

THE INDIGENOUS KNOWLEDGE SYSTEM OF KANAZ TUVINIANS (TUWA PEOPLE) AND ITS FUNCTIONS IN MANAGING ECOTOURISM OF KANAZ NATIONAL NATURE RESERVE

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ABSTRACT

This paper reports the indigenous knowledge system of the Tuvinians, an indigenous people of Kanaz of the Altai Mountain area of North Xinjiang, China. The Tuvinian subsistence depends mainly on hunting and herding in an area in which there is a key national nature reserve with distinctive biodiversity and where tourism has been rapidly developed in the past ten years. It is noted that the violation of biodiversity of the Kanaz area has paralleled the forced changes of the Tuvinian indigenous culture in the local tourism development. The paper holds that Tuvinian indigenous knowledge will dynamically function as a key factor indispensable to eco-tourism development in areas like Kanaz of Altai Mountain.

INTRODUCTION

The development of mountain areas and peoples have been a focus of many academic disciplines. While the issues of development of the mountain areas of South-East Asia have been studied and conferences were organized, similar issues of the mountain areas in Inner Asia have been much less studied. This paper attempts to report a case study of the indigenous knowledge system of the Kanaz Tuvinians and the local tourism development of the Kanaz National Nature Reserve, which aims to offer an analysis related to the theme of the III MMSEA as a referential date so as to look at the multi-situational aspects of the tourism development, resource management, and indigenous culture of the Asian mountain areas.

KANAZ AREA OF THE ALTAI MOUNTAIN RANGES IN CHINA

The Altai Mountain Ranges, one of the three major mountain ranges of the Xinjiang Uygur Autonomous Region, lie in the uttermost north of Xinjiang with Russian Altai Frontier Region to the north, Kobdo Province of Mongolian Republic to the east, and Kazakhstan to the west. These great mountain ranges were an important area in which many nomadic peoples lived and from which nomadic peoples started to migrate to other parts of Inner and Central Asia in the area's long history. Therefore, it has been called a "cradle of nomads."

The Kanaz area, is an approximately 3,000 square kilometer area situated in the territory of Burjin County, in the northwestern part of Altai Mountains Ranges. This area is unique in terms of its biodiversity because it lies between the northern edge of Zhungar Basin with an arid desert ecosystem and the frigid-temperate zone of the northern part of Asia with its Taiga Forest. The ecosystem of these high mountains is made up of primitive forest, grassland, and modern glaciers constituting a unique ecosystem with a great variety of plant and animal species, some of which are special to China. Up to now, about 798 species of plants belonging to 298 genus of 83 families, about 30 species of animals, 4 species of amphibians, and 117 species of birds have been found—of which 27 species belong to the first and second grades of nationally protected species and eight belong to the rare species on the brink of extinction labeled by the "World Extinctive Animal List." Most fish species of the Kanaz water system (lakes, rivers) are rare in China. It is no wonder that this ecosystem with special biodiversity is the only one in the country. In 1986, a national nature reserve, occupying an area of 2,700 square kilometres, was established.

Ecologically, Kanaz Lake and Kanaz River, whose source is the lake, are vital for the ecological stability of the area. Kanaz River is the most important branch of River Erqis. To its south is the Zhungar Basin, in the second largest desert of Xinjiang; to its north is the Altai Mountain steppe area, with the its vast grassland and forest providing the most important pastures for pastoralists of Altai area.

THE KANAZ INDIGENOUS PEOPLE: TUVINIANS

The Tuvinians are the indigenous people living in the Kanaz area, including Burjin and Habahe counties of the Altai Prefecture of Xinjiang. The population of the Tuvinians of Altai Prefecture is about 4,470 (1998), of whom 1,400 live inside the Nature Reserve with others living in the adjacent areas.

The Kanaz Tuvinians are officially identified as a part of Mongolian Nationality of China. However, they believe that they are ethnically not Mongolians but a different and independent ethnic group. The Tuvinians sometimes are called "Kök Monchaks" or "Deba" by the neighboring ethnic peoples, such as Mongolians and Kazakhs. In the Chinese literature and official documents, they are called "Tuwa People."

The language of Kanaz Tuvinians belongs to the Turkic Group of the Altaic Language Family. As they do not have written system, their history and culture has been transmitted orally generation to generation. Now most of Kanaz Tuvinian children attend schools in which Mongolian is the language of instruction, and only a small number of them attend school where Kazakh language is the language of instruction.

