Global Warming and Environmental Thought

This article is a revision of a public lecture hosted by this Institute on 5 November 2007.

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THE theme of today's lecture concerns "global warming and environmental thought," which may seem a somewhat serious subject, but please bear with me. I have enjoyed mountain climbing since I was a child. After I became a junior high school student I went mountain climbing in Tanzawa, Kanagawa prefecture. As I grew up in the urban area of Yokohama, I yearned for mountains and nature all the more. In the city we could only find large brown cicadas, which are quite common, so I really wanted to find rarer ones, such as robust cicadas or Japanese cicadas. When I fished in Yokohama, I was pleased to be able to catch Japanese sea bass, for example. However, when I went to the mountains there were so many different species, including Japanese dace, and I used to play around by trying to catch them with a harpoon.

These experiences led me to join the mountain climbing club during my high school and university years. When you climb a mountain, your mind opens up and you forget about the city. During the summer climbing season in particular when I was at university, I used to stay in the mountains for over a month. At times my friends and I carried leftover food in our backpacks after the summer camp was over and went rock climbing. So, basically I led a laid-back life for as long as two months before I returned home. In winter, if you were trapped by a blizzard, you could not get down from the mountains until around the middle of January. By the time you got back, the university exam period would be over. In February and March, I would be in the mountains for more than a month for the spring mountain camp, which meant that the make-up exams would be over. Ultimately, it took me seven years to graduate from university. Most people in mountain climbing clubs at universities did not graduate within four years. It was such a carefree time of my life.

What I Learned from the Mountains

Although I joined the German Literature Department at Sophia University, it was as if I had entered the mountain climbing club rather than the Faculty of Literature. Although I did read some books, I learned a great deal from the mountains. After coming back from a kind of near-death experience during winter mountain camp, mysteriously I was able to comprehend books on philosophy or Buddhism. I wonder if this is a similar experience to takigyo (an ascetic practice of standing under a streaming waterfall in the heart of a mountain). The ephemeral nature of human life becomes so clear once you are subjected to the harshness of nature. For instance, once I climbed a rocky stretch of Mt. Hodaka in winter with a climbing rope. I hammered a piton on a rock with my body trussed up, and waited for three or four days for the blizzard to stop. I thought to myself, "if this continues for another three days I'll die." Human lives are so ephemeral-no matter how hard you may try, or however many times you may have walked up a mountain, if you slip once you can die. Also, when you look down the mountain from the summit, hikers just look like specks. Then you feel that from the perspective of God or Buddha perhaps, humans are just like specks. From that height, you cannot tell whether someone is tall, good looking, or rich. One can only judge a person by the enthusiasm with which they tried to live. I felt this way even when I was eighteen or nineteen years old, and it was in this manner that I learned various things from nature.

In terms of my personal experience, I am currently working at connecting children and nature. Today's children in Japan are too far away from nature. I guess most people here today have a memory of playing freely in nature, whereas children these days need to make an appointment just to play together. They have to call their friends and ask, "hey, can you play with me tomorrow?" Then their friend might say, "I have to go to a cram school tomorrow, so let's play the day after that." In the past, if a child stood in front of their friend's house and yelled, "Hey [such and such]! Let's play together," then their friend would simply join in. Take a look at today's parks, for example. You see young mothers pushing baby carriages but I have not seen children playing kick-thecan or dodge ball recently. I am very concerned about this so I am involved in nature school activities and encourage everyone to take children into nature. I hold various positions in this field, for example, the head of the Edogawa Eco Center, the head of Chiba Nature School, and the Vice General Director of the Toyota Nature School.

Today's theme is "environmental thought," but since I am not a schol-

ar I would like to talk based on my experiences as an "environmental journalist" when I worked for newspapers. Fundamentally, when each of us considers how we should behave in nature, I believe that thinking turns into something similar to environmental thought.

From Pollution to Environmental Conservation to Global Environmental Issues

Firstly, I'd like to discuss how environmental problems have changed in various ways. As a newspaper journalist, I was in charge of covering environmental problems from around 1980. At the time, the idea of the environmental issues was closely connected to pollution. So long as I researched victims of air pollution, patients of Minamata disease or Itaiitai (literally "ouch-ouch") disease, the corporations who were the perpetrators, as well as courts, lawyers, and the Ministry of the Environment, then the answers were essentially framed within those boundaries.

