Chapter 3 The Japanese and Japanese Monkeys: Dissonant Neighbors Seeking Accommodation in a Shared Habitat

Yoshihisa Mito and David S. Sprague

3.1 Introduction

The ancestors of both the Japanese monkey (*Macaca fuscata*) and humans (*Homo sapiens*) arrived in the Japanese archipelago during the Pleistocene epoch, probably via the Korean Peninsula when a land bridge connected Japan to the Asian mainland. According to fossil evidence, the earliest recorded ancestors of the macaque were in the Japanese archipelago nearly 430,000 years ago (Aimi 2002). The oldest subfossil of Japanese people has been found in a geologic stratum approximately 35,000 years old. Thus, humans and monkeys have lived together in Japan for more than 35,000 years. The purpose of this chapter is to sketch out the historical transformations in this long and fraught relationship between the people and monkeys of Japan. It is not the intent to fully review the already extensive literature on humanmonkey relations in Japan, written in both Japanese (e.g., Hirose 1991; Mito 1992, 2011; Mito and Watanabe 1999) and English (e.g., Knight 1999, 2003, 2005; Ohnuki-Tierney 1987). Rather, the intent is to attempt to identify a few crucial values that we believe have characterized the intimate yet conflicted attitude of the Japanese people toward a fellow primate species with which they share a habitat.

Japan provides an example of a global issue where humans and nonhumans have come to an accommodation over their mutual existence within their overlapping habitats. We present this chapter as a case study of how a culture and an animal have interacted with each other. We do not believe that the Japanese case can be a model for any other culture. Nor do we claim that the Japanese have some sort of special

Y. Mito

Formerly Japan Monkey Centre, Inuyama, Japan

D.S. Sprague (⋈)

Ecosystem Informatics Division, National Institute for Agro-Environmental Sciences,

Tsukuba, Ibaraki 305-8604, Japan e-mail: sprague@niaes.affrc.go.jp

rapport with nonhuman animals or that the Japanese case is any more or less unique than the distinctiveness found in any culture. Rather, we wish both Japanese and non-Japanese readers to reflect on the deep contradictions in the relationship between humans and nonhuman primates and to reach a fuller understanding of how each of our cultures reaches an accommodation with nonhuman animals both ecologically and symbolically.

From the Neolithic, monkeys were hunted as food or venerated for their spiritual powers. As history progressed, however, the Japanese view of monkeys changed, along with the psychological and spiritual culture of the Japanese people. Once treated as godlike, people began to think of monkeys as equals, or less, as objects of ridicule or even as a scapegoat (Ohnuki-Tierney 1987). In daily life, monkeys continued to be hunted as a natural resource or despised as pests harming crops as people settled in villages to farm. Today, monkeys have become subjects of scientific research into their natural ecology as well as for the management of their populations. Nevertheless, most Japanese people continue to be keen observers of the macaque. They still retain their faith in the special powers that these monkeys are believed to possess, and the species has thus reserved its special symbolic place in Japanese culture.

3.2 Prehistoric to Early Historic Eras

As the ice age receded, the people living in Japan at the time began to develop very elaborate cultures (Totman 2000). The Neolithic Jomon Era (circa 16,000–2,400 BP) is named for the Jomon style of earthenware, some of the earliest pottery in the world. The Jomon Era saw rapid expansions of many settlements throughout Japan that were very large for a mostly hunting and gathering society. However, the ecological impact of humans intensified with the advent of agriculture and metal tools. Rice cultivation arrived in Japan at about 2,400 BCE to reinforce the trend toward the development of a more agriculturally based society. By the third century CE, early states grew strong enough to build giant funerary, tumulus monuments, known as kofun. Later, under the influence of continental cultures from Korea and China, the aristocracy of Japan developed a highly refined court culture in palatial cities, culminating in the building of the capital city at Kyoto in 794 CE where court culture flourished.

Archeological evidence shows that humans and monkeys had always lived in close proximity. The Jomon settlements left a large number of shell mounds throughout Japan, from which archeologists have unearthed large amounts of animal remains (Habu 2004). The presence of monkey bones in the shell mounds, along with those of many other species of mammals, suggests that monkeys may have been hunted as food by the Jomon people (Fig. 3.1; Hongo et al. 2002). The Jomon people also carved monkey bones to produce decorative ornaments. Archeologists have found what appear to be earrings made from vermillion painted monkey radii, colored red with a hole drilled in it from the Yoshigo kaizuka site in Aichi Prefecture.

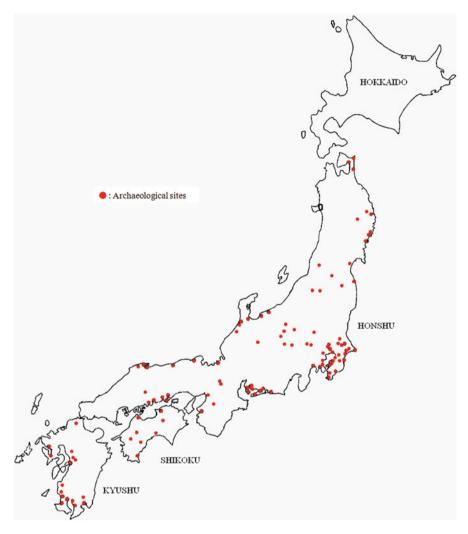


Fig. 3.1 Shell midden sites of the Neolithic Jomon period containing remains of monkeys (Modified from Hongo et al. (2002))

A clay figurine of a female monkey from a Late Jomon site (circa 3,500 BP) of Aomori Prefecture shows that humans had closely observed monkeys (Fig. 3.2). The figurine has hands held over the stomach, nipples, ischial callosities, anus, female genitalia, and the short-tail characteristic of Japanese macaques. The figurine has holes drilled on either side and may have been worn as an amulet for seeking bountiful harvests or easy birth.

