# OCCASIONAL REPORT No. 32 THE TOYOTA FOUNDATION February 2002

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## Using Wisdom to Preserve Natural and Cultural Heritage

#### The Village in Guinea Where Chimpanzees Live Alongside Humans

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Ecologists have longed to study nature in its "untouched" state. Human influences on nature are increasing dramatically, and the best way to predict the "original" condition of species and ecosystems is to gather data in locations that have been disturbed as little as possible. Yet ecologists are also motivated by a romantic and mystical desire to place themselves in primitive environments as far away as possible from the modern world as symbolized by big cities.

Some say that these romanticized spiritual tendencies are closely linked to attitudes from the colonial era. Natural history, the foundation of ecology, was certainly the legacy of the Great Age of Discovery that began in the fifteenth century. The research carried out by great natural historians like Darwin and Wallace was made possible by the willingness of aristocrats and capitalists to invest in geographical and natural exploration.

Few unexplored frontiers remained by the second half of the nineteenth century, and one after another

areas of both Asia and Africa were colonized by Europeans. Around the same time, fears that "primitive nature" would be lost forever prompted the establishment of nature reserves, such as national parks, initially in North America. These areas provided recreation for the alienated inhabitants of the cities spawned by the Industrial Revolution. Their purpose was to preserve game animals for hunting and provide aesthetically pleasing scenery for the enjoyment of visitors. The exotic lands of Asia and Africa had a powerful attraction for the people of industrial nations, yet the untamed nature of these places was being eroded by the exploitative economic activities of the colonizers. Almost inevitably, the nature reserve concept was directly applied to these countries.

As storehouses of untamed nature, bigger reserves are, in theory, considered more functional. In practice, however, it is extremely difficult to set aside vast areas of land as reserves because of the limiting effect that this would have on the activities of the people who live in the areas. Vested interests have prevented large-scale nature reserves from flourishing in Western countries. In Africa, however, it was politically feasible for colonial governments to create huge reserves on land forcibly seized from inhabitants. In this way, Western countries used their colonies to realize ideals that they could not put into effect in at home. Under pressure from Western governments and international organizations, the new governments of the African countries that gained in-

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dependence around 1960 took over management of the reserves. The overall pattern of conservation activities did not change, in the sense that they were Nature Res

tivities did not change, in the sense that they were driven by external authority in the face of opposition from local people. Nature conservation in Africa has thus been largely conducted under external pressure.

#### A Case Study in Bossou, Guinea

Since 1992 I have been involved in an ecological study of wild chimpanzees in the Republic of Guinea, West Africa. Studies of wild chimpanzees are generally carried out in areas far from human settlements, such as dense jungle areas designated as national parks, or in mosaic areas consisting of expansive savanna woodland and riverine forest. The reason is simple: Chimpanzees are not welcomed in densely populated areas because of the danger that they will harm people or damage crops. Yet the chimpanzees that I studied live in forest that remains on hills surrounding a village of around 2,000 people in Bossou. The chimpanzees have been protected by the village community, and so it was possible to observe chimpanzees who live near a settlement and have little fear of human beings.

Chimpanzee studies in this area began in the 1960s with the resumption of field research into primates, which had been suspended because of World War II. Researchers from several countries, including the United Kingdom, Japan, and the Netherlands, conducted preliminary surveys in various parts of tropical Africa. Their goal was to find locations where chimpanzees were not afraid of human beings and could be observed easily. The village of Bossou has long been known as a community where the villagers protect the chimpanzees. In the second half of the 1960s, teams from the University of Amsterdam visited the village several times to conduct short-term field studies. Major long-term studies had been conducted continuously in Tanzania since the 1960s, and detailed reports were subsequently published about the behavior and ecological characteristics of East African chimpanzees. This prompted calls for longterm continuous studies of West African chimpanzees to provide a basis for comparison. In 1976 a team from Kyoto University initiated a long-term study of the Bossou chimpanzees. This work has been in progress for over 20 years.

Bossou is located at the southeastern edge of Guinea in a remote region over 1,000 kilometers from the capital, Conakry. Though the region has a long dry season lasting about three months, its average annual rainfall exceeds 2,000 millimeters, and it was probably originally covered by rain forest. About five kilometers from Bossou the Mount Nimba Strict Nature Reserve, which now has UNESCO World Heritage status, stretches along the border with Côte d'Ivoire. The foothills of Mount Nimba are covered with closed-canopy tropical forest. In 1944, when Guinea was still a French colony, the Mount Nimba region, which has rich iron ore deposits, was declared a nature reserve to protect its flora and fauna from the effects of mining. Today the area is protected and managed under the UNESCO banner. The forest areas around Bossou are tiny compared with this vast landscape. Here the impact of human activity, especially slash-and-burn farming, has been extensive. The area roamed by the chimps now consists mainly of a small patch of tall trees around the village. However, the chimps also make frequent use of farmland and land left fallow after slash-and-burn farming. At times they even appear near the areas of the village where houses are concentrated.

Much has been learned about the Bossou chimpanzees, including the fact that they use a wide variety of tools. However, research findings from Bossou were sometimes dismissed as biased or unreliable on the grounds that the area has been the subject of considerable human disturbance. At the very least, there was a tendency to take the findings less seriously than reports from field work in areas where chimpanzees could be viewed in more natural surroundings. I believe it is inappropriate to criticize research on the basis of assumptions like this. However, I often longed to carry out research in a wider natural environment, and sometimes I resented the actions of the villagers who cut down or burned the forest that had become the habitat for the chimpanzees.