However, from around the middle of the 1980s, the issue of environmental conservation emerged. Although these issues had been raised before, it was around this time that the public started to say things like "the extent of environmental damage is too severe" and "things can not stay as they are." Many problems, such as the Nagara River Estuary Dam, logging along the Shiretoko Peninsula, the land fill in Nakaumi and Shinji Lakes, and so on, began to arise. So newspaper journalists, who were untroubled so long they only had to deal with pollution-related problems, started to work on environmental conservation issues as well. Depending on where the problems appeared, they needed to visit various places, such as the Shirakami Mountains. Before then I was able to research everything in Tokyo. But the number of journalists dealing with this did not change and I became extremely busy after that.

Until then journalists somehow got by, but from around 1988 issues concerning the global environment intensified. These issues were so complex that we could not comprehend them at first. We visited various specialists, such as those who dealt with climate. While studying together with officials from the Ministry of the Environment, journalists started to write articles on global warming or the destruction of the ozone layer. At the time, however, readers could not understand these terms. So, for example, I would include a footnote explaining terms like "ozone layer" at the end of the article. These days, however, even primary school students know what the ozone layer is.

As global warming is an international issue, we had collect information from the Ministry of Foreign Affairs. We also had to collect stories

from places like the Ministry of Economy, Trade, and Industry (former Ministry of International Trade and Industry), Japan Federation of Economic Organizations, and large corporations because global warming had a direct impact on the economy. Furthermore, we needed to talk to politicians. You might have already heard this, but it was a political showdown that finalized the Kyoto Protocol in 1997. Former Prime Minister Hashimoto and Mr. Clinton decided via telephone conference that Japan would operate at minus six percent, the United States at seven percent, and the EU at eight percent. Political decisions are made in this way by top leaders. Journalists in newspapers' social affairs departments cannot reach these people. Without help from our colleagues within the newspaper's political department, politicians would not talk to us. Journalists needed to cooperate with political or economic departments, which complicated the research process. Finally, the last problem was English. With the advent of the Internet, new information, such as statements by the governments of the United States or the United Kingdom, became readily accessible. As we wrote stories based on information from the Ministry of Environment of Japan or other researchers, we needed to re-check the content each time because the United States government might have changed their statement during that time or even the day before. Therefore, we needed to be able to read English. Since environmental issues have expanded in such a complex manner, we have come to a point where newspaper journalists cannot keep up with things.

In my opinion, each issue related to global warming requires a journalist with specialized training. There are nine major global environmental problems: global warming, the destruction of the ozone layer, the decrease of tropical rainforests, pollution in developing countries, acid rain, desertification, the decline in biodiversity, marine pollution, and the trans-boundary movement of hazardous waste. In addition, we have domestic problems, political issues, and problems related to nature conservation. This means a newspaper company needs at least five or six specialized journalists to cover all this. However, no company has these resources available. This shows that environmental journalism still has a long way to go. Short-term economic gains or financial problems take precedence. Television shows, for example, reports on entertainment to the extent that one questions whether the media is actually serious about environmental problems or not. I hope that TV shows would spend a little more time on issues like global warming, even if only for five minutes, instead of wasting time on such frivolous stories.

I digressed from the main theme, but it is getting more difficult to understand environmental problems. For instance, what is the Kyoto Protocol? Only those who have a deep interest in this will remember the meaning of CDM (Clean Development Mechanism) or Emission Trading, which were determined in the Kyoto Protocol. It is said that Japan must reduce the amount of greenhouse gas emission by six percent between 2008 and 2012. However, the question is what year's emission figures mark the standard point from which this six percent should be calculated? If fact, we should be using the amount of emissions in 1990 for comparison but we do not know if Japan is actually achieving this or not. If correct knowledge does not spread and people do not know the facts, then environmental problems would not concern them. This is why everyone should know the basics to a certain degree.

