Preliminary Report on the Archaeological Explorations in Batan, Sabtang and Ivuhos Islands, Batanes Province, Northern Philippines

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Introduction

The following is a preliminary report on the archaeological and geological explorations conducted from 20 April to 4 May 1994 at the northernmost tip of the Philippines in some areas of the Islands of Batang and Sabtang, Batanes province. The National Museum team included Dr Eusebio Z .Dizon, Curator I, and Mr Rey A. Santiago, Museum Researcher, from the Archaeology Division, and Mr Roberto De Ocampo, Curator I of the Geology Division. Ms Maria Mangahas, a cultural anthropologist of the University of the Philippines (UP) in Diliman, Quezon City, who recently completed her MA thesis on the Ethnography of Mataw Fishing in Batanes, and Ms Anna Fer, an artist, joined the National Museum team.

The National Museum acted upon the report of Mr Lory Tan, General Manager of Bookmark, Inc. and a longtime friend and supporter of the National Museum, who provided photographs of what seem to be megalithic structures i.e. columnar type of stones standing erect with some indications of human modifications such as drilled holes located on hill tops (Fig. 1). Mr Tan's report was made on May 1993 to Dr Jesus Peralta, Director III and was immediately relayed to the Archaeology Division. Lory Tan recently published *Trek Batanes*, an adventure guide-map for ecological tourism with annotated informations. Unpredictable weather conditions and flight schedules to Batanes as well as lack of funding however, delayed the National Museum from sending an archaeological team to the site. This exploration aimed to inspect the stone structures, their geological origins and archaeological significance. The National Museum team's fieldwork coincided with the Batanes trek of Mr Tan's group allowing the team to join the group in their trek of the Basco, Mahatao, and Chadpidan areas of Batan Island. The team has benefited so much and enjoyed their company.

We are also greatly indebted to Dr Florentino Hornedo, a professor at the Ateneo de Manila University and University of Santo Tomas, and a native of Savidug, Sabtang Island, Batanes for his valuable informations, help, and support to the National Museum team in their work. At the time of our archaeological exploration, Dr Hornedo was teaching a graduate summer course at the St. Dominic's College in Basco and took some time out of his class to give us a guided tour of some archaeological sites which we later explored. Dr Hornedo is an authority on the Batanes history, oral tradition, literature, ethnography of the Ivatans, etc.

Hypothesis

Prior to the site visit and based on oral accounts, review of existing literatures and the pictures provided by Mr Tan, the team formulated several hypotheses on what the columnar stones with drilled holes signify:

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1. The columnar stones with drilled holes are some types of "micro-megalithic" structures, similar to those found in Indonesia [Sudibyo, Boestami and Sanday 1984], Malaysia [Harrison 1961-2; 1973; Harrison and O'Connor 1970] and Taiwan [Blundell 1994];

2. The drilled holes were used to tie ropes when they were quarried from their original source which may have been at a distance;

3. These columnar stones were used as part of the structural features of houses;

4. These were anchors from ships ca. 200 BC similar to the stone anchors in the Mediterranean;

5. These were used as alignment to guide sea vessels for landing and directions; and

6. These were used as symbols of religious, political, and social status by an ancient society which may not necessarily be related to the present population in the area.

The team was also hopeful to find prehistoric fossils, i.e. elephants, stegodons, rhinoceri, etc. similar to those found in the Cagayan Valley and Pangasinan and of course Paleolithic material remains, and relate it to the land bridges theory that the mainland of Luzon was connected to Taiwan.

Another hypothesis which came to mind was the Austronesian northern origin by Bellwood [1985; 1991]. Bellwood theorized that the Austronesian movement may have come earlier in the north i.e. Taiwan and Batanes area, rather than in the southern part of the Philippines, i.e. Mindanao and Sulu area [Solheim 1981].

The Islands of Batanes

The province of Batanes lies in the northernmost tip of the Philippine archipelago, located between 20° 15' to 21° 15' north latitude and 121° 45' to 122° 15' east longitude (Fig. 2). It has ten small islands, only three of which are inhabited, namely Itbayat, Batan and Sabtang. The other islands consisting of Yami, North, Mavudis, Siayan, Ivuhos, Dequey and Balintang are uninhabited. Some Sabtang residents pasture goats and cattle at Ivuhos and Dequey. According to the 1990 National Statistics Office report, there are some 15,026 Ivatans or natives of Batanes.

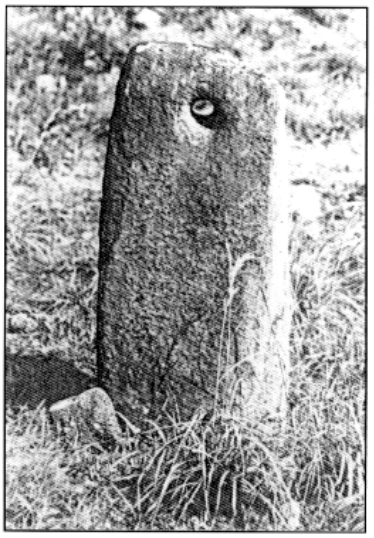


Fig. 1 Columnar type of stone structures standing erect with some indications of human modifications such as drilled holes found on top of Savidug Ijang, Sabtang Island, Batanes province, Northern Philippines.
石柱狀遺存