The human familiarity with monkeys continues in later periods. Monkeys have been found associated with the kofun tumulus monuments. The kofun were often

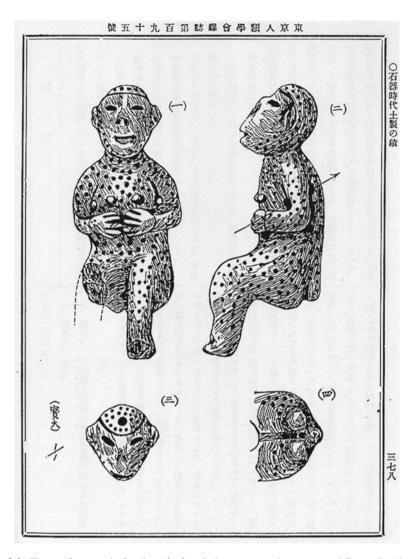
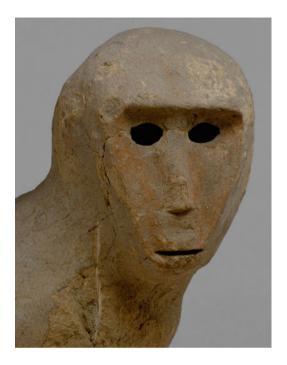


Fig. 3.2 Figure of a ceramic figurine of a female Japanese monkey excavated from a late Jomon site, in a report published in the Tokyo Journal of Anthropology no. 195 (1902) (Reproduced with the permission of the Anthropological Society of Nippon)

accompanied by large numbers of terracotta figurines, called haniwa, depicting soldiers, horses, houses, or other items that may have been important to the dignitaries entombed in the tumulus. A monkey haniwa has been discovered from the Dainichizuka kofun in Ibaraki Prefecture, dated to approximately 550 years CE. The monkeys are depicted accurately with faces painted red (Fig. 3.3).

Fig. 3.3 A haniwa figurine, about 15 cm high, unearthed from a kofun tumulus monument dated approximately 550 CE, the Dainichizuka kofun in Ibaraki Prefecture. Detail from a photo of the Tokyo National Museum: TNM Image Archives (Reproduced with the permission of the Tokyo National Museum)



The arrival of Buddhism to Japan altered radically the human view of animals. Buddhism encourages respect for all life and discourages people from hunting or eating animals. This led to official proscriptions against hunting and eating animals. In a decree dated the fourth month of the fourth year of the Tenmu Era (676 CE), the emperor ordered that the following animals must not be eaten: cattle, horse, dog, monkey, and chicken (Ohnuki-Tierney 1987). Why monkeys were included in this list is somewhat mysterious. Cattle, horses, dogs, and chickens are domesticated animals. Did humans also keep monkeys? This may have meant that monkeys were kept as pets. Alternatively, the emperor may have included monkeys in the decree because monkeys were similar to humans.

The flowering of aristocratic culture nurtured the arts, including painting. Some of the earliest depictions of monkeys seem to have been products of practicing artists. Artists sometimes practiced drawing on fragments of broken pottery because paper was too valuable for practicing drawing. Four monkeys and many characters are drawn with charcoal on the back of a 20-cm plate, excavated from an estate of the emperor's grandson, the Nagayaou in Nara Prefecture, dated to the eighth century CE (Tatami 1988). The artist undoubtedly had the opportunity to closely observe monkeys, for they are drawn animatedly and accurately, even showing the large cheek pouches (Fig. 3.4).

Fig. 3.4 Detail from a drawing of a monkey on a plate excavated from the Nagayaou estate site in Nara, one of Japan's ancient capitals. The plate is about 20 cm in diameter. The drawing shows the monkey's cheek pouch. Photo from Tatsumi (1988) (Reproduced with the permission of the Japan Monkey Centre)



3.3 Middle Ages: From Twelfth to Sixteenth Century

The beginning of the Japanese Middle Ages was marked by the decline of the aristocracy and the rise of the samurai, one of which became a shogun, the military ruler of Japan who presided in parallel to the greatly weakened emperors (Totman 2000). Old values were discarded, and the shoguns came to rule a feudal regime in which they held formal authority over everything in the mountains, rivers, and all of nature. However, regional lords ignored the shoguns and indulged in endless fighting during the Japanese era of warring states. Despite political turmoil, the arts continued to flourish in many ways, and artists continued to depict the changing relationships between humans and animals, including monkeys, in their own creative ways.