Once, I participated in a preliminary survey conducted around Mount Nimba. Chimpanzees were



Chimps inhabit the forest around Bossou.

known to live in the area, but little research had been carried out. I obtained a permit from the government of neighboring Côte d'Ivoire, and my ambition to study truly wild chimpanzees was at last realized. Yet what I saw was a place where the chimpanzees fled without a sound as soon as they became aware of the presence of human beings. Traps had been set on trails used by wildlife, and cartridge cases from hunting rifles were scattered around. The location of the Mount Nimba region, which straddles the borders of Guinea, Côte d'Ivoire, and Liberia, makes the task of controlling poaching extremely difficult.

I abandoned the idea of observing chimpanzees directly and began to search for their habitats, using nests and food scraps as clues. These clues were concentrated on a steep slope near a ridge toward the summit of the mountain, where there were almost no trails used by people. I marked this area as a promising survey site, yet when I returned a year later there was considerably less evidence of chimpanzee habitation. I discovered numerous cartridge cases dropped by poachers along a trail that I had cut. From my two preliminary surveys I learned that it is very difficult to conduct research in areas under heavy pressure from poachers.

Dejected, as I descended from Mount Nimba I gazed from a vantage point on a ridge at the tiny forest around Bossou, just a few kilometers away. It looked like a small island in the sea. I would be able to observe some 20 chimpanzees there with ease. Yet in the vast Mount Nimba Reserve I had not even heard, let alone observed, any chimpanzees. How should we interpret this contrast? In one sense, the relationship between humans and chimpanzees in Nimba represents the standard pattern in Africa, whereby local people pretend to obey restrictions in reserves forced upon them by outsiders but actually continue to use the areas as before. Yet ever since Bossou began to appear in Western documents there have been references to the close relationship between humans and chimpanzees. Observers have reported that no government intervention is required because the chimps are protected by the villagers.

My intellectual curiosity was stimulated by the relationship between humans and chimpanzees in Bossou. What did the chimpanzees mean to the villagers? It is difficult for people who make their living through agriculture to coexist with wild animals, especially large mammals. Even in Japan, crop damage by monkeys and attacks by bears are a major social problem, the seriousness of which has increased with the aging of rural populations. In Bossou, chimpanzees frequently appear in fields and damage valuable crops, such as maize, cassava, cacao, and okra. On rare occasions they even attack villagers who happen to encounter them on paths near the edge of the forest. When the victims complain angrily to the village elders about these problems, the elders say that the chimpanzees are their reincarnated ancestors and that they should be pleased by their visits since they would not come to taste the crops if there was something wrong with them. The elders defend their ancestors against claims that the chimpanzees have attacked people. They explain that the chimps must have drunk too much palm wine from a nearby palm grove, otherwise they would never harm the villagers.

Simple descriptions have been made of the folkloric significance of the Bossou chimpanzees, including their status as reincarnated ancestors and the prohibition on hunting totemic animals representing the village's founding clan. These beliefs, however, have not been studied in depth. What role do chimpanzees play in the village's creation myth? What characteristics are assigned to the animals in folk tales and proverbs? How accurate was the villagers' knowledge of chimpanzee behavior and ecology as revealed by the Kyoto University research project? How did the village assimilate the new knowledge resulting from the research, or was it simply ignored? Are the chimpanzees helping to motivate the village as it strives to achieve prosperity in the environment of economic and religious freedom that has existed since the collapse of the socialist regime in 1984? I hope to find answers to all of these questions.

The Mende people of Sierra Leone, which is not far from Guinea, reportedly fear and loathe chimpanzees, which they regard as evil. It would be interesting to carry out a comparative study of attitudes to chimpanzees in forest regions of West Africa.

Setting aside for a moment my preoccupation with "unspoiled nature," I was able to discover a totally different significance in the thinking and behavior of the villagers, whose presence I had previously resented, when I considered it more positively. What I had previously regarded as a village where people were a threat to the survival of chimpanzees I now saw as a place where people were successfully living in harmony with them. I believe this perspective has much in common with the concept of village-forest conservation, which has become very popular in Japan over the past few years. The efforts of the Bossou villagers to protect the forest and its animals on their own initiative are particularly significant for African countries, where the concept of nature conservation has tended to be imposed from outside. As we think about the problem of harmonious coexistence with monkeys and bears in Japan, perhaps we can learn something from the way in which the people of Bossou coexist with chimpanzees, which are, after all, crop-damaging and dangerous animals.

#### Creation of a Sustainable-Development Eco-Society Through Partnership

#### Ryoko Kida

#### Assistant Program Officer

Hangzhou City, the capital of Zhejiang Province, is situated about 200 kilometers from Shanghai. The scenic beauty of the area is celebrated in a Chinese poem: "In heaven there is paradise; on earth, Suzhou and Hangzhou." West Lake (Lake Xi) is in central Hangzhou and is surrounded on three sides by hills. West Lake is an artificial lake created in the T'ang Period over 1,000 years ago by isolating a lagoon from the Qiantang River. The lakeside area is always thronged with people—older residents practicing Tai Chi in the morning, strolling tourists in the daytime, and young couples in the evening. While in Hangzhou, I enjoyed walking around the lake in the early morning. Shrouded in tranquil morning mists, it has a welcoming, soft beauty.