I sincerely hope that environmental education is dealt seriously in the school education system. Everyone knows the simple mathematical equation 1+1=2, or that Hideyoshi Toyotomi followed Nobunaga Oda. If primary school students were educated about the basics of global warming and the damage it can cause, or why it is important to have a sense of *mottainai* (what a waste!) from grade one, then everyone will remember this. In ten years' time, when the students in grade six turn twenty-two years old, society would change. Germany is a good example of this. It was not such an environmentally-advanced country around 1980 when I started to deal with environmental issues. Actually, the United States was even more advanced in comparison to Germany. However the entire nation of Germany started environmental education twenty years ago, and now it has become one of the leading countries that bases itself on the principles of environmental protection.

Placing Ways of Living and Philosophy at the Center

Although environmental problems have expanded in very complex ways, the first issue that was tackled was pollution abatement. Scientific and engineering studies developed methods, such as eliminating polluted water, or removing sulfur before it goes into the atmosphere.

The second area was improvements in economic and legal areas. In Japan, especially with regards to pollution, civil law was significantly developed. In particular, the issue of compensation had a major influence on the situation in other countries. Furthermore, a great deal of research has been conducted in terms of economy and environment, such as the well-known example of environmental tax.

There is, however, a third area that requires more investigation: life style. In other words, treatments that merely fix symptoms in certain places are no longer enough; the global warming issue is a case in point. It is becoming imperative to look at how human beings live their lives everyday. We seem to be shifting away from practical studies in areas like engineering, agriculture, economy, and law, and moving toward studies that question human existence. We need to consider various issues from the perspectives of natural and social sciences to the humanities, philosophy, religion, and art. This is because environmental problems must be seen from the standpoint of human existence and ways of living. I am trying to discuss environmental thought from this perspective.

It is quite clear that Japanese have wasteful eating habits. The Kabuki-cho district in Tokyo, where lights glow all night long, is a good example of this. Some people declare proudly that it is an unusual town because even young women can walk around at two or three o'clock in the morning in relative safety. Yet it is really not necessary to have lights on all night after sunset. If we think about this, the lives we lead are quite disrespectful toward the environment. We waste resources and live in a hedonistic manner according to our own desires. However, if we continue to live like this the earth will not survive. For example, there are about eighty million cars in Japan. This means that two people own more than one car. If we think about Chinese people who might look at this and say, "China is huge and our railway system is not developed like Japan so we want more cars. We want one car for two people, just like in Japan." This means we would need about six hundred million cars. At the moment there are about seven hundred million cars in the world so we would have to double that amount. If this occurs, the earth could collapse. However, if we told China to stop this, they would respond by saying, "Japanese own one car per two people. Why can't we do the same?" So when things get to this point, the issue is not a matter of money, but rather about how we can all live on earth together. Put very simply, we must think along the lines of, "Japan should reduce the number of cars to the extent that there is just one car for every five people, so China should do the same." We have already entered the age in which this kind of thinking is necessary.

We must change the life style pattern of "mass consumption, mass disposal." As this is an issue that comes from ways of living, the process of change involves areas like philosophy, religion, and thought. Dr. Wangari Maathai, who received the Nobel Peace Prize in 2004, said "Japan has a wonderful word *mottainai*. Why not launch a *mottainai* movement?" For at least two thousand years, all religions have encouraged us not to be wasteful, and to suppress our desires. So, to put it another way, it is no exaggeration to say that environmental destruction

occurred because the power of religion has weakened.

It is important to clean polluted water through technology, and to impose restrictions through laws. However, if we do not go beyond that and approach this issue in other ways, it will be too late. I have been visiting areas in Japan and other parts of the world where environmental problems occurred for almost thirty years, and I can state categorically that none of them have improved; in fact, the situation is getting worse. We need to somehow solve these problems in our lifetime. While you and I will not have to deal with the effects because we will die before they become too serious, our children and grandchildren will suffer greatly from the negative legacy we will leave behind.

