ACTIVITIES OF INTERNATIONAL YUKIGATA RESEARCH GROUP

Yasuaki Nohguchi, Kaoru Izumi, Toshiichi Kobayashi, Katsuhisa Kawashima,
Yukari Takeuchi, Yasoichi Endo, Stefan Keller, Takatsugu Yamada, Masaki Kaneda and Hiroe Miyamoto

ABSTRACT: Yukigata is a Japanese which means the shapes created by snow patches surrounded by bare ground (positive yukigata) or by open ground surrounded by snow (negative yukigata). They have names likened to men, animals, tools, etc. and have been used mainly as a kind of calendar in agriculture in Japan. There are more than 300 yukigatas in Japan. The yukigatas are distributed not only in many regions but also in Japan. In this paper we will introduce the distribution of newly found international yukigatas and the activity of the international yukigata research group.

KEYWORDS: Yukigata, Mountain Snow, Topography, Education

1. INTRODUCTION

When a seasonal snowcover disappears on a plain and a snow line of seasonal snowcover retreats on a mountain in spring, a complex pattern of white domains covered with remaining snow and dark domains of the ground surface appears on a mountainside. Some of the white domains of remaining snow and dark domains of ground surface are likened to men, animals, tools, etc., and are called yukigata in Japan. There are more than 300 yukigatas in Japan (Tabuchi, 1981).

The yukigatas have been used mainly as a kind of calendar for agriculture in most of snowy regions in Japan for many years. Recently, however, the yukigatas are being forgotten because the primitive ways for agriculture are disappearing with the progress of agricultural technology. In this sense the yukigatas can be considered as a kind of cultural inheritance.

Nohguchi et. al. (1997) and Yamada (1997) introduced present-day significance of yukigatas. Because their formation is governed by snow accumulation, topography and snowmelt, yukigatas contain information on mountain snow distribution, climate change and topographical change. Moreover, it is possible to use them as sightseeing resources or for nature education.

In this paper we will introduce the distribution of newly found international yukigatas and the activity of the international yukigata research group.

2. DISTRIBUTION OF INTERNATIONAL YUKIGATA

The International Yukigata Society (IYS) seemed to be established about 4 years ago for this yukigata research group to be internationally active. This is a very fussy and loose group. The name might soon change to the World Association of Yukigata (WAY).

Fig. 1 is the international distribution map of yukigata made from the information which IYS have obtained by 1998. Yukigatas exist and can be observed in many regions all over the world. On the other hand, there are also many blanks in the world.

In Norway the yukigata seems to be known as well as in Japan. The positive yukigata named the Olympic Torch runner (Fig. 2) was artificially made as a monument at the 1994 Rillehammer winter Olympic games. Hakuba-village, where the ski jump games of the 1998 Nagano winter Olympics were held, is one of the most famous places for yukigata in Japan. The name of Hakuba, which means a white horse, is from the name of the yukigata, though the yukigata is a black horse. There are some new positive yukigatas, a butterfly and a dragon (Figs. 3,4), also near the Salt Lake City where the next winter Olympic games will be held. In this sense the recent winter Olympic games can be considered as the Yukigata Olympics.

The yukigatas of Mt. Kailas in Tibet, swastika and inverse swastika (Fig. 5), are related to something religious. The yukigata shaped a rabbit in Karakoram.
International Yukigata Service

YUKIGATA DISTRIBUTION MAP

1 Norway : white square, a chicken, an Olympic Torch runner (artificial)
2 Russia : an ermine (new)
3 Switzerland : a knitting woman, a spider, the eyes
   Lake Geneva (Switzerland-France) : the woman of leaves, a goat, La Vache
4 Austria : ?

5 Karakoram (China) : a rabbit
6 Tibet (China) : a swastika, an inverse swastika
7 Japan : many
8 New Zealand : ?
9 Alaska (USA) : piano keys
10 Canada : a ghost rider, No. 7
11 USA : a fox chasing a rabbit, a holy cross, an angel of Shavano,
   a butterfly (new), a dragon (new)

12 Antarctica : fingers rock, goldfish rock

Fig. 1 International yukigata distribution map.
Fig. 2  The Olympic Torch runner yukigata in Norway.
(Photograph: Asahi News Paper)

Fig. 3  The Butterfly yukigata on Mt. Superior in Utah, USA.
(Photograph: Mr. David Ream).

