong winds and rains. Typhoon Rusa inflicted immense damage. Gimcheon (Gyeongsangbuk-do province) and Gangneung (Gangwon-do province) endured record-level rains pouring down in a short time—750 mm and 900 mm, respectively—suffering a great loss of human lives and property.

For the last 7 to 8 years, Korea had unprecedented amounts of rain in early August with cloudy skies and cool temperatures in the morning and night. The heat waves that used to plague the country from late July to early August are gone. The summer weather in Korea has changed. This does not seem to be the result of freak weather events, but rather seems to herald climate change resulting from certain causes. If weather patterns of the past do not return and the new weather continues in the coming years, it will certainly indicate a large-scale climate change.

Previously, the monsoon season in Korea typically started in late June and continued until early July, bringing with it heavy rain showers and towering masses of clouds every year. The average precipitation during the monsoon season reached about 700-800 mm, but it has now gone down to 50 mm on average. Oddly enough, even heavier rains fall from late July to mid-August. Furthermore, the precipitation is concentrated in specific areas, inflicting damage to crops, property, and human lives in incomparable magnitude from the past.

Autumn in Korea is generally characterized by clear blue skies, moderate temperatures, and little precipitation—it is said to be the best time of year. But for the last 7 to 8 years, Korea has not enjoyed

of hours of sunshine from June to August for the past thirty years was 529.1. In 2003, however, this number dropped to 343.3 hours. In 1999, the average for the year was 509.2, with 490.3 in 2000, 489.9 in 2001 and 428.4 in 2002. The sudden reduction of the hours of sunshine between 2002 and 2003 is thus particularly striking.

beautiful weather in autumn. Instead, overcast skies linger with occasional bursts of rain. In 2003, heavy rainstorms hit many parts of Europe, causing the Elbe River in Germany to overflow. In China, Lake Dongting was on the verge of flooding. This year, a severe drought took hold in Europe, scorching agricultural produce. Korea, too, had an unusually long rainy spell from late June to mid-September of last year. Hours of sunshine cut by nearly one-third caused great damage to farmers. All of these strange weather events over the past several years do not seem to be idiosyncrasies but rather signs of worldwide climate change. There is no known method to stop it, and it will surely get worse.

Why do these things occur? Are they temporary, errant weather patterns that deviate from a normal distribution curve? If not, what are they? What causes these observed climate changes, not just in Korea, but in almost every part of the world? It is believed that the changes in Korea are caused by the rise in the surface temperature of seawater off the Philippines by 2 to 3 degrees Celsius. The rising surface temperature produces hot air and generates typhoons and rainstorms, thereby causing climate changes in Korea from late July to August as well as early September.

The rise of the surface temperature of seawater is the result of global warming. Global warming, by raising the seawater surface temperature, not only generates typhoons and downpours but also fundamentally changes the climate. It disrupts the balance and stability of the atmospheric flow. As global warming accelerates, far from being halted, climate change will also accelerate, producing far more fatal results in the future than it does now.

Global warming is known to be caused mainly by energy consumption and CO_2 emissions, and yet petroleum consumption continues to rise. No single country has cut down on per capita energy use; all are increasing. Moreover, a convention to control the CO_2 emissions has not been passed, as countries have not yet agreed upon control guidelines.

Until now, global warming has primarily been associated with the rising seawater levels from the melting of glaciers and permanent

snow in the Arctic and the Antarctic. This problem tended to be viewed as a first-degree function with two variables: time and the rise of seawater levels. But global warming is not a first-degree function with a single cause and a single effect; it is a function of multi-degree polynomial simultaneous equations with numerous causes and outcomes, many of them unpredictable.

It is predicted that Korea will eventually have a subtropical climate due to global warming. Should this come to pass, the question remains of whether plant life in Korea and in the world can adjust to the speed of global warming. If it cannot, what will happen? Will all plants on earth disappear?

There is a time lag between environmental destruction and its boomerang effect. Taking environment-friendly action after environmental destruction is futile, like closing the barn door after the horses have already fled. Thus, environmental information must include a function of forecasting environmental changes in nature. It is critical that environmental information warns of environmental crisis before its destruction.

What is significant is whether the atmosphere will be able to recover its balance after it has been disrupted. An instant solution is the immediate reduction of fossil fuel consumption, a major cause of global warming. To this end, societal members must become aware of the current status of environmental destruction and change their behavior accordingly.

