

Jar Burials from the Lobusbussan Site, Orchid (Botel Tobago) Island

Received 30 October 1979

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INTRODUCTION

ORCHID ISLAND (also known as Botel Tobago, Kotosho, Hung-tou-yü or Lan Yü) is one of several small islands that form a chain stretching north from the Philippines, past Taiwan, through the Ryukyus to Japan. Orchid Island is 82 kilometers (49 miles) southeast of the city of Taitung on Taiwan's east coast, and has a surface area of 45 km² (18 mi²). The indigenous peoples are known as the Yami. Although the Yami have a rich oral tradition, little is known archaeologically about their history or origins. In an attempt to fill this void in the archaeological record, the author carried out reconnaissance work on Orchid Island, Republic of China, in May and June 1977. Twenty-two sites were located: six recent historic sites (under modern villages), seven abandoned village sites mentioned in the folklore, three related to agricultural activities, one cave site, and one burial site (Stamps 1978). The purpose of this paper is to report the findings from the jar burial site of Lobusbussan.

Lobusbussan (site 9) is located immediately adjacent to the road in a cluster of overgrowth among the taro fields on the southwestern portion of the island (Fig. 1), between the modern villages of Hung Tou (Imurud) and Yü Jen (Iratai).

DATA RECOVERED

Reconnaissance in the southwest part of the island located large pottery sherds that had been uncovered by a road crew widening the road two years earlier. This site (9) was called *Lo bus bus san* by villagers in Yü Jen. Clearing of the grass overgrowth exposed several large jars (Fig. 2) and assorted other sherds (Fig. 3). Jars 2, 3, and 5 had been broken badly by the road crew. One of the road-crew workers, who was located and interviewed,