Concerning their origins, there are three legendary sayings among the Kanaz Tuvinians. One is that their ancestors were the "forest people" who lived in the Altai Mountain area for thousands of years, and later in the twelfth century they were conquered by Genghis Khan army and became a part of the Mongol Empire. It was in the eighteenth century that part of them migrated to the southern part of the Altai Mountain area. This part formed the basis for the present Kanaz Tuvinian population. The second assumes that their ancestors migrated from the area of the present Russian Tuva Republic about 1,000 years ago and later a group of disabled and aged Mongolian soldiers from Genghis Khan's army joined the group of the Tuvinians and these two groups formed the basis of the present Kanaz Tuvinians. The third legendary saying suggests that the ancestors of Kanaz Tuvinians were a tribe of the Siberian Tuvinians who migrated from the Siberia Tuva (historically, "Tangnu Urangkhay" in the present-day Russian Tuva Autonomous Republic) in the seventeenth and eighteenth centuries. It is difficult to ascertain which claim is closest to the truth, as there are few reliable written records. But what can be assumed is that the Kanaz Tuvinians migrated from the areas north to Altai Mountain Ranges, their ancestors were tribal people who lived on hunting and raising animals, and they were living in the Kanaz area in isolation until the late nineteenth century when Kazak nomads returned to North Xinjiang from the Czarist Russian Central Asia (the Present Kazakhstan). This can be seen from the language of the Kanaz Tuvinians. Some of vocabulary and accents (pronunciation) are of either Mongolian or Kazakh languages, but the grammatical structure is roughly the same as the core of the Tuvinian lan-

guage spoken in Tuva Autonomous Republic, Russia (Mongush 1997:124-25).

The Tuvinian language holds a unique position in the Altaic Language family: phonologically and morphologically, it lies between the languages of the Tungus and Turkic groups. Many linguists who researched the language believe that it has retained many morphological and syntactical features of the ancient Turkic language before it split into different dialects and languages. It is also seen that until later 1940s their social structure remained a tribal one, although they were organized in the Aimag system ("qi") by the Qing Court. The data obtained from field work conducted by several researchers provide evidence that the following tribal or clan forms continue to exist in the memory or rituals of Kanaz Tuvinians: the Soyans, the Irgists (Irkhits), the Keyuki and the Monchaks. Besides, some other names of either tribes or clans were mentioned by the informants: the Oochark, Shanganash, and Chagtyva, which may be the memories of ancestors who came to the Kanaz area later those of the first mentioned four tribes or clans (Tsui Yanhu 1993; Mongush 1997).

THE INDIGENOUS KNOWLEDGE SYSTEM OF KANAZ TUVINIANS

In order to explore the indigenous knowledge system of Kanaz Tuvinians, it is believed necessary to give a brief account of their culture, the subsistence system and religious system and practice in particular.

Many Kanaz Tuvinians said that their ancestors were a "forest people," and hunting has been a major means of their subsistence as the area is rich in wild animals. Usually the male adults are the hunters, and they learn the hunting skills from their fathers when they are very young. They know well the animals and the seasons they should and should not be hunted. About 30 to 40 years ago they held rituals before they set off to go hunting in the forest, and when they bagged an animal, certain parts were used as sacrifices to the gods of nature.

It is hard to say when Kanaz Tuvinians began to practice pastoralism. But the aged people said that this means of subsistence had a long history. Maybe it started when they came out of the "forest" and settled down in the area. Their main domestic animals are cattle, sheep and horses. Early summer they move the animals up to the high mountain pastures, usually about 2,000-3,000 meters above sea level and stay there for about four to five months until the snows begin in mid-September. In early August they prepare a lot of hay for their animals to eat in the long winter (about five to six months). When they are moving with their animals, they usually live in yurts. They regard the animals as their main wealth, and the meat and milk products consist their major food. In recent years, some Tuvinians have become engaged in growing crops (barley, maize and potatoes). However, the climate conditions (the frost-free period is about 80 days) limit farming possibilities, making it not a particularly prof-

itable business. For most of the families it is an additional source for their grain requirements.