Humans probably kept monkeys and may have walked monkeys on leashes from ancient times. A highly developed form of trained monkey performance, the "sarumawashi," appeared in the twelfth century. A scroll painting from the fifteenth century, the "Sanjuniban Shokunin Itaawase Emaki," depicts a saru-mawashi street performer. This scroll depicts 32 practitioners of various crafts and professions, and a saru-mawashi is among these professions (Fig. 3.5). The word saru-mawashi refers to both the human trainers and the performance of the monkeys. The saru-mawashi removed monkeys from their original habitat and anthropomorphized their actions to make them play a role within human culture. The strictly trained monkey performed tricks and skits parodying human actions. The saru-mawashi still exists today as a form of traditional art (Ohnuki-Tierney 1987).



Fig. 3.5 Detail from the scroll painting titled Illustrations of Thirty-Two Professions (Sanjuniban Shokunin Itaawase Emaki) from the Muromachi period, fifteenth century, of the Japanese Middle Ages. The man is labeled a "Saru Hiki," a monkey leader or puller (Reproduced with the permission of the Tenri Central Library Tenri University)

Anthropomorphized monkeys appear in other art forms as a metaphor or as vehicles of satire. Art historians are familiar with a set of scroll paintings titled Frolicking Animals and Humans or "Chouju Jinbutsu Giga" (Fig. 3.6). In a set of four scrolls produced between the twelfth and thirteenth centuries, monkeys, rabbits, and frogs are shown engaged in human activities, playing games, bathing, or carrying out religious ceremonies. The drawing style is that of Buddhist artistry, but the scenes are comical and appear to satirize the Buddhist priests. Monkeys are depicted wearing clothes and giving instructions to rabbits and frogs in some scenes, but in another, the monkeys in priestly garb worship a frog deity. Curiously, not all animals are anthropomorphized in these paintings. Deer and wild boar appear as wild animals under the control of the anthropomorphized animals.



Fig. 3.6 Details from the scroll painting titled Frolicking Animals and Humans (Chouju Jinbutsu Giga). Produced between the twelfth and fifteenth centuries. Attributed to the priest Tobashoujou Kakuyuu and others (Reproduced with the permission of the Toganosan Kozanji Temple)

Another scroll painting from the sixteenth century actually depicts a major change in the relationship between humans and monkeys. Titled the "Fujibukuro Soshi," or The Story of the Wisteria Basket, and drawn by a female artist, Tosa Mitsuhisa, the painting tells the tale of a young human woman marrying a monkey (Fig. 3.7). However, this marriage is not a happy one. The story starts with an elderly man, tired by arduous fieldwork, declaring that he will allow anyone who would do the fieldwork for him to marry his daughter. Monkeys appear from the mountains to do the fieldwork, and the elderly man allows a monkey to marry his daughter. She is taken to live with the monkeys in the mountains, where she is placed in a basket made of wisteria, hence the name of the story. The monkeys rejoice, but the young lady is saddened. Then, hunters come to rescue the young lady and kill all the monkeys. Returned to the human realm, the young lady marries one of the hunters.

This story can be interpreted as portraying the process through which humans divorced themselves from monkeys. People had become aware that the age of mystical participation had ended. The artist explains the difference between humans and monkeys and also uses monkeys as a metaphor to critique upstart humans.



Fig. 3.7 Detail from the scroll painting titled Story of the Wisteria Basket (Fujibukuro Soshi), produced about 1500 in the Muromachi period of the Japanese Middle Ages, 1,360.7 cm long and 19.8 cm wide. Attributed to Tosa Mitsuhisa, a female artist (Reproduced with the permission of the Suntory Museum of Art)



Fig. 3.8 Examples of the stable monkey custom, photographed by Y. Mito. The hands of monkeys are attached to a post of a stable (*left*), and a monkey cranium is placed inside a stable

Another new role for monkeys is found in one of the panels of this scroll painting, in which a monkey captured alive is shown leashed in a stable with a horse. The painting may have depicted the origin of the stable monkey custom. The stable monkey custom, Umaya-zaru, began when samurai started to keep pet monkeys in stables. The stable monkey was believed to take on the diseases and misfortunes of horses. This custom has lasted for 500 years; the practice of placing monkey parts in stables continues in some parts of Japan today (Fig. 3.8).

3.4 Early Modern Period: Seventeenth Century-1868

The early modern period of Japan is defined to have started with the final victory of one of the great lords, Tokugawa Ieyasu, who succeeded in unifying the country under his rule (Totman 2000). He received the title of shogun in 1603 and established the political capital at Edo, the city that later became Tokyo. Thus this period in Japanese history is often called the Tokugawa Era or the Edo Era. Still fundamentally a feudal political system, 15 generations of Tokugawa shoguns ruled until 1868 by controlling the provincial lords who continued to have the power of life and death over their domains.

The Tokugawa shogunate enforced a long period of peace and international isolation during which Japan developed rapidly both socially and economically. The population and commerce increased greatly, placing more pressure on Japan's agricultural capacity and natural resources. The Japanese relationship to nature, while still retaining many religious aspects, became more objective and pragmatic.