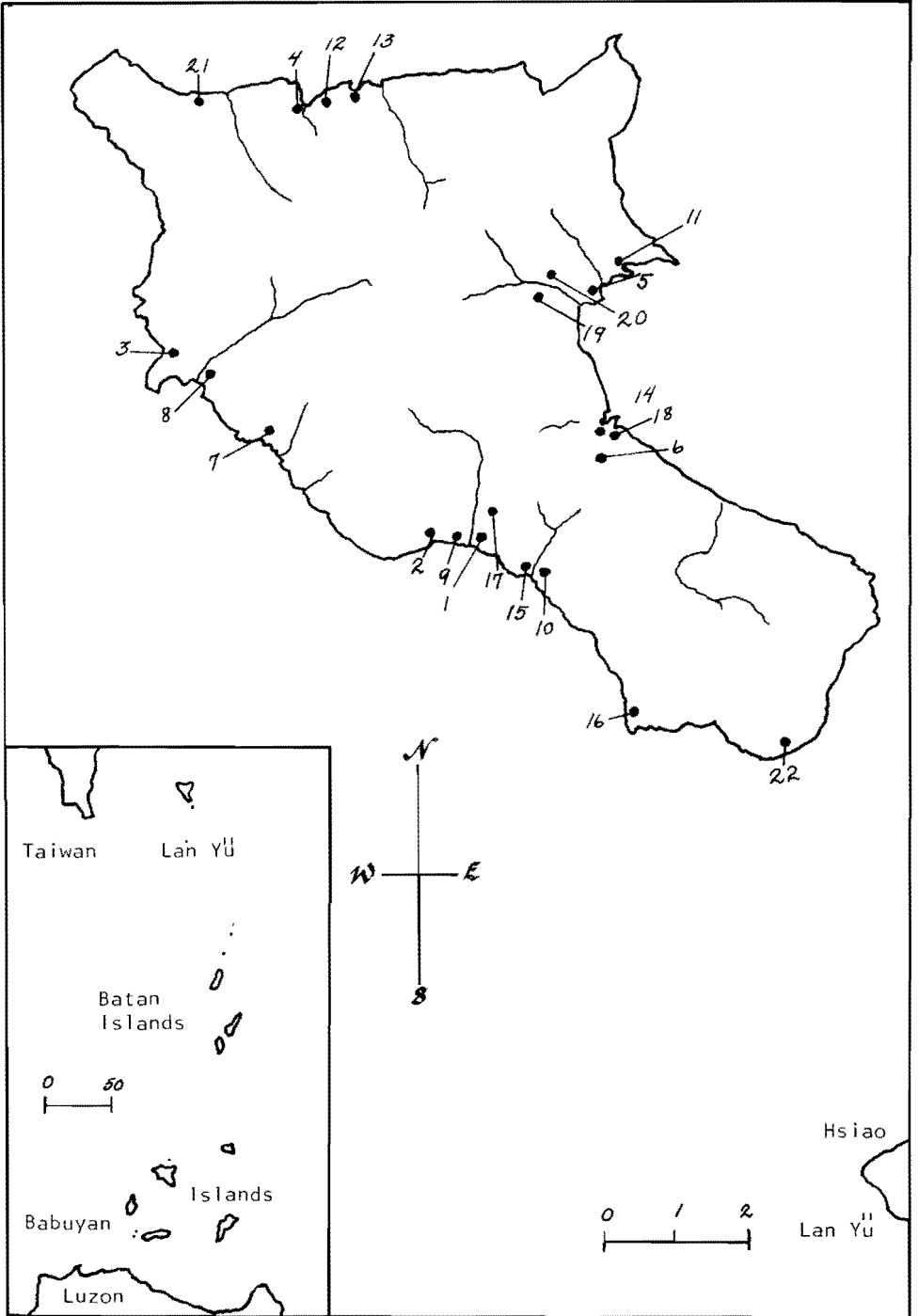


Fig. 1 Archaeological sites on Lan Yü, with insert map showing the location of Lan Yü in relation to Taiwan and the islands to the south.

remembered that two of the jars had been empty but that the other contained bones. These bones, he claimed, were very fragile and turned to dust. No grave goods were found in association with these jars. The author excavated jar 1 and found it to consist of two earthenware jars, the top one inverted and used as a cover for the bottom one (Fig. 4). The surface color of the jar was orange. The paste was an orange tan color with sand temper. The outer surface had been smoothed, while the inner surface was quite rough. The bottom of jar 1 was rounded. The top of the bottom jar had been broken around the rim, possibly to enlarge the opening. The junction of the two jars was such that the top jar had a larger opening that received the smaller opening of the bottom jar up into it 5 to 8 cm. Thickness of the sherds varied from 8 to 19 mm. The inside of jar 1 was excavated but contained only sherds and soil.

Jar 4 was also made up of two earthenware vessels, one placed on top of the other as a cover. These jars were similar to those just described, with an orange surface color and sand-tempered paste. The outside was smoothed while the inside was rough. The bases of both jars were rounded. The junction of the two vessels was such that the opening of the top jar was slightly larger to receive the bottom vessel. The fit was not quite perfect, however, and the northwest corner of the top jar was inside the bottom jar. The top jar was empty but the bottom jar was excavated (Pl. I).

Two hundred and ninety-one bone fragments were recovered from the jar (Pl. II). Preservation of the bone was poor; however, many were identifiable (Table 1). The long bones in general were located in vertical positions while the ribs and vertebrae were generally in horizontal positions suggesting a flexed posture (Fig. 5). The majority of the bones were recovered from the northeast quarter of the jar, suggesting that the individual was facing the southwest.

Based on the absence of fusion of the sternal epiphyses of the clavicles and the differential wear on the molar teeth (one with slight wear, one with almost no wear, and the third not having erupted), it is suggested that the individual was probably between 18 and 23 years of age at the time of death. Broken sherds from the upper jar, which served as the cover, were found mixed in with the bone and soil that filled the lower jar. One shell artifact (Fig. 6), possibly a bracelet, was all that accompanied the burial. The soft, shell artifact adheres to the tongue as do the shell artifacts from Lamma Island in Hong Kong discovered by Father Finn (Egli, personal communication).

