Masafumi Kono *, Nobuyuki Shimojo**, and Tsutomu Oohashi***

*Public official, Oonishi-cho, Ehime Pref. 〒799-2205 Oonishi, Ehime-Pref. Japan. Tel 0898-53-2313 Fax 0898-53-4320 Email ons-fuji@opost1.netspace.or.jp

**Professor, Ehime University. 〒790-0826 3 Bunkyo-cho, Matsuyama-city Ehime Pref. Japan. Tel 089-927-9000 Fax 089-927-9314 Email shimojo@ll.ehime-u.ac.jp

***Professor, Chiba Institute of Technology. 〒164-0003 Park House Higashinakano #022 1-53-11Higashinakano Nakanoku tokyo Japan Tel03-3366-8788 Fax03-3366-8737 Email QYL02655@niftyserve.or.jp

# Reconstruction and Management of Myokensan No.1 Keyhole-Shaped Tumulus in Miyawaki, on the Seto Inland Sea

The Myokensan No.1 keyhole-shaped tumulus in Miyawaki, Oonishi, Ehime Prefecture, has been developed as a landmark in the Fujiyama Cultural Park. We would like to take this ancient tomb which was built at the beginning of the 4th century, as an example of how preservation and management of ancient sites can be incorporated in coastal development.

In our society today, serious social problems have occurred with the drastic changes in the social environment, including a sharp increase in juvenile delinquency whose may be attributed to emotional disturbances among other causes.

Under such circumstances, people have come to realize that having a comfortable space where they can relax and feel peace of mind is indispensable to their lives. As one of the way to meet such people's needs, local people have begun to preserve ancient sites as areas for relaxation.

While coastal development is proceeding as part of industrialization and urbanization, many precious cultural properties have disappeared as a result of rather backward-looking policies such as measures to protect cultural properties from development.

The Myokensan No.1 keyhole-shaped tumulus the first to be reconstructed and opened to the public, now provides people with opportunities to view the original, historical environment of an ancient burial mound.

Special facilities have been constructed in the tumulus, from which people can see a real underground stone burial chamber. Approximates 3,000 keyhole-shaped burial mounds have been found so far in the Japanese archipelago, but the Myokensan tumulus is presently the only one in which people can see an actual stone burial chamber of the earlier burial mound period.

The tomb is mounded with earth and has been reconstructed with stone walls. Tumuli in other areas had been reconstructed by covering the mounds with turf or stones.

In restoring the Myokensan tumulus have laid stress on the concept of Kansei information, which has been developed from the Japanese way of thinking. We defined Kansei as a general term for the function of brain that has as an essential element a positive emotion such as beauty, amenity, interest, pleasure, reverence and so on. At the same time, we have endeavored to precisely reproduce the mound data collected from the excavation of the tumulus.

Through 8 academic excavations and research conducted from 1990 to 1994, quality information on the burial mound was collected.

The studies have showed that the stones used in the construction of the tumulus came from in the Yuzue Islands in the Sea of Itsuki. There was a close relationship between the tumulus and the sea. Furthermore, Chinese bronze mirrors unearthed in the No. 2 Stone Burial Chamber are similar to mirrors found in Hiroshima Prefecture, opposite the Geiyo Islands in the Seto Inland Sea. These mirrors form a bridge between both shores of the western Seto Inland Sea, an area called "Shimanami Sea Road," which has stimulated peoples interest in ancient Japan.

Throwing the site open to the public and inviting citizens to participate in the reconstruction and the improvements made from 1994 to 1996. We have addressed such issues as how to convey information that would appeal to people's sensitivity and how to authentically reproduced the site with the data from the excavation.

The reconstruction included the following:

1. The No.1 Stone Chamber in the circular mound was covered by a dome, to which a glassed-in observatory was attached.

2. The upper and lower stone walls were reconstructed with granite and quartz andesite, and the joint between the rear and frontal mounds was fitted with actual size models of antiquities made of FRP.

3. Miwatsuchi, a mixture of red earth and lime, was used to reconstruct the earthen mounds to attain an unconfined compressive strength of 13.14kgf/cm2 and strain of 1.05%. The soil nailing method was applied to the parts that had collapsed.

This is state-of-the-art technology, and the Myokensan tumulus is the first burial mound preserved by these hi-tech methods. The tumulus were completed in 1996 and the Park in 1998.

The Myokensan tumulus is managed by the museum built at its foot, the Fujiyama Museum of Historical Date. Visitors to the Park currently number 120,000 a year.

We think our way of developing a park, in this case, a tumulus was reconstructed to be just like the original one soon after its completion, utilizes regional cultural properties in the citizens' lives, thus contributing to creation of a comfortable environment in the Setouchi coastal region.

**Masafumi Kono**