The Kanaz Tuvinians situate their settlements in valleys or on small mountain plains. By "settlements," I mean that they position their houses in fixed places, usually constructed with wooden logs. About 40 years ago, most of the settlements were not the compacted compounds of houses and covered pens or folds for animals with wooden walls as they are now. At that time there was usually great distance between households, depending on the size and location of the valleys. Since 1970, settlements with many households living together have been formed and developed, usually consisting of a 30–50 families. The largest one is in the National Nature Reserve, lined up on the two sides of a main road and comprising about 140 households of eight hundred people.

The Kanaz Tuvinians observe three forms of religious belief: primitive nature worship, shamanism, and Tibetan Buddhism. These three religious forms are usually mixed in their concepts and ritual activities. The primitive nature worship is the fundamental religious form of Kanaz Tuvinians. To them all living existence, including heaven, earth, lakes (Kanaz), forest, trees, grass, rivers and brooks, mountains, wild animals, and fish in the lake, are sacred and there are gods or goddess in them. So every year they hold shamanistic rituals in worship of these. Shamans are the mediums between the human beings and nature. Shamanism has been practiced among the Kanaz Tuvinians for a long time, and in the past, almost every tribe, as well as the larger clans, had its own shamans. Shamanistic activities were held regularly every year and Kanaz Tuvinians believe that shaman rituals can help them to contact nature and its gods and goddesses that protect them, including their productive activities. For instance, at the first day of new year, a shamanistic ritual, *shagaa* in Tuvinian language, is held to pray to the nature for a bumper harvest year and good luck for the tribes (or villages). *Ovaa dagyyr* ritual is held to pray to the mountains and lakes for protection of hunting and herding. Tibetan Buddhism was introduced and spread among Kanaz Tuvinians when the Qing Dynasty established the Aimag system (the "Qi" system) among the Urangkhay (Tuvinian) tribes. And after a part of them moved to the Kanaz area, the religion moved there, too, together with the people.

Though there are no lama temples in the area there are some Lamas, who, however, often combine the three kinds of worship of primitive worship, shamanism and Buddhism. There are two major festivals of Tibetan Buddhism: Zulenayr and "Oboo." The ritual activities of the latter are usually held around an "Oboo," a big pile of rocks or stones with ritual signs (usually ribbons of cloth of different colors tied onto twigs of pine trees or Siberia fir trees set on the top. When Lamas pray or read Buddhist scripts, people move around the "Oboo," pouring wine (spirits) onto it and praying for peace, happiness, health and good luck.

The natural environment, subsistence system, and forms of religious worship are the major sources and containers

of the Kanaz Tuvinians' knowledge system and their culture too. Their behavior system, as an important part of their culture, is formed and governed by the knowledge system and conceptualized nature, which is seen in the following:

1. The conception of the nature is the universe for them and it is this natural world full of life that has its power over everything in their life. The nature of the universe is the foundation of the Tuvinian knowledge. For Kanaz Tuvinians, the natural environment, including the fauna and flora, is what the god of the universe offers to them, and they are indispensable to their lives. This can be seen from their beliefs in the concept that everything in nature offers what is needed for their survival, just as what an old Tuvinian told a field worker, "trees, the lake, even a single plant and flower, and every animal in the forest, are what we are obliged to be thankful for, they offer us all we need."
2. The conception of the harmony between man and nature is the core of the knowledge system. The Kanaz Tuvinians believe that they are a part of the world, which consists of every living species for and inside of which there are gods and goddesses. They worship the lake, the forest, the mountains and the animals, and it is the shamans that help them to communicate with nature. They believe that if they offend them, these gods and goddesses will punish them, so it is the virtue of all virtues that they should respect every single living species of nature. This is why they hold rituals every year, praying to the natural spirits to protect them and the fauna and flora on which they live. During the field work, a woman shaman told me, "If the number of a kind of wild animals reduces drastically, it is because someone has offended the gods; if the grass on the pasture does not grow well, it is only because someone stayed there too long together with his animals, if a big fish jumps out of the lake water and pulls our ox into it, it is because someone has spread dirt into the lake." The results of the questionnaire forms administered to school children suggest that knowledge of nature and protection of living species of nature lays at the core of Kanaz Tuvinian enculturation. Almost all the 142 school children questioned said that the harmony between man and nature is the most essential element in their attitudes and behavior towards nature.
3. The concept of sustainable acquisition and use of natural resources is a dominant one that regulates the environmental behavior of Kanaz Tuvinians. This can be seen in that they usually do not cut living trees but only use those that have fallen and are dead for building houses and making canoes, sleighs and tools. And they never hunt in the season when animals reproduce, and nor do they hunt those wild animals that are feeding their babies or the baby animals themselves. Several herders said that they knew a very old song that every Tuvinian herder knows. Some of the lines are as

the following: “ Move your cattle faster and let the grass grow/put down your axe while you are about to cut green twigs and let them caress their mother/Leave some seeds of pine and fir trees on the ground and let them grow their children. (Kanaz Tuvinians gather pine tree seeds to eat).