The greatest artist to draw monkeys worked in the late Edo Era. Mori Sosen (1747–1821) made a reputation for drawing monkeys realistically (Kawano 1972; Kimura 1975). Schooled in painting in the Chinese style, Mori was an artist who lived in a city but specialized in painting animals. To learn to draw monkeys, Mori purchased a monkey from a hunter and kept it in his house to serve as his model. However, an acquaintance told him that the monkeys he drew did not appear natural. To learn to draw monkeys realistically, he traveled to observe monkeys in their natural environment. He lived in the mountains to observe monkeys for 3 years and learned to depict monkeys as they actually lived. By becoming a monkey himself, Mori Sosen drew monkeys with an intuitive understanding that is unparalleled even today. Those who saw his drawings declared his ability to be godlike.

Even for a modern primatologist, Mori's paintings are uncanny in expressing the essence of macaque posture and behavior (Fig. 3.9). In recognition of his observational





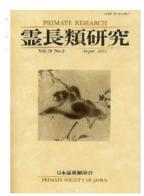


Fig. 3.9 Illustrations of monkeys by the late Edo Era artist Mori Sosen. Two volumes of sketches of monkeys in charcoal survive. The two *left figures* are copies drawn in the Meiji Era, reproduced with the permission of the Japan Monkey Centre. The figure on the *right* is a painting by Mori Sosen that is used on the cover of Primate Research, the Japanese language journal of the Primate Society of Japan, reproduced with the permission of the Primate Society of Japan

ability and artistry, a drawing by Mori Sosen was chosen as the cover picture from the first (December 1985) issue of *Primate Research*, the Japanese language journal of the Primate Society of Japan. Given his keen observations of monkeys, carried out during long years spent with them and which formed the basis of his endearing studies, we would like to consider Mori Sosen the world's first primatologist.

A serious practical problem with monkeys was the conflict between farmers and wildlife. Wild animals damaged crops, inflicting serious damage on the livelihood of farm communities. There are even accounts of a famine that was reportedly caused by wild boars (Kikuchi 2000, 2009). In 1749, 3,000 people died in Aomori Prefecture in the "wild boar famine" when boars destroyed many farms. While the ecological causes are undoubtedly complex, some historians believe that a misguided wildlife management program of the local lord contributed to the problem. The lord had encouraged the hunting of wolves to protect his horses, resulting in an increase in the number of the prey animals, including wild boar, deer, and monkeys.

Historical records show that farmers had limited means to protect their fields from wildlife (Hosoi 1987; Oka 1979; Tsuchiya 1988). They were prohibited from hunting and ate meat only rarely. They were not allowed to own firearms or other weapons and could only chase away wild animals. Farmers deployed many defensive mechanisms to guard their fields: fences and look-out huts around the perimeter, noise makers, dogs, and feces of animals, especially of wolves. The shishi-odoshi, a bamboo sound maker seen in traditional gardens, was originally used for frightening away animals (Mito 1989). Hunting of wild animals was carried out by professional hunter communities that had permission to hunt as well as use firearms or other weapons (Chiba 1969, 1992). The most famous of these hunting communities were the Matagi of northern Japan (Oota 1979). The Matagi observed a strict hunting ethic, mandated by observances of gratitude and fearful awe to the mountain god for the bounty of nature allowed them. The Matagi mainly targeted bears. Bear gallbladder and skins were the taxes paid by hunters to the lords of Morioka and Akita provinces. The Matagi were allowed to consume some of their catch but strictly prohibited from trading on their own because the lords controlled the trade in valuable animal products (Muto 1969). Monkeys were hunted sometimes because monkey gallbladder was a medicine highly valued by farm communities.

3.5 Modern Era: 1868–1945

Feudalism ended with the dissolution of the Tokugawa shogunate in 1868 and the beginning of the modernizing government under Emperor Meiji (Totman 2000). Industrialization commenced, and Japan set forth on the road to a capitalist, market economy. The liberalization and commercialization of Japanese society following the end of feudalism led to a vast expansion in the trade in animal and forest products. The mode of taxation shifted from kind to money. This had the effect of accelerating the monetization of natural resource usage and undermined traditional controls on land use and resource harvesting.



Fig. 3.10 Photograph taken after a monkey hunt in Tottori Prefecture in 1923. The man in the center is holding a rifle (Reproduced with the permission of the Japan Monkey Centre)

Forestry increased in importance all over Japan. The expanding economy and population created greater need for wood and fuel, much of which continued to be produced domestically in Japan. In particular, until fossil fuels attained common usage following the Second World War, much of household fuel continued to be charcoal and firewood (Higuchi 1960). The expansion of forestry meant greater turnover in the habitats for forest-dwelling animals.