Air and Water Pollution in Korea

> Concerning Korea's high economic growth achieved in a short period of time, many feel pride in the effectiveness of the government-led market economy. But the high increase rate of pollutant emission indicates that the market economy was probably even more effective in accelerating environmental pollution than it was in bringing up the GNP (Yi 1994, 324).

After Korea entered a phase of rapid industrialization in the 1960s, energy consumption increased rapidly. Petroleum consumption per day rose from 280,000 barrels in 1975 to 485,000 in 1980, 515,000 in 1985, and 1,185,000 in 1991 (KSA 1992, 82-89). While the GNP multiplied 3.8 times between 1975 and 1991, petroleum and coal consumption rose 4.2 times and 3.0 times, respectively, during the same period. Energy consumption has exceeded economic growth, which means that Korea is an energy-inefficient country.[4]

While energy consumption increased three times—from 12 million tons to 40 million tons—between 1965 and 1979, the emission of sulfur oxide, a typical air pollutant, rose nine times—from 160,000 tons to 1,460,000 tons—during the same period. Energy consumption per person increased two and a half times while sulfur oxide emissions per person increased almost seven times.

Meanwhile, whereas the GNP increased only 64 percent between 1980 and 1986, innocuous and harmful industrial waste discharge rose by 100 percent and 90 percent, respectively, while biological oxygen demand increased by 70 percent, sulfur oxide emission by 65 percent, nitrogen oxide emissions by nearly 70 percent, and carbon monoxide emission by 75 percent (Yi 1994, 321-322).

Korea is energy-inefficient in terms of carbon dioxide emissions, as well. Carbon dioxide emissions per GDP was 0.36 kg per US$ 1 in 1988, while it was 0.11 kg per US$ 1 in Japan. In per capita emissions, Korea is lower than Japan with 1.28 tons per person vs. 2.25 tons per person, but in per capita national income, Korea consumes much more energy than Japan.

The density of sulfur dioxide gas, which is produced mostly in the process of refining petroleum and metal and chemical treatment of petroleum, was 0.032 ppm to 0.040 ppm on average in the early 1990s, but it has risen gradually. Seoul had 0.056 ppm above the

4. In 1991, energy consumption was 15.6 barrels per person in Japan and 10.1 barrels in Korea. Compared to the level in 1975, it increased more than 5 times in Korea while decreasing in Japan. This is attributed largely to the increase of automobiles and heating and air-conditioning facilities. Considering the difference in per capita national income between the two countries, Korea's energy consumption is higher than Japan's (Choe B. 1995, 256).

allowed national standard of 0.05 ppm.[5] Japan had a relatively high level of 0.037 ppm in 1971, but it has decreased since then, reaching 0.016 ppm in 1980 and 0.011 ppm recently (Choe B. 1995, 256).

Industrial wastewater discharge has increased at an alarming speed as well. In 1985, it amounted to 3,109,000 m^3 per day, but in just four years, it more than doubled with 6,497,000 m^3 per day recorded in 1989. Household wastewater discharge is also rising with the advance in living standards, despite the increase of treatment facilities (Choe B. 1995, 265).

Worldwide economic development naturally increases pollutant emission, but what is problematic about the Korean case is that the emission levels are too high relative to the speed of its economic growth.

Environmental Awareness in Korea

"Environmental information" refers to information that publicizes the destruction of shared space due to the expansion of the private space, while advocating the restriction of that expansion. It provides detailed facts as to the current status and causes of environmental destruction and raises issues about the driving force of a modern society ruled by the average expanded reproduction ratio. It also advocates the necessity of a radical shift in modern society.

Koreans' environmental awareness appeared very high according to a survey conducted in 1990. Asked what would be the most serious problem in the 2000s, 63.7 percent of the respondents cited environmental pollution. In another survey with Seoul dwellers on the seriousness of environmental pollution, 67.4 percent said that it was "very serious," and 31.4 percent said that it was "serious." Combining these two categories, thus, the vast majority of those polled identified environmental pollution as a serious problem (Choe S. 1995, 239).

5. It has been known that the density of sulfur dioxide gas can be lowered by developing alternative energy sources and using low-sulfur fuel produced by desulfirization.