On October 31 and November 1, the Zhejiang Media News Exchange Center near West Lake was the venue for a symposium entitled "Creation of a Sustainable-Development Eco-Society Through Partnership: The International Conference of Eco-Society, Environment Education, and West Lake Field Museum in Hangzhou, China." The conference attracted environmental protection officials, researchers, elementary and middle school teachers, and students from many parts of China, including Qingdao, Guangzhou, and Nanjing. Experts from Japan and South Korea also attended. Participants made presentations on a variety of research and activities relating to environmental issues.

The conference formed part of the West Lake Field Museum Planning Project, a joint initiative launched in 1998 by Japan and China. The purpose of the West Lake FM plan is to conserve and utilize the entire area of West Lake, including its extensive historical, cultural, and natural heritage and even the way of life of its people, as a museum. It was decided to hold a conference in 2001, the fourth year of the project, to report on activities to date. The journey from Japan to Hangzhou requires a three-hour flight followed by a two-hour drive. Despite the distance, many people from both Japan and China have contributed time and energy to the project. The night before the conference there was a discussion that lasted well into the night, with organizers from two countries with different languages, cultures, and political systems repeatedly advocating and rejecting a variety of views.

Around 100 people gathered at the venue on the morning of October 31. On every table there were lidded mugs containing Hangzhou's renowned Longjing tea. After representatives of each group had welcomed participants to the conference, the presentation of reports began. A total of 20 people made presentations. There is not sufficient space to discuss all of the reports in depth, so I have tried to capture the essence of a representative sample.

Xia Ling, a researcher with the West Lake FM Planning Project, described the philosophy behind the plan and provided an overview. "The Field Museum is an open-air museum. Its purpose is to explore various aspects of the region, including industry, agriculture, traditional crafts, history culture, artistic culture, lifestyle culture, natural culture, the culture of Chinese medicine, religious culture, food culture, liquor culture, and tea culture, all of which provide clues to the harmonious coexistence between nature and humanity that has evolved in the Hangzhou region. We aim to preserve and restore these assets at West Lake itself with the cooperation of government agencies, experts, citizens, and tourists, so that they can be handed on to future generations." Other aspects covered in Xia's presentation included the role of the core museum within the Field Museum and the differences between the Field Museum and conventional museums.

Ai Li of the Nanjing Environmental Protection Education Training Center said that after hearing Xia's presentation she had had the idea of forming an environmental education network with the Environmental Science and Technology Museum in Nanjing as a core museum.

Sumiko Hasuo of the Gyotoku Wild Bird Observatory, which has worked for almost 30 years to preserve and restore the Shinhama wetland, a vital breeding ground for water fowl on the far side of Tokyo Bay, spoke about community-based wetland restoration activities, including the processes and efforts involved, as well as the emotions and passion that make such activities possible.

Professor Kim Sewnghwan of the Dong-A Univer-

sity College of Engineering described a scheme being developed to create a large "citizens' culture park" in the South Korean city of Busan. The park will consist of one million small plots of land of about 3.3 square meters, each purchased by an individual citizen.

Shin'ichi Sekiya described a variety of environmental education initiatives using pictorial maps. School teachers showed considerable interest in the giant pictorial map of West Lake that Sekiya had prepared for the conference.

Chinese presenters provided overviews of various subjects, including the contemporary environment in Hangzhou, the state of the water in West Lake and efforts to improve it, and environmental protection projects and environmental education activities undertaken by government agencies and schools. Mao Xiaoyuan of the Hangzhou Environmental Protection Education Training Center described the situation and problems of an environment-friendly "green community" in Hangzhou City, and elementary and middle school teachers presented examples of environmental education in various schools and the results they have achieved. Zhang Jie, a secondyear senior high school student at Hangzhou Zhongce Vocational School, gave a presentation in excellent English on wastewater treatment by hydroponics in urban rivers.

The reports presented by Japanese participants focused on activities at the individual level, while those by Chinese participants dealt with initiatives by provincial and city governments or schools. In Japan the individuals who drive community and grassroots activities struggle to raise their initiatives to the level of municipal, prefectural, or central government policy, while in China the challenge is to take government initiatives down to a level at which they become part of the lives of individual citizens. It is meaningless to compare the merits of these two approaches in countries that are so different politically and culturally. However, my observations of this contrast gave me renewed awareness of the significance of the conference and helped me to understand the difficulties faced by those involved.

The day before my return to Japan it rained. The eleventh-century poet Su Shi wrote of West Lake's "rippling water shimmering on a sunny day, misty mountains wonderful in the rain," comparing it to Xi Shi, one of China's four legendary beauties. As I observed the unchanging calm of the lake, I began to understand why so many people were working tirelessly to protect its beauty. Perhaps the "West Lake Field Museum" already exists here. The work that we are doing or plan to do is simply an effort to rediscover what already exists.

#### The Potential of Private-Sector Knowledge

#### Shiro Honda

#### Program Officer

The Toyota Foundation held its 2001 grant-award ceremony on October 10. In the afternoon of that day a panel discussion was held on the theme of "The Potential of Private-Sector Knowledge" at the Century Hyatt Hotel in Tokyo. The panelists were Yoshitaka Tanaka of the Foundation of Agricultural Development and Education, the film-maker and explorer Jun'ichi Nakanishi, and Masatake Matsubara of the specified nonprofit corporation Mongol Partnership Institute. Takeo Funabiki of Tokyo University participated as commentator, and the moderator was Ryuho Hayama, an editor.