Western philosophy separates nature and human beings. This is often called anthropocentrism, and the idea is that human beings are masters of the natural world. Since this long-established tradition views the world as a place that can be used by humans as they wish, some say that environmental destruction took place because these ideas were taken to the extreme. I agree in general with this, and I do not mean to say the West is bad. But as a way of thinking, it places little concern on creatures other than human beings. Nevertheless, from around 1950, for the first time in a modern Western society, Aldo Leopold and other scholars in the United States stated that "From a biological perspective, human beings are one part of nature." Similar ideas by people like Henry David Thoreau regarding environmental thought emerged relatively early in the United States. They were later taken up by philosophers like Arne Næss in Norway, and then developed into more radical areas such as "Deep Ecology." For the past five hundred years or so, society has been based on anthropocentrism and this has gradually changed to an idea that places greater emphasis on coexistence with nature. This is what is called "environmental thought."

When I have discussions with people who work for environmental NGOs in Europe or the United States they often tell me, "The current destruction of the environment comes from Euro-centric rationalistic ideas, so it is difficult for those of us who are at the root of the problem to produce innovative solutions. As Asians like you might have different ways of thinking, let's find a solution by putting our ideas together." Yet Asians did not realize this, in fact. In Japan, as a result of high economic growth, money became more important for people. In China or India, they seem to seek material gains rather than focusing on philosophy. However, when we look at philosophical ideas from the Edo era, or those of India, or Confucianism, many advocate human coexistence with nature. Surely we need to go back to these ideas and learn from them

again. I am not suggesting that we go back to those times. It is, however, important to make them a basis from which to create a new kind of thought for the future.

Children's Sensibility Grows within Nature

Rachel Carson argued that it is more important to feel things rather than to know them. Some say it is better to not tell children the names of plants or animals from the start. If we try to nurture their sensibility and enrich their hearts before providing them with knowledge, children will want to know more. When we take children into nature, they will naturally think, "these leaves have a similar shape, but I wonder they have different names." They can touch the smoothness of a cherry tree trunk or the roughness of a cedar tree and might think, "I do not know why, but I somehow prefer the smoothness of cherry trees." This type of sensibility and feeling is much more important than knowledge.

Carson also felt that the world of children is fresh, beautiful, and full of surprising moments and moving impressions. Most adults lose the sense of beauty and wonder that children possess. As people turn into adults, their hearts become entangled in daily affairs and they forget the wonderful, surprising aspects of the natural world.

In our everyday lives, issues such as getting a promotion at work or paying off our mortgage are much more important and we forget about nature's beauty. I'd like you all to recall when you were a small child. Going to school for the first time, taking a train for the first time, having a teacher visit your home for the first time, and so on...daily life was quite exciting. When my son was about four years old, I took him to Ueno Zoo because he wanted to see an elephant. However, when we came close to the cage, he stood with his mouth wide open, not moving. We could not understand what happened to him. Later, he told my wife that elephants are about the size of a cat or a dog in the picture books but because it was so huge in real life he was stunned and could not move. Adults might laugh at something like this but that's how it might feel when you saw an elephant for the first time. For children, especially infants, the world around them is very new and fresh. If we feel the beauty of nature in this way, then I think we would be quite different as people.

If we do not develop such sensibilities, then even though we can understand the concept of global warming with our minds, we cannot understand it with our bodies. "Heat comes from the sun, and the heat of radiation is emitted with infra-red light. However the greenhouse gases block this, thus making the earth warm." This is the theory but you cannot really understand much from this explanation. However, suppose your father planted a cherry tree commemorating your entry into primary school. When you become a university student ten years later, it grows into a tall tree and all your family members are looking forward to spring each year when it blooms. But what would happen when the average temperature rises by 1.5 degrees due to global warming? This cherry tree that marked your growth might die as a result. You could really understand this increase of 1.5 degrees with your body. From this example, one can understand the real meaning of global warming. You cannot understand anything even if you try to work it out in your mind. Therefore, I suggest that children should be in touch with the beauty of nature, especially when their sensibilities are very sharp.

In Japan, Yasushi Inoue, a writer states, "Children feel the essence of things with their sharp sensibilities." While they cannot express it with words, they have a sense of the four seasons within their bodies. Also, journalist Kunio Yanagida states, "Excellent picture books written by writers and painters with rich sensibilities express the essence of matters just as poetry does. Therefore, we should read picture books when we turn sixty years old." He is saying that we should read good picture books because they will moisturize our parched hearts.