Two bone samples from jar 4 at Lobusbussan were submitted for radiocarbon dating. The first sample (DIC 953), after being cleaned, was demineralized and the collagen extracted. Because the collagen level was insufficient, the date is not reliable and should be used only as an indicator of age. This date (DIC 953) was 460 ± 600 B.P. The second sample was more successful, producing a larger and sufficient amount of collagen. This sample (DIC 1026) gave a radiocarbon age of 1170 ± 145 B.P. or A.D. 780. This date refers to the age of at least one of the burials at the site.

ANALYSIS OF DATA

The question should be asked: Was this burial primary or secondary? Although, in this case the preservation was so poor that the excavator was unable to tell whether or not the skeleton was articulated, it is felt that it was a primary burial. This is based on the oral tradition that mentions the use of jars for burial purposes. The individuals were flexed and placed in the jar as they were breathing their last gasping breaths. The flexed jar burials



Fig. 2 Map of jar burials located at the Lobussusan site.

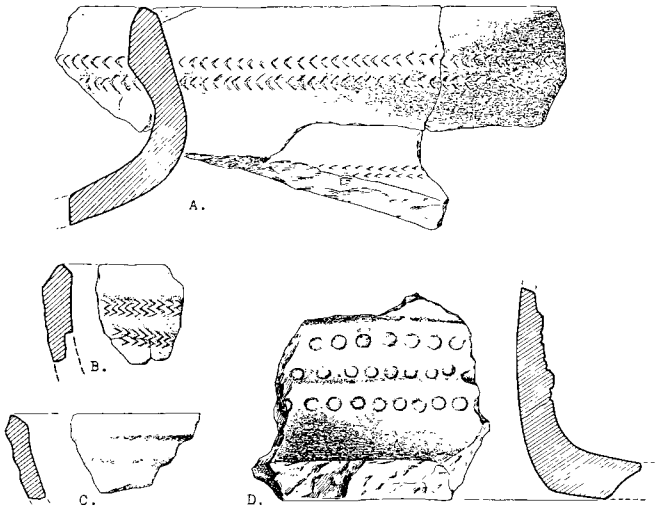


Fig. 3 Decorated ceramics from site 9, Lobusbussan.

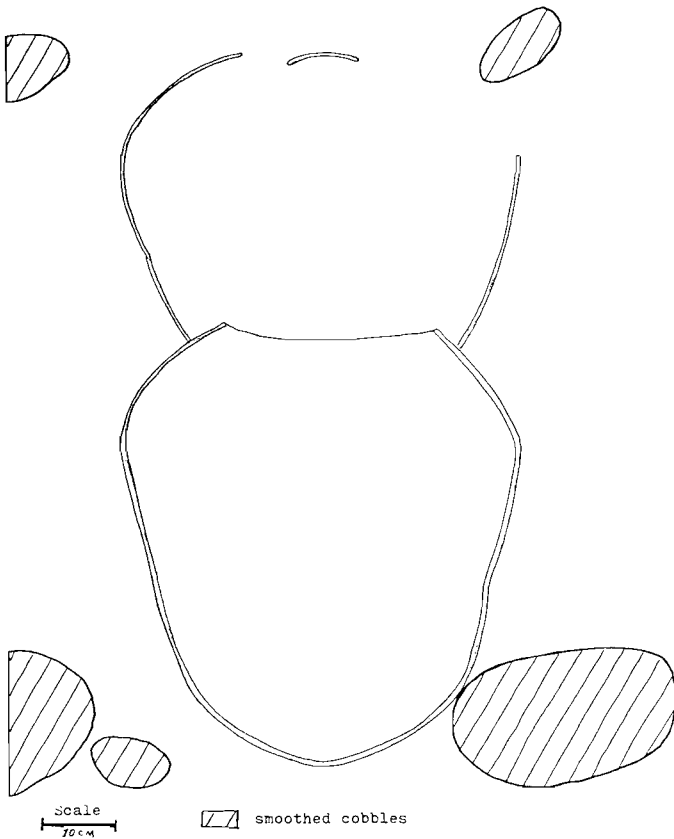


Fig. 4 Cross section drawing of jar 1 at the Lobusbussan site.