A survey of recipients of Toyota Foundation research grants reveals that some are engaged in research and surveying activities based outside of universities. Mr. Tanaka, Mr. Nakanishi, and Mr. Matsubara are good examples. Their projects fall outside of the framework set down by the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) for Grants-in Aid for Scientific Research, which requires applicants to state the nature of their research based on a highly detailed classification. Moreover, their projects have clear, practical goals that do not end with the presentation of papers at conferences. The decision to hold the panel discussion was prompted by a desire to explore the thoughts of people engaged in such private-sector research. We were fortunate to have the support of Mr. Hayama, who was previously involved in the publication of Shirizu: Minkan Gakusha (The Private-Sector Scholars Series) (published by Libroport), and Mr. Funabiki, who heads the selection committee for category A research grants. It was Mr. Hayama who chose "The Potential of Private-Sector Knowledge" as the theme for the panel discussion. And as the editor of such books as Chi no Giho (Techniques of Knowledge), Mr. Funabiki is well-versed in the current state of scholarship in Japan.

During the panel discussion the venue was almost full with an audience of nearly 100 people. After a welcoming speech from Managing Director Chimaki Kurokawa, Mr. Hayama opened the discussion by explaining the reasons behind his choice of theme. Mr. Tanaka, Mr. Nakanishi, and Mr. Matsubara then presented their reports. Mr. Tanaka, who lives in Bangkok, is surveying the botanical resources of ethnic minorities in Cambodia, Laos, Myanmar (Burma), and Vietnam while building up a network of agriculturists in these countries. He argued that establishing a base close to the area concerned in the country itself meant for lower travel, personnel, and communications costs and more rational project management compared with large-scale projects implemented by international organizations and universities based in developed countries. He also noted that this approach was effective as a way of providing feedback on survey results to local people.

Film-maker and explorer Jun'ichi Nakanishi is working with local people in the Kham region, located in the eastern part of the Tibetan Plateau, to preserve woodblock prints of Tibetan Buddhist scriptures at the Dege Printing House. He said that the photographic methods used by the average researcher for such work were inadequate for the task of preserving, in image form, the traditional woodblock printing methods. In fact the task necessitated the involvement of an experienced filmmaker. Furthermore, the rugged Kham region is known for its transport problems and is hardly suited to researchers used to working in libraries. Field research in Kham requires the abilities of a trained and experienced explorer. Such testimony confirms why Mr. Nakanishi is the ideal man for the job.

Unlike Mr. Tanaka and Mr. Nakanishi, Mr. Matsubara does not devote all of his time to field research. He is renowned for his studies of Turkish nomads and has numerous books to his credit, and today his primary occupation is as director of the Japan Center for Area Studies, National Museum of Ethnology. We were hoping that he would explain why someone in such a lofty position decided to establish the Mongol Partnership Institute to achieve the practical goal of assisting Mongolian nomads. In his youth, however, Mr. Matsubara was involved in field studies in Afghanistan. He was unable to suppress his deep concern about the situation in that war-ravaged country and focused much of his talk on this topic. He expressed his fear that the crisis would escalate into a global conflict. Many audience members have told us that they were deeply moved by Mr. Matsubara's report.

The commentator, Mr. Funabiki, used the term "public-sector knowledge" to describe knowledge in and around Japanese universities. Researchers who belong to this world of public-sector knowledge are given exclusive access to the massive Grants-in-Aid for Scientific Research program run by the Ministry of Education, Culture, Science, Sports, and Technology (MEXT). However, the end products of their work are frequently papers published in media targeted solely at academic insiders, such as the journals and bulletins of academic societies. In effect, according to Mr. Funabiki, "Public-sector knowledge consists of knowing about public-sector knowledge," and the research community does little to pass on the benefits of their work to the outside world. Mr. Funabiki argued that the public-sector knowledge system, like the bureaucracy, exists to feed itself. Private-sector knowledge, meanwhile, because of its position close to the front line, can be applied flexibly even though the investment may be small. It also allows researchers to return the benefits of research directly to local people through film and other methods. The Toyota Foundation could be described as being in a position to support such potential uses of private-sector knowledge. Meanwhile, Mr. Funabiki maintained that it was foolish, from the perspective of the long history of universal human knowledge, to draw a line between public- and private-sector knowledge.

The reports presented by Mr. Tanaka, Mr. Nakanishi, and Mr. Matsubara differed in terms of the issues covered and the methodologies used. In this sense, it is unlikely that a unified image was formed in the minds of the audience. Yet the diversity of formats and methods used and the fact that the presentations cannot readily be classified can perhaps in itself be seen as an indication of the impact, force, and potential—as well as the issues inherent in private-sector knowledge. Unusually, every member of the audience who completed a questionnaire at the venue said that the presentations were "interesting." Each of the three presenters has taken up the task of absorbing and preserving knowledge that exists in the private sector-about food plants, Buddhist scriptures, and nutrition-and acting as a channel for the return of that knowledge to the wider public. To paraphrase Mr. Funabiki's earlier comment, private-sector researchers have made knowing about private-sector knowledge an important issue for private-sector knowledge.

In fiscal 2001 MEXT will disburse Grants-in-Aid for Scientific Research totaling ¥158 billion. In fiscal 1991 the Ministry spent ¥58.9 billion, so the amount has risen by almost ¥100 billion over the past decade. Only those in the world of public-sector knowledge can access this money. It is encouraging to see the emergence of field workers who have the courage to

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turn their backs on this system and choose the path of private-sector knowledge. It will be interesting to see how these seeds grow and to observe the type of world that these people open up for us.