Currently we are working on establishing nature schools in less-populated areas and bringing children to these places. In these schools, local people who work in the agricultural or forestry industries teach their skills to children. In fact, the trouble with Japanese rural areas is that they have lost confidence, and we need to regenerate confidence and pride. Although they have wonderful tradition and culture, when people act with the idea that it is for worthwhile for them to move to Tokyo and make money, then social order becomes skewed. People who have cultivated rice fields for sixty years have excellent skills and can do a number of things. The Japanese term for a farmer, hyakusho, literally means someone with a hundred kabane, which is an honorific term for someone who can do a hundred jobs. In today's society, these people's grandchildren who are in high school do casual work in local convenience stores, earn some money, and feel proud of themselves whereas people who have cultivated rice fields sixty times feel small. This sounds quite ridiculous, but in reality this is close to the present state of affairs. If we do not change this, society will not be able to produce people with deep sensibilities.

Various forms of living wisdom, such as traditional Japanese wisdom cultivated from the Jomon era of five thousand years ago, folk tales, or a method of picking mountain herbs become intertwined and turn into thoughts. If we lose contact with these important sources of wisdom, we cannot produce anything. We have a number of problems and we should work on them. Isn't there some way we can put together elderly people from less-populated areas and children who live in the urban areas and cannot do anything in nature and see what can come of it? My point is that if we can make a system where we put children from rural, agricultural, and fishing areas and urban areas together and in a nature school it would be extremely beneficial. Things would be so much better if we could do something like this. However, these kinds of policies are rarely made so we need to discuss this with politicians more forcefully.

Japan is rapidly changing. Environmental problems are well known now, and many people are concerned with the current situation. Economic growth is slowing down as well. When we consider the declining birthrate and the increasing proportion of elderly people, the culture itself and Japan as a whole will mature. Naturally, people's way of living will also change. It is necessary to shift from the advancements of the twentieth century to a more relaxed society with sensible ways of living. It is not necessary for this small country of ours to cling onto the second highest ranked GNP in the world. We need to lead a more moderate lifestyle. If we can do this, I think the number of people with calm, rich sensibilities would increase. Japanese people are madly running around everywhere. It is fine to walk around at a slower pace.

Let us return to nature once again and rethink the relationship between nature and human beings. It is not just human beings who live on this earth. Although we might think we know what it means to coexist with nature, we actually have no idea.

A friend of mine took a photo of a bear bathing at the Shiretoko Peninsula. The bear was standing about fifteen meters away and was glancing at him. So my friend glanced back but did not stare. The bear glanced back and looked away immediately a few times. Then it started playing in the water. About ten minutes later, it shook the water off its body and left, taking another look at my friend. So both the bear and my friend were glancing at each other. Staring means attacking and this is why they merely glanced at each other. My friend thought it is necessary for wild animals and humans to have just enough adjustment space between each other so that each party could ignore the other. At that time, the distance between my friend and the bear was about fifteen meters, and apparently the limit is about thirteen meters. If you go closer than that, bears will attack. So his point is that both adjustment space and time is needed to deal with each other. I think we can apply this to the relationship of humans and nature. The attitude humans should take is to stand in awe, and to respect nature from a distance. If we have an arrogant attitude that humans are smarter than nature, then nature might turn on us. Mutual avoidance equals mutual respect: in other words, not responding to the other party based merely on our way of thinking but trying to consider their position. That is why my friend merely glanced at the bear. If he had made a scene, he would have transgressed the border. In today's society, humans blindly do things their own way and do not care at all about how animals feel.

For example, say that you are walking down the street and you see a friend walking toward you accompanied by someone of different gender and you do not know what kind of relationship they have. You do not know if you should say hello or pretend that you did not notice them. Most of you would probably pretend that you do not notice them because they could be having an affair. In some cases, this friend would feel a sense of relief that you pretended you did not notice them. So this is an example of providing enough adjustment space—in other words, just enough space to be able to ignore each other.