In addition, with the end of feudal occupational strictures, hunting was permitted for all citizens (Chiba 1969, 1992). Hunting accelerated greatly as less expensive Japanese-made rifles replaced muzzle-loading matchlock guns. Wild animal populations decreased dramatically, and the Japanese wolf became extinct. Wild animal products became valuable as food, clothing, and medicine. There was high demand for these products, and they were sold at high prices. People believed that nature was bountiful, and "insects, fishes, birds, beasts" were plentiful. In addition, the government did very little to preserve nature or wildlife. These factors contributed to the regional extinction of many species. The hunting of monkeys also accelerated. Not only were monkeys pest animals, their meat, fur, and gallbladder could be sold at high prices. Furthermore, a medicine made from monkeys – black-roasted monkey cranium ground into a powder – was popular in villages as a cure for maladies connected to the head and women's ailments. From the Meiji, Taisho, and into the Showa periods, monkeys were hunted throughout Japan (Fig. 3.10). A Matagi

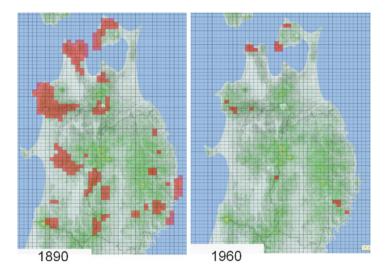


Fig. 3.11 Distribution of monkeys in the three prefectures of Aomori, Akita, and Iwate in the northern Tohoku region of Honshu Island in Japan (Figure by Y. Mito)

once shot 32 monkeys in a single hunting expedition by taking advantage of the tendency of monkeys to travel in groups (Oota 1979). Figure 3.11 shows distribution maps of monkey populations in the Tohoku region where their numbers greatly diminished during this period.

3.6 Present Period: 1945–

Recovering from the devastation of the Second World War, Japan rapidly developed its industries, and environmental pollution worsened. Fortunately, environmental protection was reestablished, and the values of nature protection have taken deeper root in Japanese society. The period immediately following the end of the Second World War appears to be the phase when Japanese people had least contact with monkeys. Macaque populations had greatly reduced over much of Japan, and in 1947, monkeys were finally given legal protection and placed on the list of nonhunted animals under the laws regulating hunting. But even before the hunting ban, according to government statistics, fewer monkeys were hunted during the immediate postwar years. However, serious crop damage by monkeys started again in the 1970s. The hunting of monkeys, not as a resource or for sport but as a pest, increased dramatically, exceeding 10,000 animals per year in 1988. Primatologists have found it difficult to fully explain why crop damage by macaques has seen such a dramatic resurgence. We believe it is the result of a combination of various factors - rural depopulation due to younger people congregating in the cities, the aging rural population, massively expanded conifer plantation forestry, and the loss of traditional rural land uses resulting in closer proximity between farms and forests (Muroyama



Fig. 3.12 "Sarubobo" figurines from the Hida region of Gifu Prefecture. Made of cloth, the figurines are protective amulets in the form of monkeys, now often sold as souvenirs to tourists, even at the Nagoya Airport (Photo by Y. Mito)

and Yamada 2010; Sprague 2002; Sprague and Iwasaki 2006, 2010; Suzuki and Muroyama 2010). It is unfortunate that the interface between humans and monkeys in much of Japan is once again characterized by conflict.

Nevertheless, monkeys continue to play large roles in cultural practices in many parts of Japan. Monkeys are central characters in many traditional children's stories. In the Monkey Jizo legend of Yamagata Prefecture, an old farmer takes a nap during fieldwork. A group of monkeys mistake him for a Buddhist Jizo statue and bring him many rich offerings. The old man awakes to find himself enriched. Monkey figures still serve as modern protective amulets. For example, the "sarubobo" of Gifu Prefecture is an infant monkey figurine that serves as a protective amulet to avoid misfortunes (Fig. 3.12). It is now a popular gift item for tourists.

A new institution created in the postwar period, specifically intended to bring monkeys and people together, were monkey parks. Monkeys at that time were elusive and unusual animals that had to be enticed with food offerings to visit the parks. Monkey parks were set up in many parts of Japan for various reasons, such as tourism, to move monkeys away from human habitations and to help in the recovery of monkey populations (Mito 1995). Unlike zoos, tourists can visit a monkey park to mingle among free-ranging monkeys and often directly interact with monkeys by feeding them (Knight 2005). Several parks were set up with the cooperation of primatologists who carried out some of the most important early research on the social behavior of monkeys in these parks, in particular, Takasakiyama in Oita Prefecture and Arashiyama in Kyoto.

Japanese primatologists took full advantage of living in a nation with monkeys (Yamagiwa 2010a). Many generations of Japanese students started their research career by being sent off by their professors to nearby mountains to watch monkeys. Partly because of the excellent observational opportunities at monkey parks, scientific research on Japanese monkeys quickly achieved world-renowned results

and focused attention on many fundamental aspects of macaque behavior such as the matrilineal dominance rank system and behavioral variability and cultural traits like potato washing. Later, just as Mori Sosen wanted to draw naturalistic monkeys, a new generation of primatologists sought out field sites to study Japanese monkeys in entirely natural habitats, further enriching the body of scientific literature on Japanese macaques (Yamagiwa 2010b).

The scientific study of animals in Japan does not exclude Japanese customs. One example of the confluence of tradition and science is the Buddhist Kuyo memorial rite carried out in many research institutes in Japan for the animals studied at the institute (Asquith 1986a). The ceremony is often named after the subject being memorialized, and "Saru Kuyo" ceremonies are carried out at the Japan Monkey Centre and the Kyoto University Primate Research Institute. In Buddhist theology, the rite is for comforting the departed soul, sending them to the next world, and wishing them a good life in their next life. Through the ceremony, humans apologize for taking the life of animals and express gratitude for the benefits gained by humans.