#### A Lesson on "Seeing" from a Blind Priest

#### Akiko Nagai

#### Part-Time Lecturer, Fukuoka Women's University

A shadowy human figure suddenly emerges from the darkness and walks slowly toward me. As he passes under a street lamp, I notice that he holds a white cane. This must be R, the blind priest. It is early on a winter's morning. The streets are deserted, and the only other people in view are those coming and going at a market in the distance.

I first visited South Korea in 1988. A two-year grant in fiscal 1995 and a research report grant in 2000 from the Toyota Foundation allowed me to travel extensively there, visiting blind priests who recite scriptures and practice divination. South Korea has a tradition of blind religious figures dating back to a blind priest who appears in the *Koryosa* (the History of Koryo). They have been known by various names, including blind diviners, *pansu* (blind fortune-tellers), and blind sutra chanters. In modern times they have formed a national organization called the Korean Society of Divination Art of the Blind.

My most recent journey began in Seoul. My aim was to interview R, a member of the Korean Society of Divination Art of the Blind in Chonju City, Cholla Pukdo Province. R agreed to be interviewed during his morning walk, and we arranged to meet in front of the main gate of a school.

R walked on into the darkness, apparently unwilling to waste time on the greetings usually associated with first encounters. He walked ahead of me, cane in hand, with an accustomed stride. I had to follow behind with my assistant, Ms. Kim, a student at Inha University. We had no idea which direction he would go. After following him for some time, we arrived at a look-out point on top of a small hill. The surrounding hills became visible as silhouettes as dawn approached. The scene was incomparably beautiful as I physically experienced the start of a new day heralded by birds singing in the clear, cold morning air. R told us that he had frequently visited this vantage point both before and after he became blind. He gazed intently at the dawn, and we stood silently beside him, watching the color pour into the sky. In the end, I was lucky enough to be able to spend the rest of that day with R until late at night.

R is 48 years old and has lived in Chonju for most of his life. After graduating from a technical high school, he worked for a civil engineering firm. At the age of 21 he became embroiled in a dispute over a road construction project and was beaten by a gang. It was this beating that cost him his sight. For some time he was unable to recover from his mental and physical pain, but eventually he began to visit temples, guided by his mother, in search of a place to undertake religious study and recuperate his body and mind. He was allowed to enter Seongbul Temple, which is located on a hill on the outskirts of Chonju. There he spent the next three years restoring his health and cooking his own meals.

At that time the Seongbul Temple was a hermitage for a shamanistic religion dedicated to the mountain gods. There was another blind priest, P, who made his living by reciting scriptures and telling fortunes. As R gradually regained his mental stability, he began to learn Zhou divination and other knowledge from P by ear. It was in this way that he acquired his fortunetelling skills. R also learned a variety of folk religion scriptures, and eventually he took over P's work. After learning Braille, R began to study Buddhist scriptures in earnest.

In the 1970s the government initiated a campaign to eliminate superstition through its Saemaul (new village development) movement. Though the Seongbul Temple was affected by this campaign, it escaped destruction by adopting T'aego Buddhist practices. Though he does not have a shaven head, R has been given the priestly title "Dogan."

I had heard that many ordinary people in South



R taking a walk in Chonju.



Seongbul Temple, on the outskirts of Chonju.

Korea retreat to mountain temples or hermitages for mental and physical recuperation or study, so I asked R if I could visit the Seongbul Temple. The temple is not far from the city and can be reached by a 30minute taxi ride, followed by a 30- or 40-minute walk up a mountain track. R walked confidently, never varying his pace, though he stopped from time to time to wait for us as we lagged behind. He must have walked up and down this hill countless times since he began to live in the temple. As I observed him leading us, I found it hard to believe that he was blind. I can only assume that he had developed a map in his head.

Though his eyes cannot see, R made full use of his senses of hearing, touch, and smell. He sensed the movement and scent of the breeze, the chirps of birds and insects, the rustling noises of trees and grass, and the feel of the stones and soil on the road. He must have used that information to learn about the area and build an invisible map. Though he experienced the surroundings in a different way, his map was the same as the ones we see with our eyes, or perhaps it was even more detailed. It began to seem inappropriate to talk of R as being "blind."

R lives alone in an office-apartment located in a downtown shopping district. It is a simple one-room dwelling equipped with a telephone, and the Braille books that R uses in his work are neatly arranged. R told us about his impressions of Japan, which he had recently visited as a member of an organization for the visually impaired. While in Tokyo he visited the Japan Braille Library in Takadanobaba. In Asakusa he tasted *tendon* (tempura served on a bowl of rice) for the first time, and he also had the opportunity to exchange views with Japanese organizations for the visually impaired. By actually walking in Tokyo and riding buses and taxis, he also learned about government policies toward the visually impaired and the situation of disabled people in Japan. Most of those who participated in the visit thought that policies for the disabled in South Korea were not as adequate as in Japan and that disabled people in South Korea were very unfortunate. R disagreed. He thought that continued exposure to the consideration shown in Japan would rob disabled people of the will to live independently and of the satisfaction of achieving things for themselves in the face of adversity.

Today R reads scriptures and practices fortunetelling only on weekends. He devotes the rest of his time to counseling blind people at the Blind Welfare Alliance Center. He started that work because he thought it would be helpful if someone with the same disability could listen to the pain and frustrations of the visually impaired.