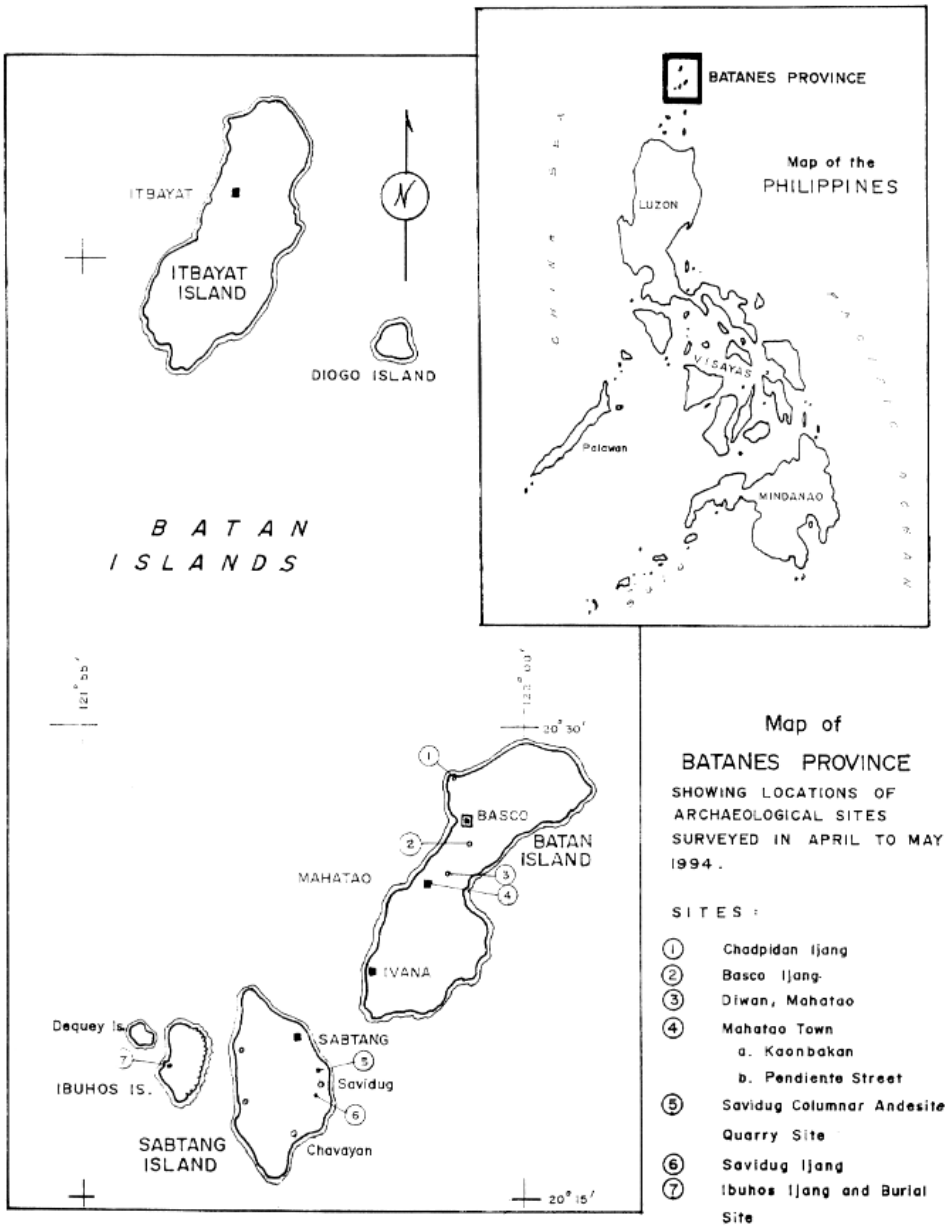


Fig. 2 Map of Batanes province
巴丹群島

The Islands of Batanes is bounded on the north by Taiwan with the Bashi Channel, on the east by the Philippine Sea and Pacific Ocean, on the south by the Babuyan Islands which are part of the province of Cagayan, and on the west by the South China Sea. Batanes is actually closer to Taiwan than Luzon. Basco the capital of Batanes on the Island of Batan is 180 km south of Taiwan and 280 km north of Aparri on the tip of Luzon [Mangahas 1994:19]. The Batanes Islands cover a total land area of 230 sq km making it the country's smallest province, while its territorial waters encompass some 4,500 sq km. Treacherous waters between the Pacific Ocean and the China Sea are commonly observed in the territorial waters of Batanes.

According to Hornedo [1993:12] the Batanes Islands were created by a series of volcanic activities and geologic forces from the Late Miocene (Mahatao Volcano, ca 7-9 million years ago), Pliocene (Mt Materem, ca 6 m.y.a.), and Quaternary (Mt Iraya, ca 2 m.y.a.) periods. An eruption of Mt Iraya on Batan Island around 325 BC buried under the ashes the charcoal of burned wood along with broken pottery indicating that the islands were already inhabited over 2,000 years ago. Two more eruptions of Mt Iraya, one around 286 AD, and the latest ca. 505 AD were responsible for the present geologic features and fertile soil of much of Batan Island today [Richard et al 1986].

Previous Archaeological Activities in Batanes

Prior to the actual archaeological exploration, the team reviewed the available literatures and maps on previous archaeological activities conducted in the Batanes Province. Most of the excavations were done by Japanese archaeologists with limited participation from the National Museum of the Philippines. One of the first anthropological studies known to us is *The Scientific Expedition for the Study of Batan Islands* conducted in 1970 by the Ritsumeikan University and published in 1971 in Japanese. Unfortunately no English translation of the report is available. The researchers were guided by Mr Rey Flores of the National Museum at that time and their reports included a number of informative photographs which were not archaeological in nature.

Perhaps the very first recorded archaeological activity conducted in the Batan Island was done in 1981-82 by Kazumi Shirakihara, Masayuki Koomoto and Yooji Aoyagi through a grant from the Japanese Ministry of Culture. Their report, the *Batan Island and Northern Luzon; archaeological, ethnographical and linguistic survey* [1983] was published by the University of Kumamoto in English. This report covers a number of artefactual materials from stone tools of both Paleolithic and Neolithic origins to potteries and jar burials as well as ceramics from the Batan Island. These artefactual materials were compared to the cultural remains from Cagayan Valley of Northern Luzon.

Another Japanese archaeological expedition was conducted by Mr Hedefumi Ogawa and some support staff from the National Museum in 1986. However, no report was ever written on this expedition. Nevertheless, we made use of Ogawa's 1986 field notes and official forms for archaeological site field survey which were submitted to the Archaeology Division. In 1987, Dezso Benedek completed his Ph. D. dissertation on the *Comparative Study of the Bashiic Cultures of the Irala, Ivatan, and*

Ibbayat at Pennsylvania State University, summarizing the few archaeological works in the Batanes area.

It was surprising that although some of the Japanese researchers were able to visit several Ijang sites, none of them have seen their full archaeological potential and no reports were made on the erect columnar stones with man-made holes located in both the islands of Batan and Sabtang. The earliest report on these archaeological features (with photographs) were made by Hornedo in a popular Christian magazine *Life Today*, vol. 39 no. 2 (February 1983). He described the Ijangs as follows:

There are prominent landmarks called *ijang* (pronounced *idzjyang*). Ijangs are found close to towns and barrios. They are high rocky formations which can serve as fortress or refuge against attacking enemies [Hornedo 1983:18].

Hornedo offered some interpretations of these archaeological phenomena based on the oral history and the oral tradition of the present population. These interpretations are not archaeological in nature as he admitted (personal communication). According to him, in pre-hispanic times, the Ivatans were divided into small clans that lived not far from the sea. Sometimes these small clans attacked one another either to get by force what they wanted or to avenge themselves for wrong done to them. The clans when attacked climbed for safety to the tops of the ijangs where they defended themselves by throwing stones at the enemy below. This explains why the top of the ijangs today are still full of stones — the primitive ammunitions of the people. We need to examine the distribution of the stones on the ijangs archaeologically and provide a more scientific explanation based on the material evidence.

Hornedo [*op cit*] continued that, when the fighting lasted for some time, it became necessary to build a shelter on the ijang top. These ijangs or cliff dwellings were first described by the English freebooter Captain William Dampier when he visited the island of Ivuhos in 1687. Today, there are still traces of such ancient dwellings, including stone posts standing or lying where the Ivatans left them when they abandoned their pagan way of life for Christianity in the late 18th century. We believe that these are simplistic explanations from oral traditions and there could be more clarifications regarding these features that can be derived from archaeological investigations.

It has been hypothesized by Hornedo [1983; 1993] that the prehistoric and proto-hispanic Ivatans were boat-making and seafaring people who lived in small tribal communities that supported themselves by fishing, hunting, and horticulture, raising taro and other rootcrops. They have left abundant evidence of their Neolithic tools and their pottery, some of which they used as primary burial jars (*padapaday*) until the later part of the 18th century. Diggings along the littoral plains and beach ridges for the construction of sea walls of the present habitations and occasional erosions have often exposed some of these burial jars. A few glass beads and some funerary earthenware vessels were observed with the burial jars.