Now let me tell you a story about an Ezo red fox. Once, some people were at the Shiretoko Peninsula blowing soap bubbles when it was about minus thirty degrees. They were checking to see if the bubbles would freeze when they touched the ground. The next morning, they found the footprints of a fox near the area. It had come down specifically to that spot and no one could understand why. Finally they thought that maybe it came to see the soap bubbles. Apparently soap bubbles of about five centimeters in diameter freeze on the ground. Perhaps the fox was looking at the people playing with them, and it later came to investigate but the frozen bubbles broke on its nose. Mr. Takeda, who researches the Ezo red fox, writes, "I found out that the subject of my observation, the Ezo red fox, was actually observing me.... From the day I discovered this, I started to sense them looking at me from various places: behind a tree, or bushes, or between flowers." This is amazing.

We humans observe animals but in fact we are the ones being observed. I think this applies to the entire natural world. Even crows or sparrows are looking at what humans are doing. Maybe they are thinking, "Humans are doing stupid things, they do not even know they will be the ones who will perish." This kind of understanding of the natural world is extremely important now, and we need to start from this point and move toward seeing how each person can have a relationship with the nature and think about the global environment.

The Edo Era: "A LOHAS Society" that Placed Importance on the Environment

Let us now consider the Edo era. The word "LOHAS," which has been fashionable for the past two or three years, stands for Lifestyles of Heath and Sustainability. It means life that takes into account health, the environment, and its maintenance. This idea started in the United States in the 1980s and was imported into Japan. Examples of LOHAS include eating organic vegetables, carrying your own shopping bags, or using your own chopsticks instead of disposal ones. There are other LOHAS methods like reducing the amount of greasy food you eat or eating more vegetables than meat. It seems that there are many people who want to make money in the United States, but there are also significant numbers who also want to lead a healthy and environmentally conscious way of life. In Japan, too, I was surprised to learn that from a survey that thirty percent of the respondents wanted to lead this type of lifestyle. My guess is that Japanese people are unconsciously leaning toward adopting a LOHAS-type lifestyle.

We can think that women in their late twenties to thirties are at the forefront of areas like fashion. They have the largest disposable incomes. Therefore, when their choices move in one direction, the rest of Japan also makes a considerable shift in the same direction. When women change, men change along with them. I am going off the track here but there is a reason why I choose to teach at a women's college. I thought that if I taught young women about environmental problems, this would be three times more effective than if I were to teach men. Young women change first, then men copy them. In this respect, men do not have such a strong influence on women. When women change, young men follow, so young women influence their boyfriends. After these women bear children, children change due to their mother's influence. This is why teaching women is three times more effective than teaching men.

Returning to my main point, life in the Edo era exemplified LOHAS itself. For instance, around 1603 when the government began, Edo was a totally rural area, and then major development took place. However, after fifty years an order was issued to stop development. So once the basic infrastructure was established, the government decided to halt further development. There was a lack of rice fields during the time of Yoshimune, the eighth shogun, so more of these were plowed, but the government discontinued reckless development. When we look at Japan today, we have already constructed roads, dams and various other

things—we have covered the basics. A few new bullet-train projects may be necessary but there are some development projects requiring tens of billions of dollars, which seems totally unnecessary. Once they established the basic infrastructure, politicians in the Edo government cut the development budget from taxes, thus reducing the number of projects. Today, we can build child-care centers by not constructing new roads. Among developing nations, there is no other country that is so affected by the lack of child-care centers as Japan. We do not have a system where women can leave their children in safe hands and go to work without worrying. Also, Japan does not have a system where women, regardless of their age, can start working at any age. I wonder how many excellent brains of Japanese women are buried as a result of this.

Edo was a great city with a population of millions of people. It is said that there were about 1.3 million people at the end of the Edo era. Among that, 650,000 were warriors, about 50,000 belonged to temples, and 600,000 were townspeople. At that time, London had a population of 900,000 and Paris 600,000, so Edo was definitely one of the largest cities in the world. Interestingly, however, there were just 290 officials who worked at the magistrate's office. So the rest of the society was controlled by civilian rule, which was conducted on a voluntary basis.

The percentage of school enrolments varied between about 75 to 86 percent at the time. School in this case means schools connected to temples. At the time, the percentage of school enrolments in London was about 20 to 40 percent, and Paris 1.4 percent. This means commoners in these cities did not study, as opposed to commoners in Edo. Furthermore, most of the teachers in temple schools did not charge fees. People like retired warriors or temple priests taught for free. If we can apply this to today's society, we would use retired teachers to run cram schools for free. For about three times a week for no charge, they could look after not only the top students but also those who are not great students. This could help prevent delinquency and other problems. People were already doing this in the Edo era.