4. Their concept is that man is responsible to help Heaven to take care of all those existing in nature. The most important way to do this is to keep contact with nature through various rituals. Only by doing so can man communicate with the nature and its gods. This conceptualized sense of responsibility is seen in their daily practice: never demand too much from the nature, what is gained is what is needed, no more. Before the 1980's there were no administrative bodies responsible for managing the environment. Since the National Nature Reserve was established in 1986, the Kanaz Tuvinians have offered much help to the managing office. And when they see tourists (in recent years, the number is increasing dramatically) damaging the environment, they stop them.

From the above we can see that the core of the indigenous knowledge of the Kanaz Tuvinians embodies the conception of nature, the relationship between man and the eco-environment and the ritual system, and its practical function in terms of communicating with nature and of the ways for coping with the relations with it. It is this indigenous knowledge system of Kanaz Tuvinians and their practice based on it that help the people to manage to maintain the ecosystem of the area and keep it intact. It is clear that Kanaz Tuvinians' indigenous knowledge system is the result of their adaptation to the ecosystem, and it is through this adaptation that they understand how to live their life without violating the eco-environment and, what is more, understand how to maintain a harmonious relationship with their environment.

And it may seem logical to say that this knowledge system is full of too much superstition and unscientific, and that it goes against the general trend of the modern world. It is also true that the “others,” like us, would say that the system seems to be incommensurate and incompatible with the modern management of the eco-environment and natural resources in areas like Kanaz of the Altai Mountains. However, the assumption of the incommensurability and incompatibility of the indigenous knowledge system with the development of tourism, those elements concerning the concepts and behavior to the ecosystem in particular, is questionable: Why can knowledge that suits the sustainability of an ecosystem in the context of indigenous culture not be compatible to development in a new context? Naturally, it may lead to another question: What can the indigenous knowledge system of the people, like Kanaz Tuvinians, do for the “modern development” of the area in which it functions in the context of an indigenous cultural system?

It seems too early to come to any conclusions before we understand the values of the indigenous knowledge

system of any indigenous people. Many cases of the violation of biodiversity in many areas in the world, including Kanaz, suggest that the indigenous knowledge system is de facto indispensable to local development, natural resource development, and management in particular. Any neglect of it may not only result in environmental problems but lead to the drastic change of the indigenous culture itself, which in turn may lead to further violation of the ecosystem and biodiversity, too.

A CASE OF TOURISM DEVELOPMENT AT THE KANAZ NATIONAL NATURE RESERVE

Following the above discussion, I would use the tourism development at Kanaz National Nature Reserve as a case to explore what the indigenous knowledge can do for the local economic development and management of natural resources.

In the recent years, the concerned local governments of Xinjiang have worked out a plan for developing tourism in Kanaz National Nature Reserve. Some development plans designed by the institutions of Xinjiang and other places in China neglected the indigenous culture of the area. When they are put into practice, many environmental problems have appeared and tourism has become a great pressure on the eco-environment of Kanaz area, including the National Nature Reserve. Kanaz Tuvinians together with their indigenous knowledge system have been pushed aside and became marginalized in the local tourism development. And it has been noted that the economic interests which concerned decision makers and local tourism management have impacted some of the Tuvinian people of Kanaz. Young people in particular have become more and more careless with the environment. “They become so mad about making money and forget what our people believe in and how we are living with nature,” said an old Tuvinian hunter. Although it is not correct to assume that all environmental problems of the area are associated with this change, it may be empirically logical to assume that if the indigenous people are excluded from taking part in the present activities of tourism development in the Kanaz area, then greater pressures can be expected to be put on the ecosystem.

The local strategies for the development of tourism and their practice in the Kanaz National Nature Reserve and its neighbouring areas have caused controversial debates in the local society of Xinjiang.