The Results of the Archaeological and Geological Explorations

The National Museum team was able to visit three islands of the Batanes province namely Batan, Sabtang and Ivuhos islands.

At the Basco Capitol, one columnar stone made of andesite with a drilled hole was found lying at the courtyard of the building complex. It was removed from its original location at the Savidug Ijang, in Sabtang Island by the order of the governor with the intention to display it being transported according to the people we interviewed.

We concentrated on the ijangs and the columnar stones with drilled holes as planned. We were able to visit the Basco Ijang, the Chadpidan Ijang, and observed the columnar stones with holes located at the Mahatao area in the Batan Island. In Sabtang Island, we spent most of our time at the Savidug Ijang and were fascinated with the columnar stones with drilled holes which were still left standing *in situ* . We did an archaeological test pit on this site. Finally, we were able to visit the island of Ivuhos where Captain Dampier found the Ivuhos Ijang in 1687 and observed the alleged boat-shaped stone grave markers just below the ijang.

There are three types of columnar stones with man-made drilled holes which we identified, namely limestone, conglomerate, and columnar types of andesite.

The detailed results of our archaeological and geological explorations are as follows:

Basco Ijang

Basco, the capital of Batanes is the biggest town in Batanes in terms of population and the most urbanized among the six towns of the province. It is located in a level area at the northern tip of Batan Island bounded on the east by Mount Iraya, on the west by Basco Bay, on the north by Chadpidan with Songsong Bay and on the south by the municipality of Mahatao. It was known as *Basay* before the Spaniards came, and was renamed after Don Jose Basco who was the Governor General of the Philippines when the church and civil governments were permanently established in the province in 1783. Batan Island has a length of 10.7 km and a width of 6.2 km in its widest area. It has a total land area of 71.8 sq km.

Basco Ijang is located at 20° 26'15" north latitude and 121° 58'14" east longitude. It is approximately a 3 km trail distance southeast from the town of Basco. It was visited by Japanese archaeologists in 1981-1982 [Sharikahara and Koomoto 1983] with photographs (plates 17 and 18) on pages 137-138. It may also have been visited in 1986 by Ogazawa. However, its archaeological importance as an ijang and habitation site was neglected.

The geologic formation of Basco Ijang is actually a molten volcanic magma which acted as a plug on an extinct crater (see De Ocampo's report). It has an elevation of approximately 100 m above mean sea level. There are enough indications such as the presence of earthenware sherds of varying attributes as well as the arrangement of stone walls suggesting fortification which prove that it could have been used as a habitation (Fig. 3).

Among the ijangs we explored however, the Basco Ijang was the most simple. It has less human modification when compared with the rest of the ijangs we visited.

Chadpidan Ijang

The Chadpidan Ijang is located northwest of Basco at the tip of Diojo Point, west of Songsong Bay. It is approximately 4

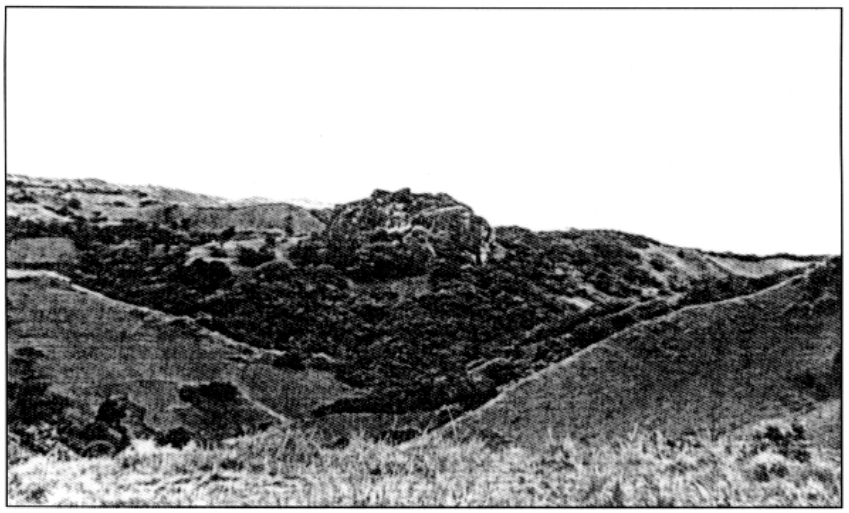


Fig. 3 Basco Ijang, a molten volcanic magma. Stone walls suggesting fortifications.
火山岩漿堆成的堡形穹丘

km passing through the Naidi rolling hills, now utilized as a grassland for cows and goats. The ijang itself was on top of a ledge, on a cliff overlooking the bay, which is generally a limestone formation of probably Plio-pliestocene period. It has an elevation of 20m above mean sea level with co-ordinates of 20° 28'23" north latitude, and 121° 57'40" east longitude. There were volcanic rock boulders of varying sizes observed which may have been quarried from below and found to have been piled for riprapping purposes. There were a number of earthenware sherds observed on the surface which are good indications that it may have been used as a habitation site. Its location is very strategic for a lookout tower. It must have been very easy to see people who were coming from the sea as well as from the land.

The Chadpidan Ijang has also been visited and documented by Japanese archaeologists in 1981-1982 [Sharikahara and Koomoto 1983] with photographs (plates 19 and 20) on pages 139-140. Again, its archaeological importance as an ijang and habitation site was overlooked.

Mahatao Area

Mahatao is a thriving municipality about 6 km south of Basco. It is located on the co-ordinates of 20° 25'04" north latitude and 121° 56'46" east longitude. It nestles at the foot of three hills namely Naydi in the south, Lagud in the east and Majorojoron on the north. It is bounded on the west by the Disbayagan Beach which is a part of the Luzon and China Seas. The town was originally named San Carlos de Mahatao on 4 November 1798 by then Lieutenant Governor Don Miguel de Amo in honour of the patron saint San Carlos Boromeo. A brook runs in the middle of the town which

supplied the people potable water before the construction of the present water system. Now it has the best water supply in the main island of Batan.

We located two columnar limestones with man-made drilled holes measuring 1.5 m in length, and average 30 cm in width and 10.5 cm in thickness; the maximum hole diameter is 8 cm tapering to a cone shape having 4 cm minimum diameter at the centre. These limestones were found at a house owned by Natividad Bacuno located on a hilltop of Barangay Diwan approximately 20° 25'18" north latitude and 121° 27'43" east longitude. One was used as a part of the house's structural wall and the other was lying just before the main entrance of the house. According to our informant guide PNP Ageo Rarela, the house is currently owned by a certain Naty Pacuno and as far as he can remember, the columnar stones with drilled holes were carried from the lowland area of Mahatao to their present location although he could not recall when these were quarried.

At Barangay Kaunbakan, Mahatao lowland proper, we observed a number of these columnar stones with drilled holes in various places. This time most of these stones were made of conglomerate granules to pebble size. Only one was observed to have been made of limestone, which is a similar type as those found on the hilltop of Barangay Diwan. There were at least five conglomerate columnar stones with drilled holes standing erect at the road side which are currently used as support posts for a structure for drying various materials on top and as a shade below. This property is also owned by Natividad Bacuno.