3.7 Conclusion: The Japanese Monkey, a Neighbor to the Japanese People

The Japanese people have found multiple and often contradictory meanings in the presence of monkeys in Japan. These multiple meanings persist today and interact with each other in complex contexts. The spiritual power of monkeys may have diminished in Japanese culture, but the stable monkey custom remained until recently in many parts of Japan. Not only research institutes but many zoos also carry out annual Kuyo ceremonies to express gratitude and gain the indulgence of animal spirits. Government policies to manage and control animal populations are tempered by heightened awareness for nature protection. Even though thousands of monkeys are culled as pests every year, a general antipathy to killing animals persists, and in some parts of Japan, primatologists have heard of the fear of some hunters of a curse from killing monkeys because of the similarity between humans and monkeys.

It is tempting to seek in religious beliefs the foundation to Japanese attitudes toward nature. However, no simple, one-to-one relation exists between Japanese religious beliefs and particular attitudes about monkeys in Japan. We defer to scholars more knowledgeable about religion for a detailed analysis but suggest a few basic values that the majority of our Japanese readers may agree continue to exist widely among the Japanese people.

The Japanese people consider that all animate beings possess a spirit and a personality. The Shinto religion, worshipped in Japan from ancient times, has brought the animistic view of nature into present-day Japanese culture, in which the forces of life and spirit are seen within any and all things in the natural world, not only in living things, animals and plants, but also in nonliving stones and earth and water. When the philosophical religion of Buddhism arrived in Japan via the Chinese

continent, some Japanese Buddhists introduced into Buddhism the philosophy of original enlightenment (*hongaku shiso*) where the mountains and rivers and all living creatures possessed the Buddha nature (*bussho*) (Sueki 1997). Stones, earth, mountains, rivers, lightening, typhoon, the sun and moon, grasses and trees, insects, birds, and beasts, and of course, humans were all placed on the same horizon and considered to possess a soul and were simultaneously god (*kami*) and Buddha spirit (*hotoke*).

Immersed within this culture, the Japanese people freely anthropomorphize and insert emotional significance into many things. The historical paintings and crafts introduced above are a part of the evidence for this attitude of the Japanese. This is not only done with animals and plants but even with tools. Every tool is recognized to have a unique personality, and the fundamental ethic of Japanese craftsmanship lies therein. Japanese people are moved by the fate of every object, imbued with a spirit, fulfilling its destiny given to it by heaven. In a recent example, Japanese people were moved, inspired by, and even shed tears for the space probe "Hayabusa" that returned from a 7-year long journey to an asteroid, and fulfilled its mission by burning to extinction as it entered the Earth's atmosphere to successfully deliver its tiny payload. Kuyo rites recognize the significance and sacrifice of many things. There are sewing-needle Kuyo and doll Kuyo ceremonies, to name only a few. Kuyo rites can be merely the seeking of absolution, but it also admonishes people not to treat things casually or callously. That is why research institutes perform Kuyo memorial rites for monkeys.

Anthropomorphism has been critiqued by many philosophers (Asquith 2011), and its role in interpreting nonhuman animals has been considered highly problematical, although some researchers have defended the role of anthropomorphism in the study of nonhuman animal behavior (Fisher 1996; Keeley 2004). While Western researchers also exhibit anthropomorphism (Rees 2007), it has been claimed that Japanese primatologists practice anthropomorphism more self-consciously, as compared to their Western counterparts (Asquith 1986b). We wish to emphasize here that a critique of Japanese anthropomorphism should perhaps take into account its philosophical basis and its sociocultural roots. The anthropomorphism evident in the human-monkey interrelationships, as seen in Japan, is based on an assumption of a fundamental equivalence among living things that allows humans to assimilate to some degree with monkeys without precluding the opportunity for dispassionate observations of the other. This dualism may be seen in the scroll painting of the Frolicking Humans and Animals where animals are anthropomorphically assimilated with humans and yet objectified in a highly detailed pictorial medium. The naturalistic paintings by Mori Sosen are simultaneously intimate and anatomically accurate.

This dualism also may be related to why early Japanese primatologists sought out opportunities to observe primates as closely as possible. Within the context of a fundamental equivalence between human and nonhuman social animals, the observer was expected to assimilate to some degree with the subject while proximity permitted accurate observations. Early primatologists achieved proximity by feeding monkeys at provisioning sites. Later, primatologists spent many years habituating monkeys without provisioning and establishing more naturalistic study sites, patiently waiting for the time when a field researcher could sit next to a wild

monkey on the same ground level. Positioned closely to monkeys, the primatologists gave individual monkeys the names of Greek gods because they quickly recognized the personalities of the monkeys with whom they interacted. It is not surprising that postwar Japanese primatologists readily recognized that monkeys possessed a complex social system.