Some officials, tourism planners and management staff argue that since the Kanaz area is rich and unique in tourism resources and the local economy has been undeveloped, the utmost important issue is the development of the rich resources. This will not only help the area out of poverty but also help Kanaz Tuvinians to become “modernized” in terms of improving their living standard and education. In the development, it is essential to turn Kanaz into a world famous tourism site to achieve this. “Modern

concepts of development should be taken into account and put into practice, and the facilities for tourism should be equal to any famous tourist sites in the country," "it is unavoidable to desert some negative influence on the environment of the National Nature Reserve and it is unnecessary to worry about it too much, for, when tourism numbers boost up, this will certainly improve the local economy and living standard of the locals, including Tuvinians, and we can put money into the improvement of the environment."

Another voice insists that since the biodiversity as well as the ecosystem of Kanaz is very important to the whole Chinese ecosystem, any development of tourism without consideration of eco-environment protection of the ecosystem would be disastrous. According to them, it is better not to develop tourism in the nature reserve, and even if the local governments want to develop tourism, they should not do it within the reserve area. They also hold that in order to protect the ecosystem of the reserve, those Tuvinians who live within the Reserve area should be moved out of it. This has certainly been rejected by both of the local governments and Kanaz Tuvinians. The former say that Tuvinian culture is a resource for tourism development and the reserve will be less attractive without a Tuvinian community living within the reserve while the latter say that this is their homeland and they will never agree to any plans that demand them to move out of it.

The recent development of the situation is also controversial. In the past five years, tourism facilities have been established in the end area of Kanaz Lake and many changes have happened to the fauna and flora of the area, most obvious one is the reduction in density and height of plants and vanishing of wild animals. The rubbish and wastewater are not properly disposed. The eco-environment of the development area has been deteriorated to some dangerous extent. Pressed by the media of Beijing (this is also controversial, the local media of Xinjiang seldom reports the negative effects of tourism development of Kanaz Nature Reserve) and the local academic circle, the Xinjiang government recently decided that all the tourism facilities that were built should be moved out of the Reserve. However, implementation of this decision seems very slow. And the latest development is that a local enterprise group has "bought" the right for the development of Kanaz tourism resources and a new development plan has been made.

THE INDIGENOUS KNOWLEDGE SYSTEM AND ECOTOURISM DEVELOPMENT

The case of the Kanaz Tuvinian indigenous knowledge system and its relation to the local tourism development may have multifold implications to the mountain area development and the development of tourism in particular.

Tourism development in mountain areas will inevitably affect indigenous people and their culture. The ques-

tion is not whether the development will bring changes to both the people and culture or not; rather, it is whether the people and their culture should be regarded as dynamic and active factors in the development process and whether their culture can be developed, too, without deteriorating. Any tourism development plans in mountain areas would be incomplete without the active participation of the local people and without consideration of the involvement of their indigenous knowledge system within them.

In ecologically sensitive mountain areas like Kanaz, sightseeing tourism is unsustainable because of negative effects of its consuming patterns and the unbearable demands of the tourist population on the ecosystem. Therefore, ecotourism in its true sense may be a better choice, for the reasonable control and management of tours and strict control of number of tourists' accessing the areas that are demanded by ecotourism will certainly reduce the negative effects while the tours themselves may satisfy the special needs of tourists.

The Kanaz case suggests that the indigenous knowledge system carries its values in both designing ecotourism development programs and the practical operation of them. As it has been described in the above, the core of the Kanaz Tuvinians' indigenous knowledge system consists of a series of concepts and behavior patterns concerning their understanding of their position in the ecosystem, the relations between man and nature, and how to use and manage natural resources in sustainable ways. Accordingly, they will not only contribute a great deal to designing ecotourism development programs but also may be valuable in helping eco-tourists obtain better and deeper understanding of the natural environment in which they are participants of the protection and the relation between man and nature.

The Kanaz Tuvinians' concepts of man and the nature suggest that ecotourism is an interactive activity that involves two kinds of participants: not only the tourists themselves, but also the local people with their local knowledge. This interactive participation will certainly benefit both.

Adding to above discussion, I assume that there is an interactive relationship between biodiversity and cultural diversity in terms of mountain area development. Violation of either of them may lead to the instability, even degradation of the other. So sustainable development of mountain areas will be incomplete, even impossible, without maintaining the both.

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