There were four more conglomerate type of columnar stone structures with drilled holes found standing and currently used as posts for a storage house, owned by Susana Galulo. Some of them have two drilled holes on top. Wooden beams were observed to have been securely tied at the holes of the stones. The area of the structure is approximately 2.5 x 2.5 m. Moreover, there were more holes observed in some corners of a few of the stone structures which may have been used for attachments. We believe that these columnar stones were quarried and are used differently from what its primary function was originally (Fig. 4).

A number of columnar conglomerate stones were observed lying on the roadside at the corner of Lucero and Pendiente Streets. These were longer and bigger in sizes, approximately 2.3 m in length, 32 cm in width and 30 cm in thickness. There were also indications that some of them were used as beams for houses.

The quarry for these columnar type of conglomerate granules to pebble size rocks was located at the Disvayagan Beach area of Mahatao.

Savidug Ijang

Savidug Ijang is on the Island of Sabtang. Sabtang is an island town with barangays scattered along its coast. It is about 5 kilometres from the seaport of Ivana. (Ivana is the third town in Batan Island which is 14 km south of Basco on a narrow coastal plain). The place can be reached only by a motorized water vessel or by *fallowa* (native boat) rowed by men. Sabtang Island has a total land area of 31.7 sq km. It has a length of 10.7 km and its widest breadth is 5 km. There is a treacherous water current between the islands of Batan and Sabtang. The water

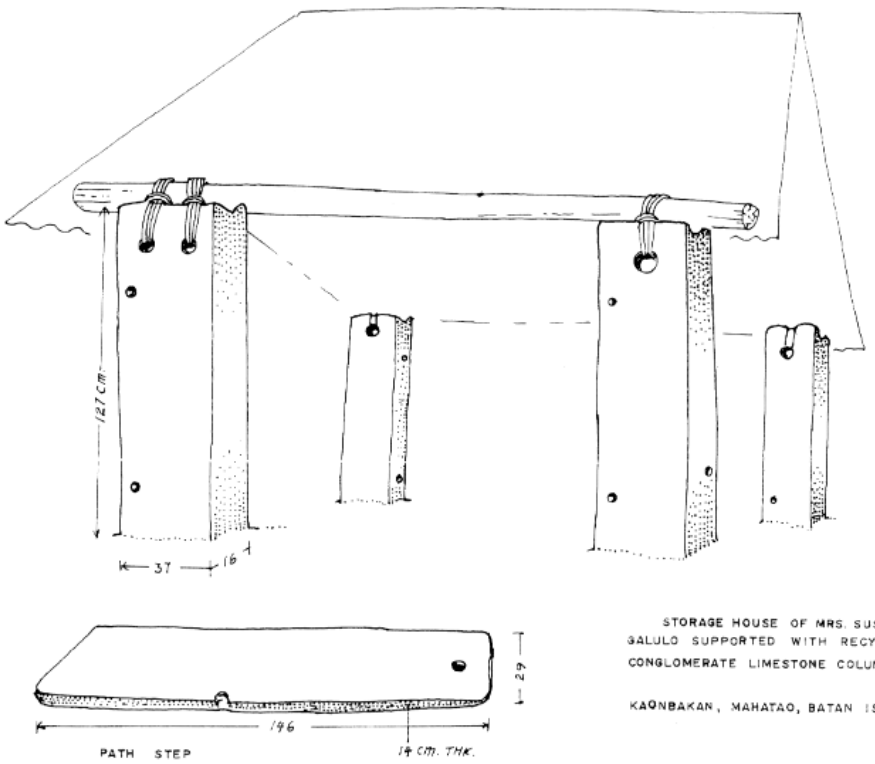


Fig. 4 Storage house of Mrs Susana Galulo supported with recycled conglomerate limestone columns. Kaonbakan, Mahatao, Batan Island.
石柱建成的屋食

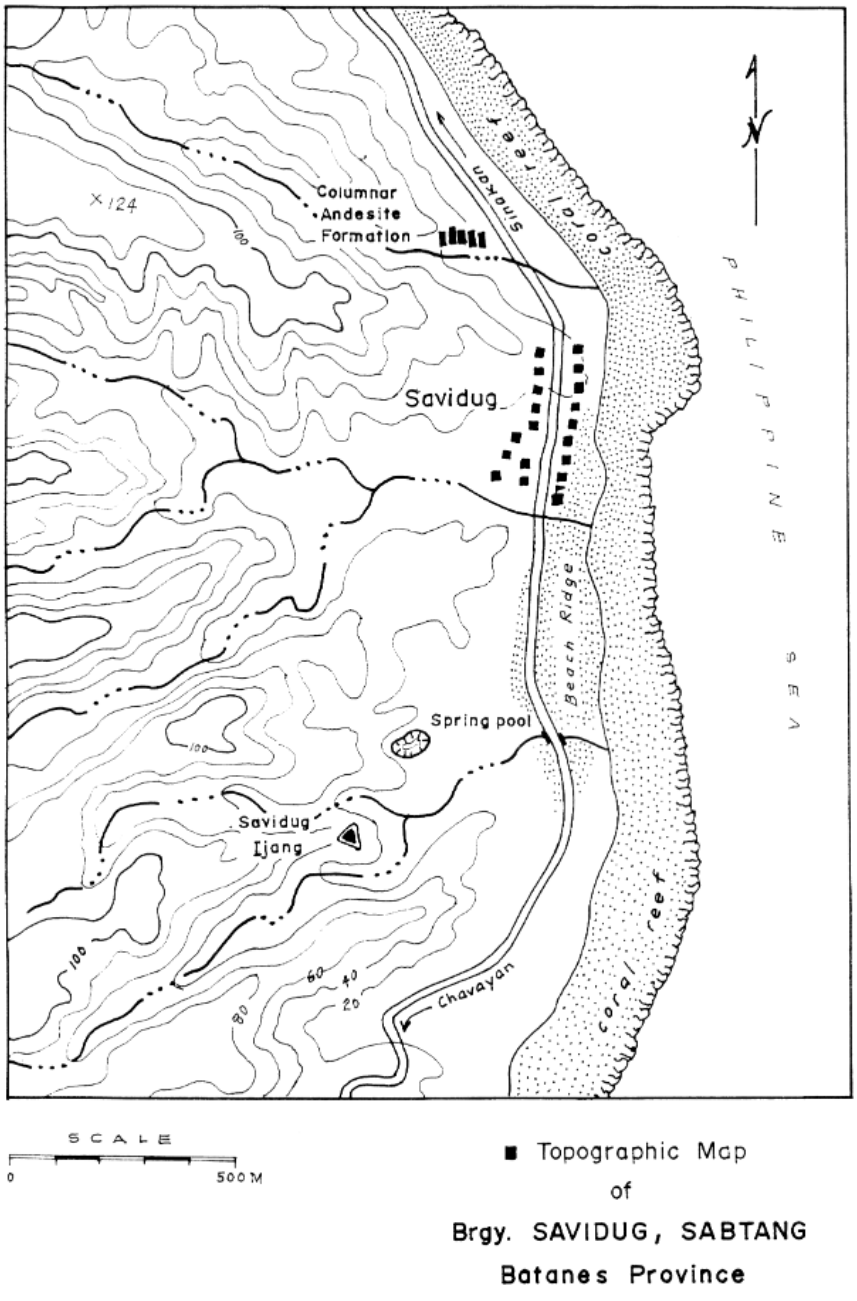


Fig. 5 Topographic Map of Barangay. Savidug, Sabtang, Batanes province.
巴丹群島的 Sabtang 島

current is approximately 13.8 m per second or 50 km per hour. Hence, one should be mentally and physically prepared to cross the turbulent channel between the Pacific Ocean and China Sea.