As I listened to R, I became aware that it was already becoming dark and that I could not see well enough to take notes. I asked R to turn on the light. Those who are used to living without darkness are helpless in such situations. We ended the day with a late dinner. R told me that I must try *pibimbap* (rice with vegetables) while in Chonju. Of course, it was R who led the way to the restaurant. Soon the table was covered not only with *pibimbap* but also with several varieties of kimchi and other Korean delicacies. R happily recalled his experiences in Japan. When he tried *tendon* in Asakusa, he had expected that there would be a variety of accompanying dishes, but all he received was two slices of pickle!

Finally R asked about my age. I told him to guess. When he said "late 50s," I realized that the voice reveals all and that everything was visible to R. This was somehow reassuring, and I relaxed for the rest of the meal. Afterwards R declined my offer to escort him back to his home, so we shook hands and parted in front of the restaurant.

My idea about R's "invisible map" was probably not entirely wrong. I realized that when I read *Tori ga Oshiete Kureta Sora* (The Sky the Birds Taught Me) (Japan Broadcast Publishing Co., Ltd.), a collection of essays by Mayuko Sannomiya.

Sannomiya became blind at the age of four. She subsequently discovered a rich sensory world after coming into contact with nature through bird-watching. As she learned to distinguish bird calls, she found that the songs of birds provided her with a three-dimensional awareness of the scenery. Eventually she became aware of the times of nature through the sounds made by plants and insects, and in this way she was able to "see" the world around her through sound. To reach this stage, it is necessary to open all of the senses at once. This is different from the simplistic notion that blind people have good hearing. Sannomiya writes that she had to climb one step at a time until she was able to perceive scenery through all of her senses.

The experiences of Mayuko Sannomiya provide us with the opportunity to think anew about the meaning of the word "see." Of course, sight is simply a process in which stimuli reaching the retina are transmitted to the brain. Yet the way in which R and Sannomiya perceive the world around them cannot be seen simply through our visual organs, the eyes. They seek information using all of their remaining physical senses. They combine that information to create an image of their environment. This task involves a constant expenditure of energy and requires considerable perseverance. Perhaps that is why they are so physically determined to "see" deeply. This leads me to believe that the experience of seeing is essentially linked very closely to physicality. In this way, seeing goes beyond accepted concepts and becomes a richly expanded experience.

In the past, people in Japan and Korea believed that blind priests had been granted sacred powers by virtue of their blindness and that they were able to see into the future. These beliefs assigned a positive significance to blindness. From a modern perspective, we can interpret this as signifying that blindness gives people access to hidden physical perceptions and allows them to develop special abilities.

In retrospect I realized that it was always the priests themselves who led me during my visits in search of blind priests. I met many blind priests, and each time I simply followed where they led me. My eyes can *see*, but I wonder now if I truly *see* the world.

## Toyota Environmental Activities Grant Program

## Kyoichi Tanaka

Program Officer

The Environmental Activities Grant Program is administered jointly by the Toyota Foundation and Toyota Motor Corporation. The selection process for fiscal year 2001 has now been completed. The basic theme for the program is "social investment in sustainable development." In early April the Founda-

#### Toyota Environmental Activities Grant Program: Projects Awarded Grants in Fiscal 2001

(\* indicates a continuing project from the previous fiscal year.)

#### **Environmental Technology**

- Protecting the Terrestrial Biodiversity of the Island of Pohnpei, Micronesia
- Conservation Society of Pohnpei (Micronesia)

• Substitution of Conventional Cooking Fuels with Plant Oils in Guatemala: A Practical Test for Implementation Institute for Agricultural Engineering in the Tropics and Subtropics, University of Hohenheim (Germany)

• Compatible Production Systems for Sturgeon and Shrimp Aquaculture in the Caspian Sea *Atyrau Regional Government (Kazakhstan)* 

• Commercialization Project for Medicinal Plant Resources in Central and Western Himalayan Communities

Society for the Conservation and Development of Himalayan Medicinal Resources (Japan)

• Biomass Gasification to Provide a Gas Supply in Rural China

Institute for Thermal Power Engineering, Zhejiang University (China)

• Rehabilitation Project for Devastated Tropical Peatland Ecosystems in Central Kalimantan

Hokkaido University Graduate School of Agriculture (Japan) Next-Generation Human Resources

- Production of an Environmental Education Guide in the Central Highland Region of the Dominican Republic *Moscoso Puello Foundation (Dominican Republic)*
- "Green Packs" for Environmental Education in Schools in Bulgaria and Hungary\*

Regional Environmental Center for Central and Eastern Europe (Hungary)

•A Practical Education Program Aimed at the Preservation and Improvement of the Steppe Environment in Inner Mongolia

Imin Soum Environmental Problem Research Group (Japan)

- The "Roots and Shoots" Environmental Program The Jane Goodall Institute Japan (Japan)
- "Youth to Youth": Peer Education for a Sustainable Future *Pronatura Península de Yucatán, A.C. (Mexico)*
- Environmental Education in Laguna del Tigre National Park, Guatemala
- Conservation International-ProPeten (Guatemala)
- Participatory and Active Learning About the Management of Local Resources for Young Thais
- Eco-Community Vigor Foundation (Thailand)
- A Leadership Program for the Environment and Development\*
- LEAD Japan (Japan)
- •Building and Implementing Environmental Awareness by Promoting the "Midori no yubi" (Green Finger) Logo *Tsurukawa Community Development Citizens' Group (Japan)*

tion began to accept applications for projects relating to "commercializing environmental technology" and "developing next-generation human resources." By the deadline in early May, the Foundation had received 76 applications from universities, research institutes, community and environmental NGOs, and other organizations in 21 countries, including Japan. The eight-member selection committee chaired by Keiko Nakamura convened in early August. After careful deliberations, the committee decided to award 15 grants totaling approximately ¥160 million in the current financial year.