Plate I Jar 4, Lobusbussan site.

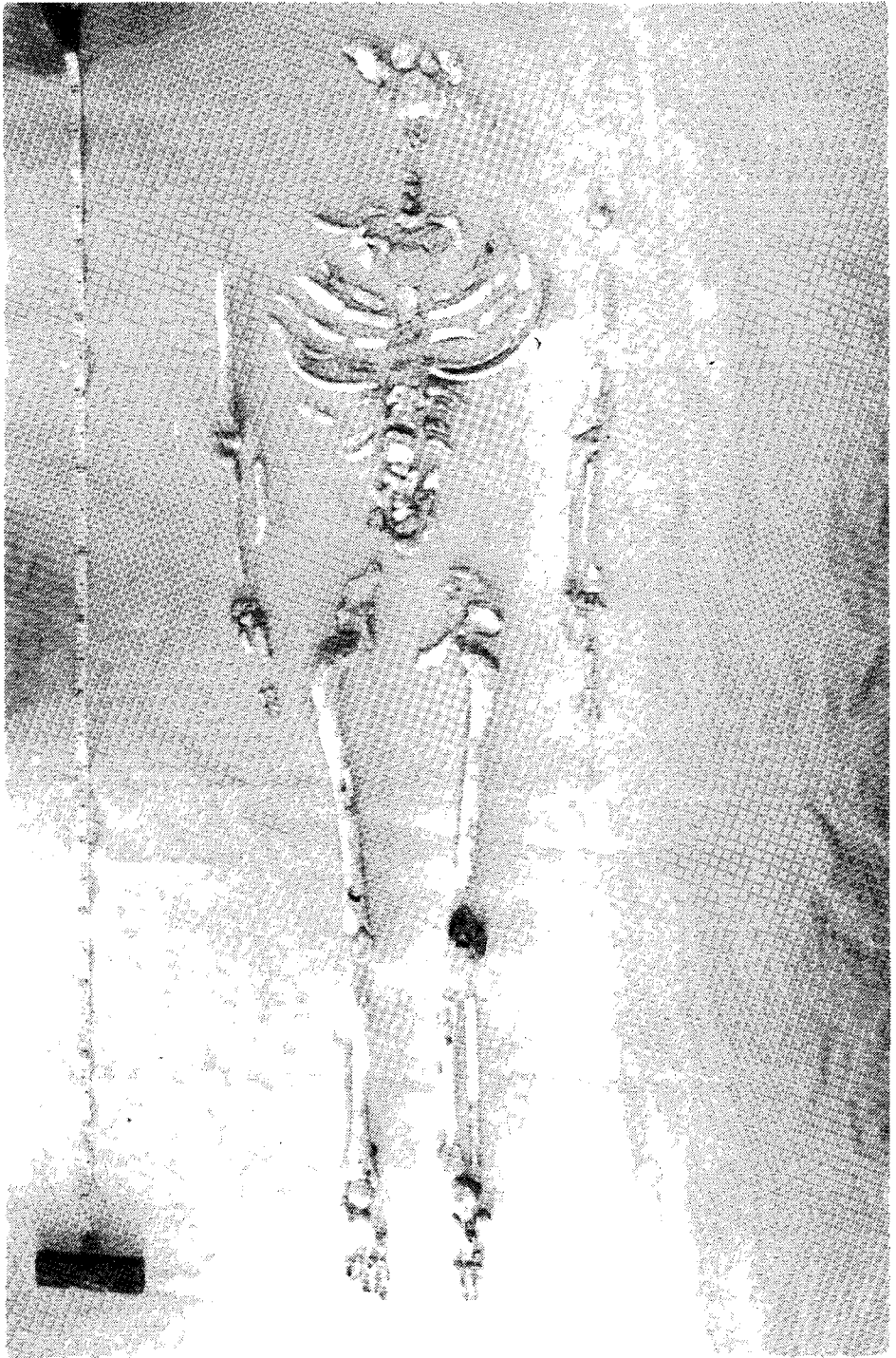


Plate II Bones from jar 4, Lobusbussan site (Stamps 1978).

TABLE 1. BONES FROM JAR BURIAL NO. 4, LOBUSBUSSAN SITE (291 TOTAL)

| TYPE | NUMBER | COMMENTS |
|--|--------------|---|
| <i>Cranial bones</i> (extremely fragile) | | |
| occipital | 2 fragments | |
| parietal | 3 fragments | |
| temporal | 1 fragment | |
| unknown | 48 | |
| <i>Teeth</i> | | |
| total | 8 | |
| incisor | 2 | Both with distinct shovel-shaped feature. One is the only complete tooth among them all. |
| premolar | 3 | |
| molar | 3 | One of them is only a top shell of a molar crown, which indicates that the tooth had not come out during the lifetime. Another shows slight wear at the occlusal surface, and the last one shows almost no wear at all. |
| <i>Vertebrae</i> | | |
| cervical | 3 | |
| thoracic | 5 | |
| unknown | 15 fragments | |
| <i>Sternum</i> | | |
| manubrium | complete | |
| body | 3 fragments | |
| <i>Rib</i> | | |
| total | 39 | The right and left first ribs are almost complete. |
| <i>Scapula</i> | 3 fragments | |
| <i>Clavicle</i> | 3 fragments | One shaft and two ventral ends. Both the ventral ends show that the sternal epiphyses did not fuse. |
| <i>Upper limb bones</i> | | |
| right humerus without the proximal end | | |