It can be said that the Edo era was like a great experiment of maintaining a certain level of lifestyle and culture without letting the natural environment of Japanese archipelago go to ruin. Japan was an island nation and the population of 30,000,000 did not change much. Since Japan was sealed off from the outside world, it basically needed to be self-sufficient for food. Cultural arts like ukiyo-e and kabuki developed and Japan was quite wealthy compared to other nations. There were some famines of course, but basically it was not too poor. The country protected the natural environment without developing areas recklessly, and this was sustained for as long as 270 years. The Edo era may be a model for "Spaceship Earth." We have as many as 6 billion people on the earth. In order for us to live together in harmony, I think Edo-era Japan provides us with a good reference point.

In Edo, waterworks like those in Tamagawa were established. They were the first of their kind in the world. But there were no sewerage pipes because there was nothing that could be flushed away. Farmers purchased human waste, which was completely reused. Salads were not eaten in Japan in the past. As vegetables were produced using human waste as fertilizer they contained roundworms. They needed to be washed and cooked in order for people to eat them. I think the custom of eating raw vegetables became popular after the war. It is a tradition from Western countries. In any case, large cities were called great manure factories, and all the human waste from the townspeople were sold in good prices. This became a source of income for house owners. At the same time in London, human waste was flushed into the river, which became very dirty. The Thames River became completely polluted. On the other hand, people could fish in the Sumida River in Tokyo. This shows remarkable wisdom about living.

There were many people who lived on collecting rubbish because paper was precious. Also, everything was used and repaired: people exchanged furnaces, repaired pots and pans, fixed setta (a kind of sandal), made tubs, and exchanged the paper of lanterns. There were even ash shops whereby people bought ashes for cooking in order to remove the lve from some foods. When I was a child, I remember visiting tinkers, bamboo tobacco pipe sellers, and knife sharpeners, as well as pawnbrokers and second hand clothing stores. In 1841, there were four second hand clothing stores in Edo that had a turnover of more than ten thousand tael. People in the countryside bought second hand clothing from Edo cheaply and recycled them. As these examples of paper, ash, and human waste show, various things were recycled whereas nature remained pristine. Edo was a city full of greenery: owls apparently hooted by Nihon Bashi. Certainly the Edo era had its negative sides, such as the feudal system, but I would say that in terms of city planning it was great. All buildings had the same roof tiles and I'm sure the townscape was beautiful. When the Meiji era began, the government forgot all that and concentrated on Europe, building the Rokumeikan (a large building that was the symbol of Westernization). It all went too far, and I believe it is necessary for us to reexamine the wisdom of old Japan.

Learn from the Past for the Sake of the Future

The Edo era was a time of various ideas and philosophies. The government applied Confucian ideas, and those from Buddhism were also prevalent. Baigan Ishida proposed a theory concerning frugality and how merchants should act. He insisted that, "Merchants should earn money, but not for themselves," and "Make money not for the sake of personal greed but for the sake of the world." If I apply this theory for those who are in the field of environmental conversation, it means that they should make a lot of money by selling goods and so on and use the benefits for environmental conservation rather than putting it in their own pockets. The Japan Federation of Economic Organizations studied Baigan Ishida and these ideas became foundational for Japan's economic growth in the postwar period.

Shoeki Ando is another thinker of that time. There are seven principles of Deep Ecology elucidated by Arne Næss of Norway, and six of them coincide with Shoeki Ando's suggestions. His basic idea was that there is no difference between people regardless of their social status, and that people who do not work should not eat. Ando declared that humans work really hard in this world, feed themselves, and then die. Notions of who is great and who is not, or the class system itself, are absolutely wrong. The principles of Deep Ecology are almost the same as this. I think it is important to study and compare these thoughts in order to learn from them.