The criteria applied to applications relating to commercializing environmental technology included consideration of regional characteristics, the reliability of applicants, the real potential for commercialization, and the need for private-sector support. Particular importance was placed on the cultural, social, and economic characteristics of the locations in which projects were to be implemented.

The committee selected three projects to be implemented in developing countries by organizations in developed countries. There was debate over why these projects were to be run by organizations in developed countries rather than local organizations. The projects were selected because committee members recognized that the plans reflected the strong commitment of the organizations toward the regions concerned and the strong desire of local people that the projects should be implemented.

The results of the selection process also reflect the fact that projects designed to localize existing technology for use in developing countries were seen as having greater value than the development and commercialization of the very latest technology.

The criteria for projects relating to developing next-generation human resources included the appropriateness of project goals, the issue of whether the project leaders and participants would learn from each other, the potential for future development, and the need for private sector support. In environmental education projects in particular, the committee looked especially hard for evidence that project leaders and participants would be working and learning from each other on an equal footing with a shared perception of their objectives, rather than having the leaders simply teach existing concepts and methods of environmental education to the participants.

Two continuing projects from the previous financial year were selected. Applicants are required to submit progress reports in the case of continuing projects. In both cases the selection committee was very impressed with the content of the reports.

Balance among the regions of the world has been a priority since last year. This has been achieved in the current financial year, with projects selected in Japan, North America, Latin America, Asia, and Europe.

This program was established in fiscal 2000 and will continue for three years. In fiscal 2002 the application period will again be the entire month of April. Those wishing to apply should address inquiries to the Environmental Activities Grant Program Department, Toyota Foundation Secretariat. Details can be found on the Toyota Foundation website: <a href="http://www.toyotafound.or.jp/etop.htm">http://www.toyotafound.or.jp/etop.htm</a>>.

### **Grants Awarded for Fiscal 2001**

The ninety-sixth meeting of the Board of Directors was held on September 14, 2001. The following decisions were made regarding the Research Grant Program and other grant programs for fiscal 2001.

On October 10 a grant award ceremony was held at the Century Hyatt Hotel in Tokyo. The following is a summary of the various grant programs.

#### Research Grant Program: 72 Grants, ¥185.97 million

Applications were solicited from April 1 to May 20, 2001. The record final tally of 1,091 applications topped the previous year's total by 75. As in the past, the Foundation sought proposals for projects concerned with the program's core theme, "Creating a Society with Pluralistic Values."

After studying the applications, the selection committees chose 40 individual research projects for Category A grants worth a total of ¥53.84 million, and 32 collaborative research projects for Category B grants totaling ¥132.13 million.

As usual, the successful proposals included a high proportion of projects involving overseas fieldwork. The selection panel expressed the view that applicants should think more carefully about their reasons for undertaking fieldwork in a particular location as they develop their research plans.

#### Southeast Asian National Research Program: 68 Grants, \$563,100

This program supports local researchers in Southeast Asia engaged in research relating to the program's theme, "Cultural Issues in Contemporary Society." As in the previous year, the Foundation received over 400 applications for this program. Initial selection produced a list of 119 applications that met the Foundation's criteria. Foundation staff then interviewed applicants and made supplementary inquiries, after which proposals were examined by the selection committee members responsible for each country. The grants were approved at the Board of Directors meeting. Grants were awarded for 11 projects in Cambodia, 18 in Indonesia, 1 in Malaysia, 2 in Myanmar (Burma), 9 in the Philippines, 6 in Thailand, and 14 in Vietnam.

## Young Indonesian Researchers Program: 1 Grant, \$25,000

This program is currently under review. One grant was awarded to a project whose aim is to provide a training program to improve skills in the area of academic thesis writing. The leader of this project is Yunita Triwardani Winarto, editor-in-chief of the journal *Antropologi Indonesia* (Indonesian Anthropology).

#### "Know Our Neighbors" Translation and Publication Programs: Japan, 5 grants, ¥9.58 million; other Asian countries, 17 grants, \$100,700

These programs promote mutual understanding among Japan and South and Southeast Asian countries by supporting the translation and publication of a broad variety of works in such fields as history, humanities, politics, economics, and literature.

This year six applications were received for the program in Japan. Grants were awarded for translations of five books on the humanities and social sciences in Cambodia, China's Yunnan Province (Sip-Song Phanna), India, and Vietnam.

A total of 28 applications from Southeast and South Asian countries were received for the program in other Asian nations. Grants were awarded for 17 projects, including books on the humanities and social sciences and literary works. One of the projects is based in Cambodia, 5 are based in Indonesia, 3 in Nepal, 3 in Pakistan, 3 in Sri Lanka, and 2 in Thailand.

#### Foundation Initiative Grant Program: 6 Grants, ¥18.41 million

This program, unlike others, does not publicly solicit applications. The Board of Directors approves the awarding of grants after an internal screening process by Foundation staff. This year grants were approved to support projects including a website to provide Japanese-language information services relating to articles by Inter Press Service, a nonprofit news agency based in Rome (representative: Suvendrini Kakuchi), about issues in developing countries that have not been widely reported in Japan.