| distal end of right humerus | | |
| right radius without the distal end | | |
| shaft of left radius | | |
| distal end of left radius | | |
| right ulna without the distal end | | |
| shaft of left ulna | | |
| distal end of left ulna | | |
| <i>Hand bones</i> | | |
| carpal | 9 | Three complete: left hamate, left capitate, and one lunate |
| first right metacarpal | | Complete |
| 3rd left metacarpal | | Proximal end only |
| 1st left metacarpal | | Distal end only |
| 1 phalange of first row | | Complete |
| 5 phalanges of second row | | Three are complete |
| 4 phalanges of third row | | All complete |

TABLE 1.—*Continued*

| TYPE | NUMBER | COMMENTS |
|--|-------------|---|
| <i>Hip bone</i> | | |
| total | 5 | Four fragments of right and left innominate, and one left pubic |
| <i>Lower limb bone</i> | | |
| most part of right femur | | |
| most part of left femur | | |
| shaft of left tibia | | |
| distal end of left tibia | | |
| distal half of right tibia | | |
| shaft of fibula | | Fragments from sections SWL and NW |
| quite a few small fragments of femur shaft | | |
| <i>Foot bones</i> | | |
| tarsal | 6 | Three complete: left talus, and two cuneiform |
| metatarsal | 4 fragments | |
| phalanges | 6 | Two complete |



Fig. 5 Suggested position of human remains in jar burial 4.