However, the survey results do not necessarily guarantee a high level of environmental awareness in Korea. The following passages demonstrate this clearly:

> After the phenol accident, which resulted in the serious pollution of the Nakdonggang river, many people bought bottled water or scattered to nearby areas with jars to collect underground or other natural water, rather than try to understand what caused the accident and organize a social movement to react to the mishap, thereby eliminating the polluting source in a collective effort. . . .
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> Since 1984, the wastewater discharge from factories in the dye industrial site of Daegu has never been under the permitted level, not a single day. . . . The factory owners are swept up in the idea that money is everything, thinking that they will continue the practice whatever the cost so long as they can maintain and expand their personal profit. Politicians and government officials, who tacitly approve such practice or even promote it, have a distorted notion that environmental problems can be ignored for the sake of economic growth (Choe B. 1993, 196-197).

The passages cited above show that the actions of citizens, government and corporations are far from environment-friendly. Also, it can be pointed out that the high environmental awareness observed in the opinion survey is not reflected in reality, with societal members lacking awareness and self-judgment for their actions (Jo 2001, 372). Despite the survey results, Koreans do not seem concerned with the problems of expanding manufactured space and civilization-friendly behavior, and have not yet progressed from civilization-friendly behavior to environment-friendly behavior.

Of course, it cannot be denied that the focus of environmental awareness and the environmental movement has shifted from crisis treatment to crisis prevention. However, citizens typically blame businesses and government for destroying the environment, rather

than taking responsibility for their own actions. This may be called "passing-the-buck" environmental awareness, or an environmental awareness based on collective selfishness. This is not to suggest that citizens should not take issue with businesses and government. Undoubtedly, it is true that considerable environmental destruction has been caused by businesses and the public sector, especially government-owned corporations. However, environmental organizations in Korea primarily target environment-unfriendly government programs and policies as well as cases of environmental pollution by businesses. What is lacking in the movement is an act of spurring a change in citizens' awareness and behavior.

The reason there is a considerable gap between survey results reflecting citizens' high awareness of serious environmental problems and the grim reality of environmental destruction is that Korean society is oriented toward growth and expansion of private spaces in both the short term and the long term, and environmental awareness, as it is understood in Korea, is merely a way of shirking individual responsibility for collective selfishness. As we can infer from the population density and heavy concentration of industry in urban areas, Koreans seem to prefer manufactured spaces, with civilization-friendly behavior defining the center of a normal distribution curve.

To reiterate, Korean society seeks growth and expansion of the private space rather than the preservation of shared space, i.e., the environment. They are unwilling to restrict the expansion of the private space in order to preserve shared space. Accordingly, a relatively small amount of environmental information is available in Korea, which is also closely related with the low level of environmental awareness and practice.

The reason for this scant environmental information is the interaction of social pressures for private material expansion and conspicuous public displays. Having helped raise the average living standards of Koreans, high economic growth stimulated economic activity and imposed social pressure for a high expanded reproduction rate, further reinforcing the expansion of the private space.

Perhaps more so than in other societies, another social pressure

for public ostentatiousness operates heavily on Korean people. This is expressed through material consumption, which in turn drives expansion of the private space and destruction of the environment. Public ostentatiousness, i.e., showing off the size of one's material possessions, is thus premised on the destruction of shared space.

Welfare states and countries with abundant environmental resources may have relatively higher awareness than other nations, but this does not necessarily mean that the quantity and content of such information has reached a level sufficient to solve environmental problems. Such countries are only concerned with the environment and the shared space because they put human beings before everything else, even the environment itself. In other words, the environment is not important per se; it is important for the well-being of humanity and as a resource for tourism.

In sum, Korea, where social pressure for conspicuous consumption is stronger than most other societies, lacks appropriate environmental information. Accordingly, Koreans have lower levels of environmental awareness to put into practice.

Calls for Sustainability

Sustainability is a concept created to draw attention to the problems arising from the expansion of the modern social ecosystem beyond the self-purification capacity of nature. Using the metaphor of the salt dissolution capacity of water, it is as if too much salt has been poured into water with many undissolved salt grains remaining. The undissolved grains represent the social ecosystem that is oversaturating the environment and is a danger to all life in the natural ecosystem.