#### Award Ceremony

The award ceremony began with comments from the selection committees for the Research Grant Program, the Southeast Asian National Research Program, and the "Know Our Neighbors" Programs about the selection process and the projects chosen to receive grants. This was followed by the awarding of the grants. Foundation President Shosaburo Kimura presented lists of grants to representatives of recipients in each program. Tatsuya Orita represented individual research project grant recipients (Category A research grants), Jun'ichi Nakanishi the collaborative research project grant recipients (Category B research grants), and Yasuyuki Tsuboi (an editor at Akashi Shoten) and Emiko Fujioka (a translator) the recipients of the "Know Our Neighbors" Translation and Publication Programs.

After the ceremony a party was held at which specially invited members of the Asia Leadership Fellow Program gave speeches. The gathering provided a chance for lively exchanges of views between selection panel members, grant recipients, and guests, boosting the motivation of recipients.

## **Recent Publications Based on Foundation-Supported Research**

*In Our Own Words: Filipino Writers in Vernacular Languages.* Isagani R. Cruz, ed. Manila: De La Salle University Press, Inc., 2000.

The Toyota Foundation has for some time provided grants to recipients in the Philippines to support the study, translation, and publication of vernacular literature. The grant that supported this book fits into this pattern. The book is a record of the lives and works of Filipino authors born in the 1910s, 1920s, and 1930s who wrote in vernacular languages. It consists of interviews with 24 authors who wrote in various vernacular languages, including Bikol, Cebuano, Hiligaynon, Ilocano, and Tagalog, and works by those writers. The editor himself is a noted writer and literary critic. He used the oral history method to complete his book and spent two years visiting provincial writers.

Through these biographical accounts and works the book vividly depicts the atmosphere of the period when these authors were writing, as well as issues that have remained current in the Philippines down to the present day. How do writers who in their younger days loved Steinbeck, Hemmingway, Poe, and Keats choose which language to use in their own works? How does the choice of language affect motifs? How can literature drive out narrow factionalism and regionalism and create awareness of nation-building? As artists of a country that has experienced colonization, what can poets do for that country? This book overflows with the profound love that the writers have for their cultures, and for the Philippines as a country. It is also a record of what they have perceived and expressed in society.

Many Japanese people today may find it hard to imagine the reality of life in the polyglot society of the Philippines. To quote one of the writers: "Cebuano has even more wit than English. In typical Cebuano fashion, I fill my poetry with the wit, wisdom, and sense of humor that I have been familiar with since my childhood. That would not be possible for someone who had grown up in the United States."

The professions of the featured writers are diverse, including a construction worker and a teacher, and the interviews with them reveal fragmentary episodes in their lives. These episodes provide insights into the fates of provincial cultures since the end of World War II and the thoughts of the writers toward them. If we follow the perspectives of the writers, we also become aware of an impassioned plea that their beloved languages and cultures should be inherited by the next generation of young writers.

The words "relic" and "engineering" form an extremely incongruous pairing. However, through this book one learns that this odd mixture has actually produced a new methodology.

What is engineering? On the website of Toyo Engineering Corporation, for which the author of this book worked for many years, it is described as a very broad field: "Based on consistent concepts and policies, the diverse and complex operations required to ensure the success of a project are implemented on an integrated basis starting from feasibility studies and basic design, and including detailed design, procurement, construction, and operation."

In 1986, several years before the achievement of peace in Cambodia, the author happened to become involved in a project to preserve the Angkor ruins. He applied these concepts to produce a master plan for the project. Basically, his plan was to treat the ruins as a cultural "resource" and to make that resource available for a wide range of purposes, including the promotion of learning, education, and tourism.

This book provides a detailed description of the "relic engineering" methodology developed by the author. It also records the application of the method to ruins in Thailand, Cambodia, and India and the results that were achieved. Of particular interest is the author's discovery of fundamental differences in the criteria applied to profit-oriented corporate projects and cultural projects. With the former the emphasis is on productivity and economic returns over a limited period, while with the latter greater importance is placed on spiritual and scientific aspects that transcend time. It is fascinating to read about the process by which the author adapted engineering concepts to the criteria of cultural projects. Perhaps this type of engineering could be applied not only to ruins but to all types of cultural projects.

The Toyota Foundation supported the project on which this work is based—"Research on Creation of a Model for Coexistence of Human Beings, the Natural Environment, and the Angkor Monuments of Cambodia," led by Shinji Tsukawaki—through a fiscal 1995 Research Grant and provided a Research Report Grant to facilitate the publication of the book.

The Toyota Foundation welcomes responses from readers of the *Occasional Report*. Comments and questions should be addressed to the International Division, The Toyota Foundation, Shinjuku Mitsui Building 37F, 2-1-1 Nishi-Shinjuku, Shinjuku-ku, Tokyo 163-0437, Japan. The articles in the *Occasional Report* reflect the authors' opinions and do not necessarily represent the opinions of the Foundation.

*The Methodology of Relic Engineering: How to Use Historical and Cultural Resources.* Nobuo Endo. Tokyo: Kajima Institute Publishing Co., Ltd., 2001.

Coordinating editor: Shiro Honda. Production: Japan Echo Inc., Tokyo. Copyright ©2002 by The Toyota Foundation; all rights reserved. Printed in Japan.