Fig. 4  The Dragon yukigata in Cardiac Bowl behind Mt. Superior in Utah, USA. (Photograph: Mr. David Ream)

Fig. 5  Religious yukigatas in Tibet. Where is the swastika yukigata and the inverse swastika yukigata?

Fig. 6  The Eyes yukigata on Mt. Schreckhorn and the Spider yukigata on the north wall of Mt. Eiger in Switzerland.

Fig. 7  The Ermine yukigata in Kirovsk, Russia named by Mr. Pavel Chernouss.
seems to have been used as a primitive sensor for water resource since long time ago.

In New Zealand and Austria, they have yukigatas but now we have no information in detail such as name or history.

Antarctica is almost a white continent, so that a dark pattern of rock is important as a landmark as well as mountain. The names sometimes are from the shape of the dark pattern of the rock. So these can be considered as a kind of yukigatas in a wide sense.

The yukigatas in Switzerland are not well known even by Swiss except the positive yukigata, a spider on the north wall at Mt. Eiger (Fig. 6), which is well known by a lot of climbers. The positive yukigata, the eyes (Fig. 6), of Mt. Schreckhorn is not very well known. Also the yukigatas which appear near the Lake Leman are known by few Swiss. These yukigata appear the mountain in the France side of the lake and can be observed from Switzerland, the opposite side through the lake.

We have not obtained any other information on yukigatas from the other countries or regions for the present. Russia is a blank on such yukigatas with names and histories. The Russian yukigata in the map was newly named by the director of Russian branch of IYS for the popularization of yukigata (Fig. 7).

3. ACTIVITIES OF JAPANESE BRANCH OF INTERNATIONAL YUKIGATA SOCIETY

Figs. 8-15 show some of Japanese yukigatas with oral literature. Yukigatas sometimes have their own tales as well as the names. For example, the tale on the positive yukigata, two sisters, of Mt. Hitokata is as follows:

"There once were two sisters whose mother was seriously ill. The sisters climbed a mountain to pray to the god Gongen for her recovery. But, on the way down, they were overcome by a snowstorm, and were trapped. From then on, the girls have appeared on the mountain as a yukigata, and the mountain is now called Hitokata-yama, which means a mountain with the shape of people."

Some of new yukigatas without histories are shown in Figs.16-18.
Fig. 11 The Rabbit Yukigata of Mt. Azuma-kofuji.

Fig. 12 The Jumping Horse Yukigata of Kanna-san.

Fig. 13 The Old Woman Sowing Millet Yukigata of Awaga-take.

Fig. 14 The River Yukigata of Nokogiri-san.

Fig. 15 The Two Sisters Yukigata of Hitokata-yama.
The new yukigata, Musicians of Bremen. This yukigata is selected Yukigata of the Year '96 by IYS.

The new yukigata, "Oohakucho" (a big swan) of Mt. Tanigawa. This yukigata is selected Yukigata of the Year '97 by IYS. (Photograph: Mr. K. Yamanoi)

The new Yukigata named Princess Diana. This yukigata is a slope of Nagaoka ski field in Japan.

Recently yukigata watching, which is a tour to observe yukigatas like bird watching, is held every spring in Japan. This is a good chance for nature education. The most popular yukigata at the watching is sometimes used as a design for the yukigata T-shirt, which is made every year. In the yukigata T-shirt '98 the two sisters yukigata is designed.

Recently yukigata watching, which is a tour to observe yukigatas like bird watching, is held every spring in Japan. This is a good chance for nature education. The most popular yukigata at the watching is sometimes used as a design for the yukigata T-shirt, which is made every year. In the yukigata T-shirt '98 the two sisters yukigata is designed.

If you have any questions or information on yukigata, please contact with nhg@ess.bosai.go.jp.

The address of yukigata home page of WAY and IYS are
http://www.geocities.com/Tokyo/Fuji/4567/yukigata.html
and

We are waiting for the information on yukigata from you.

REFERENCES