Barangay Savidug is about 5 km south of Sabtang Centro. The Savidug Ijang is about 1.2 km southeast of Barangay Savidug (Fig. 5). The original photographs of the erect columnar stones with drilled holes were taken from this ijang and because of its extraordinary features, the team spent considerable time to study this ijang. It is a mound which was probably modified and shaped by humans to its present castle-like configuration (Fig. 6). It is situated in a general topography of rolling hills and in between two creeks coming from the west, then merging into one towards the east and out into the Philippine Sea. Along the creeks, we observed some evidence of embankment or some forms of human modifications.

Savidug Ijang lies in the co-ordinates of 20° 18'14" north latitude and 121° 52'55" east longitude. We registered it in the Archaeology Division by giving it the National Museum accession code of II-1994-Z. It has a base area of approximately 180 x 160 m, hence, 28,800 sq m or 2.88 hectares. It is elevated to 43 m above the land plane and 63 m above mean sea level. Savidug Ijang has an equilateral triangular structure from the top view. In our crude mapping (Fig.7), we divided the ijang as follows:

A. Knoll .... apex
B. 2nd Level ....shelf 2
C. 1st Level .... shelf 1
D. Base .... foothill

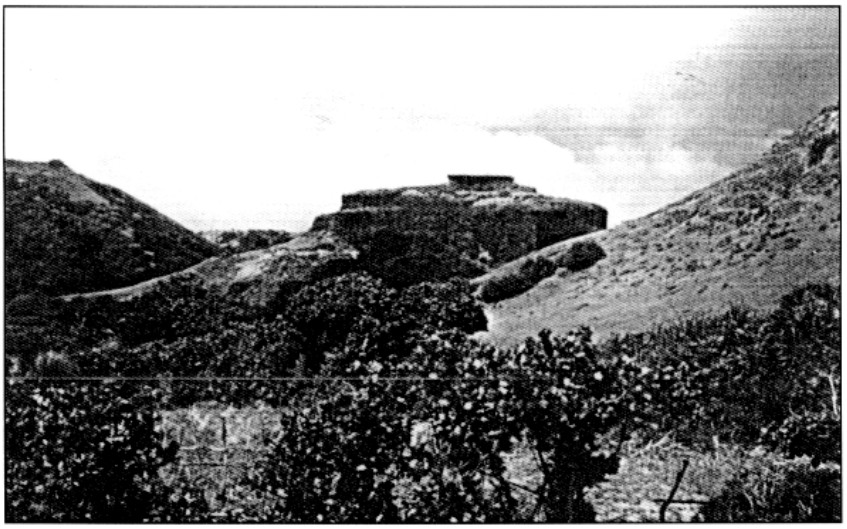
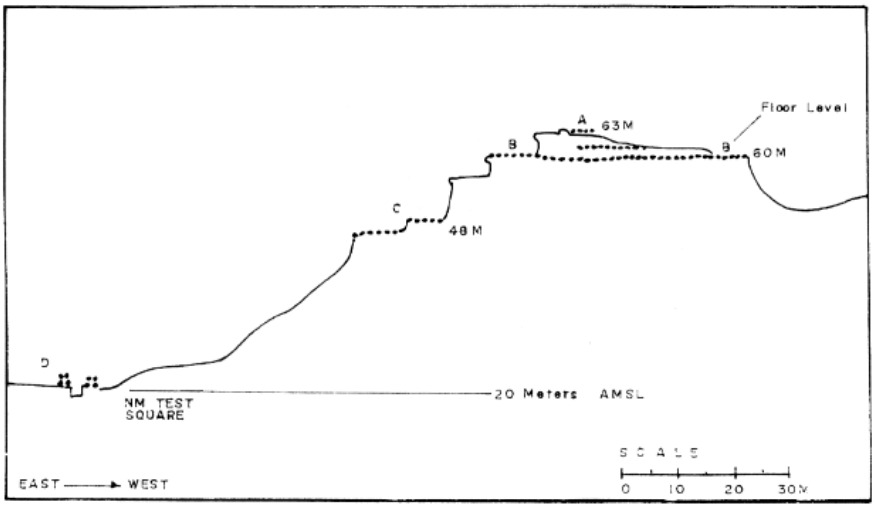
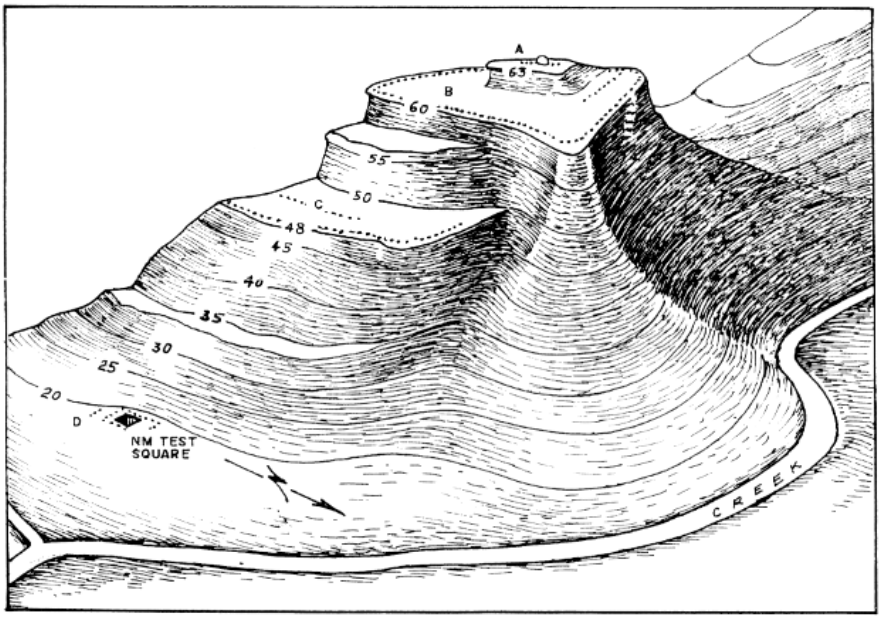


Fig. 6 Savidug Ijang. Barangay Savidug, Sabtang Island, Batanes province.
Sabtang 島上的 Savidug 堡形岡丘



CROSS-SECTION OF SAVIDUG IJANG SHOWING MAJOR FLOOR LEVELS OF DIFFERENT ELEVATIONS.