Furthermore, Norinaga Motoori stressed the idea of mononoaware (to feel an empathy toward things), which I think expresses a Japanese view of nature. For instance, when we think about environmental education in Japan, we use methods such as nature games and bird watching that have originally been imported from Europe or the United States. Some words that do not quite fit in Japanese language such as "review" and "sharing" are used. We should develop original Japanese environmental education programs by using words of Chinese origin, for example. There are a number of traditional Japanese nature games. The Japanese view of nature or Japanese sensibilities toward nature in particular become the core, and children today live with this inheritance in their DNA. If the programs are not created with the idea of, for example, understanding the sense of admiration for falling cherry blossom petals, then they would merely be for study and could not convince the audience in a real sense. I think it is necessary to study how to crystallize what Japanese people were thinking in the past and present it today.

This is a very rough way of saying things, but I think it is necessary to

think about research on Oriental philosophies from the perspective of environmental issues. There are so many treasures, and Buddhism is one of them. Confucianism contains many aspects that converge with environmental thought. Faiths of India and Tibet contain some deep insights as well. Treasures exist in Japan, Korea, South East Asia, and within Native American culture and Africa. We got so carried away by flashy aspects of European civilization and forgot other important things. We should all reclaim the wisdom of humanity together, list them up, incorporate what is positive, and start considering philosophy for the twentyfirst and twenty-second centuries.

Humanity's Direction: Equality or the Law of the Jungle?

Currently we are locked into dealing with environmental problems on a global scale. However, it was extremely difficult for Japan to stand by the decisions made in the Kyoto Protocol. Then United States withdrew from the agreement, saying it would be bad for their economy. It is incomprehensible that the United States did this merely because of their economy when the issue is about whether the people on this globe will survive or not. So why doesn't Kyoto Protocol move forward? I think it is because the general direction is not there. What kind of society are we aiming at, what kind of ways of living are good, which direction to go in, and so on...we are not united in any of these things. Immigrantbased countries, such as the Unites States, Canada, or Australia tend to operate under the law of the jungle, which is based on the idea that "poor people bring about their own situation, and they could be wealthy if they made some effort but they do not." People in the United States moved west, thus pioneering the frontier. Although it was quite dangerous and anyone could be attacked and killed, entire families including small children went together in fleets of wagons. The unlucky ones died while those who struggled survived. Therefore, it is inevitable that the mindset of survivors is that of "the strong," which basically means things will be fine so long as the strong survive. It is hard for them to think from the perspective of weaker ones. This becomes problematic when we think about how weaker countries in Africa and such like can survive.

What, then, should human society do? For instance, the amount of carbon dioxide emissions varies greatly between India and the United States. When we compare this in units per "nations," the United States emits about 5.3 times more than that of India. However, compared in the units per person, India can emit 22 times more since they have a much

larger population. In this case, Indian people can afford to emit much more based on the amount of individual emissions, even if we are talking about reducing the amount of carbon dioxide emissions. On the contrary, reductions must be made on an individual level in the United States. This is why the United States does not compromise, and insists we should work on national level reduction. However, in the case of India or China, they would want to keep developing further so they would insist that the citizens are poor and question why the people should not watch TV or use air conditioners in the summer. Generally speaking, if everyone agrees that the direction of humanity is to create an environment where children from any country, whether they are from Africa or Bangladesh or Japan or Europe, can live in similar conditions and have the freedom to study or go to university if they wish, then the nations would agree to calculate how much carbon dioxide emissions per person should be reduced. But if we think about this from a perspective of the law of the jungle, then the answer is to calculate the national level, which places so much pressure on weaker nations. This is why nations cannot agree amongst themselves, and end up arguing over various theories. The reason why negotiations on global warming do not go well in the end is because we have not been able to overcome this wall.

My conclusion is that researchers of Oriental philosophies should urgently review various ideas and confront Western philosophy. I would love the Institute of Oriental Philosophy to take on that task. Japan, China or India has many great philosophical ideas and there are many people who research them. It is time for those people to come forward. With the increase in environmental problems, the world, which has been Western-centric, needs Oriental philosophy. The direction of the world is changing slightly from anthropocentrism to natural symbiosis, so the power of religions, philosophies, and humanity will become very important. In particular, religion holds great power and I would like to ask you all to engage in discussions concerning environmental problems.