The modern social system operates on the premise of the externalization of burden. To give a concrete example, the automobile engine works on the premise of emitting exhaust gas, which is an externalization of burden. In order for humans to enjoy utility beyond their basic needs, their behavior operates on the premise of burden externalization. The pursuit of sustainability was spurred by criticism of burden

externalization. Sustainability demands human behavior and system operation that do not require burden externalization. However, without a deep and thorough interrogation of the modern social system's externalization of burden, the pursuit of sustainability is at best an ethical request derived from logical inference, and at worst, a powerless catchphrase wanting of practice. It is easy to call for the construction of a social system that does not presuppose externalization of burden. However, the modern social system is moving ever more strongly against the direction that is urgently required to proceed.

The driving force behind the state, businesses, and individuals is the goal of attaining high economic growth and profit maximization, not pursuing sustainability. Seeking sustainability would mean lagging behind in the world market and failing to maintain basic standards of living.

The expanded reproduction rate predetermined in each society every year compels societal members to make the goal of reaching it top priority. The rate is the average figure earned by dividing the realized profit of "maximum" and "minimum" economic action by the total number of economic actors. It determines the minimum range of economic action to be taken by businesses and societal members. In other words, the primary goal is to reach the minimum expanded reproduction rate (Lee 2004). While those who fail to reach the expanded reproduction rate fall behind, those who pass it exceed the average standard of living.

However, the economic actions of societal members do not remain within the "minimum" range. They seek "maximum" economic action, i.e., profit maximization. That is, their goal is not to reach the "minimum" range of economic action, but to reach the maximum level of profit.

Seeking to maximize growth and profit is not merely an option that individuals can choose but is an imperative stemming from social pressure. That one has to reach at least the average social expanded reproduction rate in order not to fall behind is a condition of life for modern people. The expanded reproduction rate operates as social pressure, and the aggregate efforts of societal members to

respond to this pressure is the force that makes modern society march forward, blind to the consequences of collective inaction.

Modern society can be compared to Jagan Nath's carriage in Indian mythology (Giddens 2003). With enormous driving power, the carriage surges forward, destroying everything in its path. If one is not to be run over, one must mount it, even without knowing where it is headed. The principle of sustainability is a call to control, with human power, over the expanded reproduction rate. Here, the issue is not merely a call for control, but also a methodology of how to control it. Namely, we are searching for a way to reduce the externalization of burden arising from the headlong rush of Jagan Nath's carriage.

In this context, the following passage in Ivan Illich's work has many implications:

> The bicycle also uses little space. Eighteen bikes can be parked in the place of one car, thirty of them can move along in the space devoured by a single automobile. It takes three lanes of a given size to move 40,000 people across a bridge in one hour by using automated trains, four to move them on buses, twelve to move them in their cars, and only two lanes for them to pedal across on bicycles (Illich 2004).

Environmental policy and institutions must be formulated on the basis of the idea founded in this passage. This means providing support through policies and institutions to help societal members gradually step out of the blind competition to reach the expanded reproduction rate. One way to do this is to intensively manage the areas where the bulk of burden externalization is produced.

Yet the possibility of producing such policies and institutions is proportionate to the level of environmental awareness among societal members. With undeveloped environmental awareness, even good policies and institutions have a lower probability of attaining the desired goal. Therefore, making people understand the seriousness of environmental problems is of foremost importance. This can be an

important strategy to help people exit the blind competition for an expanded reproduction rate and maximize conspicuous utility.

Conclusion

Environmental information in Korea has two problems. First, most information created by environmental (nongovernmental) organizations in Korea criticizes enterprises and policies of local and central governments, but seldom attacks or takes issue with the civilization-friendly behavior of societal members. More specifically, environmental (nongovernmental) organizations pay attention only to massive reclamation projects, dam construction projects, and environmental destruction by corporations (Ku 1995), and are not concerned with environmental risks imposed by societal members who pursue maximization of profit and utility, commit environment-unfriendly behavior, or engage in conspicuous consumption. Also, such environmental information does not contextualize the interrelationship between the serious climate change of the peninsula and the behavior of societal members.

Second, the public sphere of Korean society is market-oriented. Neither the problems of environmental destruction caused by the expansion of the market nor the impossibility of infinite expansion of the market are addressed by Korean society. Meanwhile, in Habermas's terminology, the public sphere of Korean society is partly "refeudalized" and partly commercialized. That is, it is controlled by government and by commercial enterprises. A commercialized or refeudalized public sphere prevents citizens from becoming aware of environmental crisis.

The issue of externalization of burden has not been sufficiently addressed either. Little discussion is made about sustainability in Korea. Thus, environmental awareness and environmental practice seem far from being sustainable.

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