THE SAVIDUG IJANG IN PERSPECTIVE VIEW AS SEEN FROM ITS NORTHEASTEN BORDER.

Fig. 7 The Savidug Ijang in perspective view as seen from its northeasten border.
Savidug 堡形穹丘示意圖

The columnar stones with drilled holes were mainly distributed on the 2nd and 1st levels and all of them were of the columnar andesite type. Our geologist was able to locate the quarry which was located approximately 3 km north of the ijang (Fig. 5). There were also indications that some of these columnar andesites were quarried on top without holes. We also observed that some of them were still in the process of being drilled, probably by a harder material like metal. We noticed some variations in the manner by which the holes were drilled. Most of them have holes drilled from one side to the opposite side, while in others, the holes were curved from the side to the top and others from adjacent sides (Fig. 8).

From the two shelves (1st and 2nd Levels) and down to the base, there were indications of riprappings and stone walls evidently constructed by the early inhabitants. There were also lateral divisions on each level and at the base. A number of earthenware fragments and sherds were observed on the surface as well as stone tools and structural stone features i.e. arranged in circular, square, and rectangular shape. The earthenware fragments have good diagnostic features like footrims and rim sherds in various thickness.

An archaeological test pit was excavated at the base. It was arbitrarily and strategically located at a wall division oriented to the north - south direction. This allowed us to get a cross section of the archaeological remains including the cultural materials from the eroding deposit coming from the upper levels. It measured 1.3 x 1.3 m with a deepest depth of 1 m

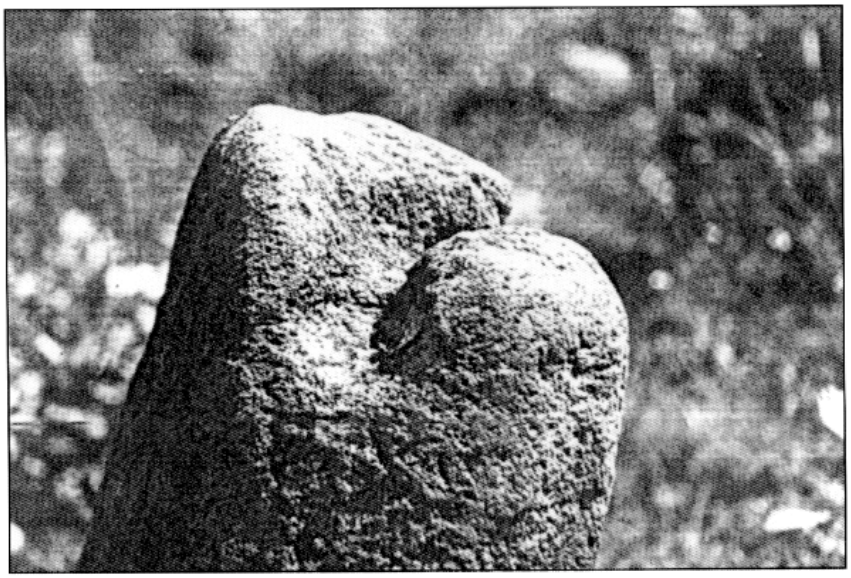
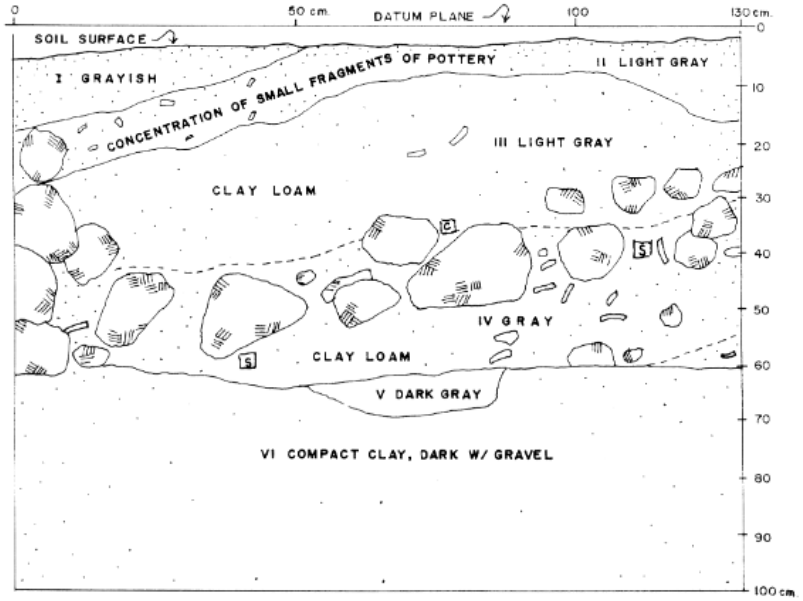


Fig. 8 Variations of drilled holes on columnar andesite stones found at Savidug Ijang, Sabtang Island.
石柱上凹槽

below its surface level. It was observed that a variety of earthenware sherds were evenly distributed. The soil was loam to clay, black brown in colour, medium to coarse in texture and loose to compact. There were visible signs of erosion on the first 40 cm depth level and stone pebbles to cobble sizes were haphazardly observed. Compact hard clay loam was detected at 50 cm depth level, suggesting a floor-like feature (Fig. 9), Stones were observed to have been arranged and compacted against the wall; earthenware sherds were also in between two large stones, as well as flakes of andesites. It seems that flaking was done to shape and fit the stones together. Moreover, the andesite flakes were used not as flake tools but as filling materials for large stone structural foundations.

Aside from the variety of earthenware sherds which were recovered, Song types of



SOIL STRATIGRAPHY, SOUTH WALL
SAVIDUG IDYANG, SAVIDUG, SABTANG, BATANES

LEGEND:

C CHARCOAL
S SHELL
POTSHERD

Fig. 9 Soil stratigraphy, south wall Savidug Idyang, Savidug, Sabtang, Batanes province.
Savidug 堡形穹丘遺址地層示意圖

greenware ceramics (12th AD) and glass beads were also retrieved. The beads were doughnut in shape and of cylindrical type (Fig. 10). Ecofactual remains in the form of wild pig (boar) teeth, deer teeth, shell fragments, coral fragments and bone fragments were also noted. Some charcoal were observed from 20 cm to 50 and 60 cm below the present surface. There is a consistency of cultural materials from top to bottom suggesting a long occupational period for habitation.

Ivuhos Ijang

Ivuhos is another island west of Sabtang Island which is uninhabited except for occasional visits by people from Sabtang who raise cows and goats on this island. Ivuhos Island has a total land area of 6 sq km. It has a length of 4 km and a width of 2 km. This is the island which is believed to have been visited by the English freebooter Captain William Dampier from August to October 1687. Dampier observed and described the terraced settlement on the ledge and cliff of a high limestone formation which is now known as the Ivuhos Ijang. According to Hornedo [1993:12-13] the people Dampier found, "lived in mountain villages, raised root crops, bananas, and sugarcane from which they produced *palek*, an alcoholic beverage fermented from cane juice. They also raised goats and pigs. They bartered or used gold as medium of exchange. They built many boats, and valued iron greatly."