To be sure, a great deal of casual anthropomorphism occurs in Japan. Knight (2005), in his study of monkey parks, characterizes them as sites of pervasive anthropomorphism where visitors are supposed to be able to encounter the grateful monkey of Japanese folklore in the act of hand-feeding the monkeys. However, Knight (2005) points out how visitors quickly discover that the monkeys ignore human etiquette. Visitors are forced to study monkey social behaviors to feed a favorite individual monkey by devising a handout strategy counteracting the monkey troop's dominance hierarchy. Intimate interaction negates casual anthropomorphism, forcing visitor and monkey into keenly observing each other, in what Knight (2005) calls the meeting of dissonant socialities.

All of these multifaceted meanings gathered into one culture may only seem confusing, and it is hard to advocate a cultural basis for the Japanese people to continue their coexistence with monkeys. We confine ourselves to suggesting that Japanese culture retains the concept of coexistence with monkeys based on a sense of equivalence among living things in this transient world. This recognition of nature is part of Japanese tradition and has fostered many aspects of Japanese culture and society, including primatology.

While nature conservation policy may be mainly the work of scientists and the government, it is important that Japanese people continue their relationship with monkeys as neighbors with their own personalities, based on a culture of "anthropomorphized personalities." This neighbor is a difficult one, and maintaining a working relationship requires continuous and endless effort. Some of the community conservation efforts being developed around Japan may represent the hard work necessary to reestablish the human-monkey relation in Japan (Suzuki and Muroyama 2010). These community conservation programs call for the fine-grained planning of many detailed practices needed to manage village environments based on a better understanding of how both humans and monkeys see the environment that they share, such as by reducing crop residues left in fields or training "monkeydogs" to guard villages (Izawa 2005). Maintaining a working relationship with wildlife is a time-consuming and difficult effort, but it is one way to achieve coexistence with mutual benefits, *kyozon-kyoei* in Japanese, for humans and monkeys.

For non-Japanese readers, we submit that to look deep into one's culture is to gain an awareness of the history and values that underlie the relationship between humans and wildlife. Whatever the relationship, purely technocratic values are unlikely to gain public support for either the protection or management of primate populations. We hope the Japanese case provides some insights, but the actual solutions to wildlife issues need to be formulated within the cultural context of each place where humans and primates coexist.

Acknowledgments This chapter was originally prepared by Y. Mito and D. S. Sprague for the symposium titled "Japanese Monkeys and the Japanese People: History and Issues in Japanese Monkey Conservation," held at the XXIII Congress of the International Primatological Society, in

Kyoto, Japan, in September 2010. We thank the members of the Conservation Committee of the Primate Society of Japan, especially Dr. T. Oi, for organizing the symposium. Finally, we thank Dr. Oi and an anonymous reviewer for their many useful comments of an earlier draft.

References

Aimi M (2002) The oldest Japanese monkey. Asian Paleoprimatol 2:13-19

Asquith PJ (1986a) The monkey memorial service of Japanese primatologists. In: Sugiyama Lebra T, Lebra WP (eds) Japanese culture and behaviour: selected readings. University of Hawai'i Press, Honolulu, pp 29–32

Asquith PJ (1986b) Anthropomorphism and the Japanese and Western traditions in primatology. In: Else JG, Lee PC (eds) Primate ontogeny, cognition, and social behavior. Cambridge University Press, Cambridge, pp 61–71

Asquith PJ (2011) Of bonds and boundaries: what is the modern role of anthropomorphism in primatological studies? Am J Primatol 73:238–244

Chiba T (1969) Hunting lore research [Shuryou-denshou-kenkyu]. Kazama Shobo, Tokyo (in Japanese)

Chiba T (1992) Hunters of Japan and their activities [Nihon no shuryousha to sono kodo]. In: Koyama S (ed) Hunting and fishing [Shuryo to Gyoro]. Shuzankaku Shuppan, Tokyo, pp 240–254 (in Japanese)

Fisher JAF (1996) The myth of anthropomorphism. In: Bekoff M, Jamieson D (eds) Readings in animal cognition. MIT Press, Boston, pp 3–16

Habu J (2004) Ancient Jomon of Japan. Cambridge University Press, Cambridge

Higuchi K (1960) History of Japanese charcoal use [Nihon Mokutan-shi]. Zenkoku Nenryo Kaikan, Tokyo (in Japanese)

Hirose S (1991) Monkeys and the Japanese [Saru to Nihonjin]. Dai-ichiShobo, Tokyo

Hongo K, Fujita M, Matsui A (2002) Time-course changes in the distribution of Japanese monkey, Macaca fuscata based on those unearthed on the ground from ancient remains. Asian Paleoprimatol 2:1–12

Hosoi K (ed) (1987) Morioka-han (17th century), Miscellaneous records of the Morioka Domain [Morioka-han Zassho] no. 1~4. Morioka-shi Shakaikyoiku-iinkai, Morioka (in Japanese)

Izawa K (2005) Complete manual for monkey measures [Sarutaisaku Kanzen Manyuaru]. Dobutsusha, Tokyo

Kawano M (1972) Mori Sosen research preface [Mori Sosen Kenkyu Jyosetsu]. Kokka (950):5–25 (in Japanese)

Keeley BL (2004) Anthropomorphism, primatomorphism, mammalomorphism: understanding cross-species comparisons. Biol Philos 19:521–540