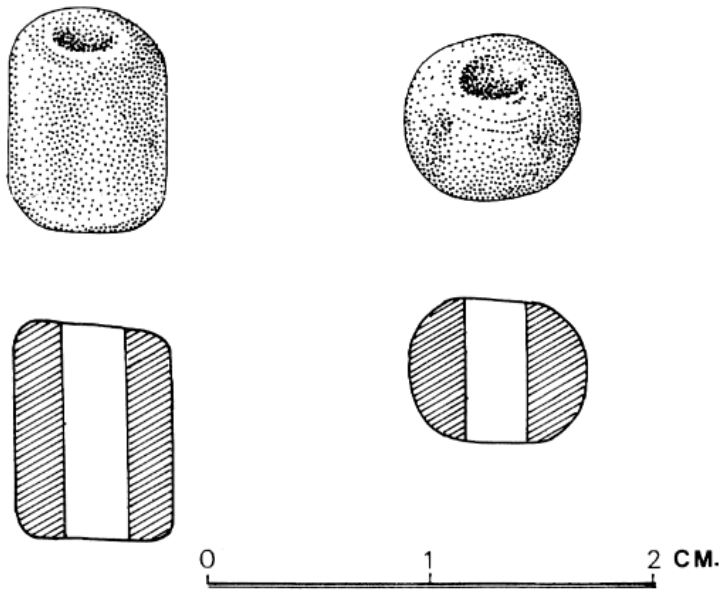


Fig. 10 Glass beads
琉璃珠

The Ivuhos Ijang is located on the cliff of Dibhu Point, Ivuhos Island on the co-ordinates of 20° 18'58" north latitude and 121° 47'48" east longitude. At Ivuhos Ijang, we also observed a number of earthenware fragments and sherds at the surface. Looking at the ijang down below, one can observe the intentional arrangement of stone walls and terracing which were perhaps the same structures observed by Captain Dampier in 1687. The Archaeology Division registered the Ivuhos Ijang under the National Museum accession code of II-1994-F_2.

Down below the rolling plain, there were boat-shaped stone grave markers in regular pattern. The stones were arranged like their current traditional boat, where the bow or proa and stern appear prominently (Fig. 11). This site is located at the co-ordinates of 20° 18'59" north latitude and 121° 47'56" east longitude. We registered another National Museum accession code for this site which is II-1994-G_2.

Discussion

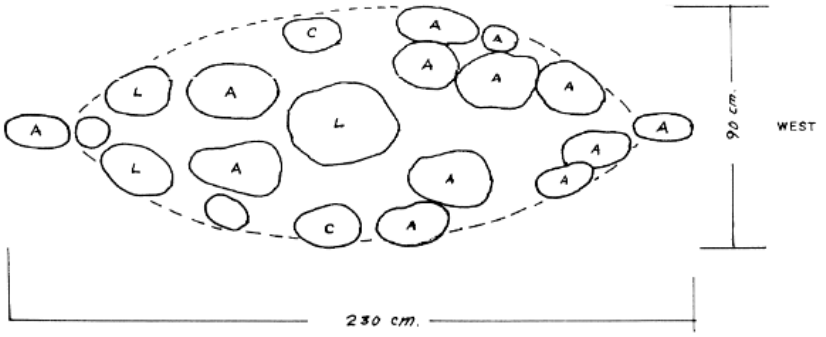
The province of Batanes has certainly a number of archaeological potentials which are still untapped. We will not be able to answer the hypothesis posted from this very short fieldwork; however we can offer some ideas to be considered. For example, although we have observed one possible Paleolithic material, a chert cobble tool and no fossil remain during this preliminary archaeological and geological explorations, we believe that there may have been some in other areas like Itbayat Island. It is possible that there may be paleolithic tools in the sites we explored; they may have been used in the construction of houses by the present inhabitants, as in the case of the remains of a grinding stone (Fig. 12) which was used as construction material for a house wall. All of the houses we observed were made of stones and people have the tradition of recycling materials for their use. If this is the pattern of human behaviour in this area, it is possible that most of the Paleolithic materials were already used in the construction of their houses.

We have not found any early ceramics which may indicate early Austronesian movement in the area. There were reports though of jar burials and one associated earthenware vessel with stamp design which appeared to be an early type was shown to us. This pot is similar to the earthenware sherds documented by the Japanese researchers of the University of Kumamoto [1983:153] on plate 33. It was allegedly recovered during the construction of the sea wall at Barangay Sinakan near Sabtang Centro in Sabtang Island. In addition, there were a number of Neolithic artefacts in the form of basalt adze and axes currently at the High School in Basco, suggesting the presence of a Neolithic period.

The most interesting archaeological finds from this fieldtrip is our discovery of the ijangs, as well as the columnar stones with man-made drilled holes of various types. We can still play with the idea of "micro-megalithic" traditions since we have good indications of massive stone working especially in the Mahatao area, although we have no idea of their chronology yet.

Three of our hypotheses on the columnar stones with drilled holes have been proven weak by this exploration. The holes could not have been used to tie ropes when the stones were quarried from their original source because we found evidence that

PERSPECTIVE VIEW



OVERHEAD OUTLINE OF THE GRAVE

Legend:

A — ANDESITE ROCK

L — LIMESTONE

C — CORALINE ROCK

Fig. 11 The Ivuhos burial marker, Ivuhos Island, Sabtang, Batanes province.
Ivuhos 島上墓葬標記石塊

Fig. 12 Remains of grinding stone, used as a construction material for a house wall in Batanes province. It is possible that paleolithic & neolithic materials have also been recycled for house construction.
以遺存的石器建造房屋

some of them are in the process of being drilled at the Savidug Ijang. They could not have been used as anchors for ship or boat either, although they may have been used as anchors for houses. They could not have been used as alignments for navigation purposes because some of them have curving holes disallowing peeping as their function.

Two of our remaining hypotheses may still be tested by future archaeological excavations, namely: a) that the columnar stones with drilled holes were used as part of the structural features of houses at the ijangs; and b) that the columnar stones were used as symbols of religious, political, and social status by an ancient society which may not necessarily be related to the present population in the area. There are a number of implications for this final hypothesis. First, there must have been a complex social organization existing. Second, there must have been a sizeable population of at least 10,000 people or more. Third, with the presence of fortification, there must have been conflicts and feuds between people of the various ijangs.

We are not quite satisfied with the explanation of oral traditions and history of the present population on the ijang phenomena about the stones found on top of the ijangs. The people claim the stones were the weapons used by the ancient people during warfare by throwing them to their enemies. Furthermore, they claim that ladders were used by their enemies to climb the ijang and the people of the ijang used Y-forked sticks to fend off the approaching enemies. Our plan to conduct a full scale archaeological excavation may shed some light on this issue.

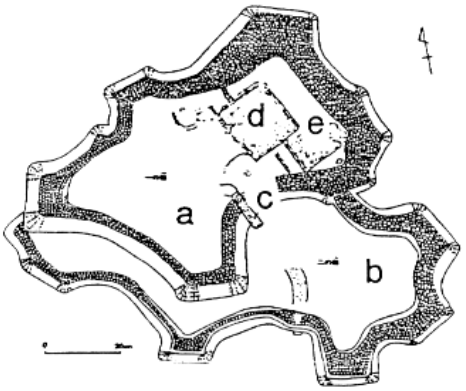


Fig. 13 Plan of Zakimi Gusuku. (from Okinawa Ken 1983:77). a) Enclosure No. 1; b) Enclosure No.2; c) arched entrance to Enclosure No. 1; d) Palace No. 1; e) Palace No.2.
日本冲繩島 Zakimi Gusuku城堡遺址示意圖

We observed that the ijangs were primarily used as habitations and fortifications. We have reason to believe that the ijangs function like castles similar to those found in Okinawa, Japan [Pearson 1991]. Comparing our preliminary maps and findings with Pearson's [1994] paper particularly the figures he used from the Japanese literatures such as Okinawa Ken [1983:77; 1992:133] and Urasoe Shi [1985:5], there is a remarkable similarity between the Savidug Ijang and the Okinawan castles, specifically the plan of Zakimi Gusuku (Fig. 13). First, the builders of the ijangs and the Okinawan castles were selective in choosing natural topographies to be utilized and made remarkable human modifications on the environment. The ijangs' and the Okinawan castles' strategic locations in high places illustrate an interplay between culture and nature. Secondly, the artefactual materials recovered from the Savidug Ijang such as the Song type ceramics and Chinese beads of the 12th century AD fit perfectly well with the foundations of Okinawan castles, approximately the same period 1200 AD. In fact, there were indications that some Song type ceramics were copied by the local potters using clay and this was observed among the earthenware sherds we retrieved. Some of the earthenware sherds examined were similar to those published in the University of Kumamoto [1983 Figs. 8, 9, 11 & 13; and Plates 6, 7, 8, 27, 28, 29, 30 & 37]. The significance of the ijangs in the development of socio-political complexities in the Philippines is a topic that should be investigated in our future archaeological research.

Furthermore, the significance of the boat-shaped stone grave markers which could be the archaeological evidence of a truly *barangay* community in the Philippines should be pursued in the consideration of the evolution of Philippine societies. The latter can be compared to the boat-communities research of Pierre-Yves Manguin [1984] on the *Shipshape Societies: Boat Symbolism and Political System in Insular Southeast Asia*. According to Manguin [1984:216-217]:

> In most of the latter societies, where people are organized into small political systems, the boat and the house are the principal structural units. They are felt as the best modes available to define and regulate relations among members of the smaller units between the latter and higher social groups (the village community sphere, or a small political system), and between all these social units and the material world (thus the economic production). They provide models for encompassing various orders of social, political, economic (and cosmological) classifications, together with their expression in myths and rituals. Examples taken in Sawu, Kei or Tanimbar will provide concrete evidence of the ubiquitous references to it. The houses are always perceived in clear correlation with the boat, with parts of them named after the "keel", the "mast", the "sail", or the "rudder". The inhabitants of the same village look upon themselves as being a group of people who belong to the same "village-boat". This is the large communal boat which is jointly possessed by the whole community and is used only in special occasions, when the social order needs to be signified and revalidated (marriages, alliance renewals with other communities, warfare, death, etc.). The leader of the community and all the

dignitaries have their appointed seats in this "village-boat", and these places are duplicated in the boat- shaped meeting place of the village, complete with stem and stern. Ritual dances are performed in boat order and the songs explicitly describe the boat thus mapped on the ground. The village itself, as well as the whole island at times, are spatially organized as a boat and its crew. The dead are disposed off in boat burials. Myths refer to early voyages from overseas: the village spatial classification, as that of the communal boat, are said to be a reflexion of the original journey.

It is only by archaeologically examining this whole set that a more reliable explanation for the barangay-type of paradigms will be found. Various communities of Insular Southeast Asia actually produce statements establishing complex homothetic correlations between boats, houses and/or larger social groups.

Recommendations

Considering the findings of our very limited archaeological and geological explorations of the Batan, Sabtang and Ivuhos islands, it is highly recommended that a full scale archaeological exploration and excavation be conducted in the Batanes Province. An integrated archaeological proposal for five years will be formulated covering the following topics:

1. Systematic archaeological exploration and mapping, locating all ijangs in various islands of the Batanes Province. Archaeological excavation of Savidug Ijang may be initiated in this phase.
2. Continuation of the archaeological excavation of Savidug Ijang with training programmes for graduate students in archaeology.
3. Archaeological excavation of the boat-shaped stone grave markers in the Island of Ivuhos.
4. Complete analyses of archaeological data recovered from exploration and excavation.
5. Publication of the results and exhibition of findings at the National Museum.

Finally, it is also highly recommended that all archaeological sites of Batanes Province be declared protected areas. Visitations for tourism purposes should be monitored by public officials, and nothing (no artefact or ecofact) should be taken out of the archaeological sites as souvenir items. The National Museum should initiate a law to protect, preserve and conserve archaeological sites in the Batanes Province.

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菲律賓北部巴旦群島遺址初步考察報告

Eusebio Z. Dizon 及 Rey A. Santiago

【摘要】

1993年，菲律賓最北端的巴旦群島發現有石柱狀遺存屹立於岡頂，有經過加工痕蹟。1994年，菲律賓國立博物館於巴旦群島的其中三個島嶼－Batan，Sabtang及Ivuhos展開了一連串有關考古及地質學的考察，發現了不少這類石柱是屹立於ijang之上。Ijang是一種由火山岩礫堆疊成的堡形穹丘，再經人工修整，是先民的棲息地或抗敵陣地。據當地傳說，石柱是上古民族兩陣交鋒時互擲的武器，但這說法不無疑問。七十及八十年代時，日本考古學家在巴旦群島進行過不少考古勘察及發掘，亦有提及堡形穹丘，但卻未曾深入探究其考古學上的意義。

鑑於這次實地考察爲時甚短，具體結論言之尚早，但對當地史前文化已略具概念。雖然出土的舊石器遺存少之又少，但相信只是尚未發現而矣。加上當地居民看來有將石材循環再用的習慣，不少舊石器時期的石器大有可能已用作建築房屋。器物方面，石斧與石鏃的發現顯示新石器文化的存在，至於更早期的陶製品則有待發現。

勘察結果是發現了三種不同石質的鑽孔石柱，分別爲石灰岩、礫岩及柱狀安山岩。石柱的實際用途尚未明朗，但可以肯定鑽孔並非爲方便繫繩採石，亦非用來繫縛船隻，更與校直航道無關。石柱可能是堡形穹丘上的建築結構，或是宗教、權力與社會階級的象徵，實際情況尚有待求證。由於穹丘與十二世紀日本沖繩島一些城堡頗相似，而其中Sabtang島上的Savidug穹丘更發現中國宋代青瓷及玻璃珠，二者關係值得深究。Ivuhos島上的船形墓標則代表著一種以船隻爲中心的文化。

爲了要解開以上種種疑團，有必要在巴旦群島展開全面的考古調查和大規模挖掘，將所有穹丘記錄下來，逐一研究，並繼續深入發掘Savidug穹丘及探索船形墓標，亦有必要將所有遺址的所屬範圍列爲文物保護區，使文物得以妥善地保留下來。