Kikuchi I (2000) Famine [Kikin]. Shueisha Bunko, Tokyo (in Japanese)

Kikuchi I (2009) The wild boar famine and regional society [Inoshishiare to chiikisyakai]. Furusato Nanbu (3):3–19, Nanbu Township Historical Research Society (in Japanese)

Kimura S (1975) Thoughts of Sosen [Sosen Ko]. Kobijyutsu (49):57–70 (in Japanese)

Knight J (1999) Monkeys on the move: the natural symbolism of people-macaque conflict in Japan. J Asian Stud 58:622–647

Knight J (2003) Waiting for Wolves in Japan. Oxford University Press, Oxford

Knight J (2005) Feeding Mr. Monkey: cross-species food 'exchange' in Japanese monkey parks. In: Knight J (ed) Animals in person: cultural perspectives on human-animal intimacy. Berg, Oxford, pp 231–253

Mito Y (1989) In the case of farmers: monkey damage and its counter measures [Nomin no baai – engai to sono taio]. Monkey J Japan Monkey Centre (227/228): 34–39 (in Japanese)

Mito Y (1992) Why is Japanese monkey distribution so limited in the northern Tohoku Region? [Tohoku-chiho hokubu no nihonzaru no bunpu wa naze sukunaika]. Biol Sci [Seibutsu Kagaku] 44:141–158 (in Japanese)

- Mito Y (1995) Prospects of the wild monkey parks [Yaen-koen no shochyo to shorai]. Wildl Conserv Japan 1:111–126 (in Japanese)
- Mito Y (2011) The livelihoods of people and the changing monkey distribution of Tohoku Japan [Tohoku Chiho no nihonzaru no bunnpu hensen to hitobito no kurashi]. In: Yumoto T, Shirouzu S, Ikeya K (eds) Environmental history of mountains and forests [Yama to Mori no Kankyo-shi]. Bunichi Sogo Shuppan, Tokyo, pp 99–120 (in Japanese)
- Mito Y, Watanabe K (1999) The social history of people and monkeys [Hito to Saru no Shakai-shi]. Tokai University Press, Tokyo (in Japanese)
- Muroyama Y, Yamada A (2010) Conservation: present status of Japanese macaque population and its habitat. In: Nakagawa N, Nakamichi M, Sugiura H (eds) The Japanese macaques: their plasticity and robustness. Springer, Tokyo, pp 143–164
- Muto T (1969) Testimony of the Akita Matagi [Akita Matagi Kikigaki]. Keiyu-sha, Tokyo (in Japanese)
- Ohnuki-Tierney E (1987) The monkey as mirror: symbolic transformations in Japanese history and ritual. Princeton University Press, Princeton
- Oka M (ed) (1979) A farmer's diary [Hyakusho Denki] written by an anonymous author (17th century). Compil Agric Manuals [Nihon Nosho Zenshu] No. 17. Noson Gyosonn Bunka Kyokai, Tokyo (in Japanese)
- Oota Y (1979) Records of the disappearing livelihoods of mountain people: the matagi [Kieyuku Yamabito no Kurashi]. Suiyosha, Tokyo (in Japanese)
- Rees A (2007) Reflections on the field: primatology, popular science and the politics of person-hood. Soc Stud Sci 37:881–907
- Sprague DS (2002) Monkeys in the backyard: encroaching wildlife and rural communities in Japan. In: Fuentes A, Wolfe L (eds) Primates face to face: the conservation implications of human-nonhuman primate interconnections. Cambridge University Press, Cambridge, pp 254–272
- Sprague DS, Iwasaki N (2006) Coexistence and exclusion between humans and monkeys in Japan: is either really possible? Ecol Environ Anthropol 2:30–43
- Sprague DS, Iwasaki N (2010) Did a habitat bottleneck exist in the recent history of Japanese macaques? In: Nakagawa N, Nakamichi M, Sugiura H (eds) The Japanese macaques: their plasticity and robustness. Springer, Tokyo, pp 345–357
- Sueki H (1997) History of Buddhism in Japan [Nihon Bukkyou-shi]. Shincho-sha, Tokyo (in Japanese)
- Suzuki K, Muroyama Y (2010) Resolution of human-macaque conflicts: changing from top-down to community-based damage management. In: Nakagawa N, Nakamichi M, Sugiura H (eds) The Japanese macaques: their plasticity and robustness. Springer, Tokyo, pp 359–373
- Tatami J (1988) Monkey illustrated plates from the Nagayou estate excavation. Monkey J Jpn Monkey Centre (219/220):4–5 (in Japanese)
- Totman C (2000) A history of Japan. Blackwell, Oxford
- Tsuchiya T (ed) (1988) The complete agricultural manuals [Nogyo Zenshu] by Miyazaki Yasusada (1697). Iwanami Shoten, Tokyo (in Japanese)
- Yamagiwa J (2010a) Research history of Japanese macaques in Japan. In: Nakagawa N, Nakamichi M, Sugiura H (eds) The Japanese macaques: their plasticity and robustness. Springer, Tokyo, pp 3–25
- Yamagiwa J (2010b) History and present scope of field studies on *Macaca fuscata yakui* at Yakushima Island, Japan. Int J Primatol 29:49–64