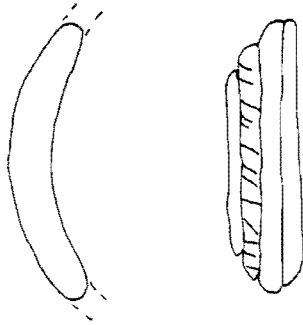


Fig. 6 Shell artifact fragment from jar burial 4.

allowed the digging of smaller holes for interment of the dead. Don Joaquim Melgarejo, as noted by Solheim (1960:127), records the practice of jar burials in 1770 among the natives of the Batan Islands south of Orchid Island. A second reason for suggesting that the burials were primary, aside from the oral tradition, is the fact that the Yami have a great fear of the dead and anything related to the burials. The author, after excavating the above-mentioned burial, was asked not to touch a new canoe being constructed for fear that it might bring bad luck for the boat and its owners. This fear of the dead was also observed by Beauclair (1972:168-172) and Liu (1959:173-178).

At the Lobusbussan site there appeared to be no specific order of placement of jars; however, a larger area would need to be uncovered to say for certain. The elevation is less than 10 m above sea level and the site is clearly within view of the ocean. The jars themselves were not visible from the surface and had been exposed only by cutting into the bank. The top of jar 1 was 1 m below the surface, while the top of jar 4 was 1.5 m below the surface. No cairns as had been observed to the south in the Babuyan Islands by Bartlett (Solheim 1960:118) were noted here, but smoothed beach cobbles or boulders were noted around the bottom jars. A total of 60 of these large cobbles were in the south-east quarter section around jar 4. If an equal number were located in the other sections around the jar (the area not excavated), this would amount to 240 around the whole jar, and represents an expenditure of no small amount of energy to move so many stones. Their function is unknown. The phenomenon of jar burials in general is shared in common with sites on both the Babuyan and the Batan islands. The specific case of double jar burials is noted by Bartlett on Dalupiri and Fuga Islands in the Babuyan group (Solheim 1960:130-131). Table 2 compares jars from site 3, Fuga Island, with those at Lobusbussan on Lan Yü.

COMMENTS

It should be pointed out that this is not the first jar burial site recovered from Lan Yü. In 1935 Kano found a large (60m high and 60m wide) round-bottomed earthenware vessel in the village of Imurud (Solheim 1960:137). Inez de Beauclair (1972) describes the location and contents of jar burials that were uncovered in 1969 by construction workers in Yayu and Imurud. She was able, a year after they were uncovered, to visit the sites and interview those who had found the burials. Her descriptions of associated artifacts are

TABLE 2. COMPARISON OF JARS FROM SITES ON THE NORTH SHORE OF FUGA, BABUYAN ISLANDS, WITH THE LOBUSBUSSAN SITE

| JAR | HEIGHT (CM) | RIM DIAMETER (CM) | MAXIMUM DIAMETER (CM) | BOTTOM |
|----------------|----------------|-------------------------|-----------------------------|----------|
| Fuga: Site 3 | | | | — |
| 2 | 58 | 46 | — | — |
| 2a* | 63 | — | — | flat |
| 6 | 53 | 36 | c. 40 | rounded |
| 6a* | 61 | c. 45 | 56 | rounded |
| Lan Yü: Site 9 | | | | slightly |
| 1 | 63 | 28 | 55 | pointed |
| 1a* | 40 | 37 | 55 | rounded |
| 4 | 50 | 44 | 56 | rounded |
| 4a* | 42 | 46 | 61 | rounded |

* a = lid

detailed and informative; however, there are several unanswered questions about the context of the finds in situ and the sampling of the total range of artifacts. No excavation notes were made by the workers (many of whom were prisoners kept under military guard) and no real control over artifact recovery was maintained. During my stay in 1977 a local merchant displayed his collection of beads from the Yaya excavations. Therefore, from these sites the full range of artifacts recovered and percentages of each will probably never be known.

The significance of the work reported here is that we have a controlled, dated sample. It is unfortunate that the sample is small and that the associated artifacts are limited to one shell bracelet. However, the size, shape, construction, and placement of the jars themselves are informative in attempting to develop cultural continuities both internally on the island and externally with other islands.

Dating of jar burials in this part of the world is still tentative but has been suggested to go back to as early as 1500 B.C. for the Philippines (Ho 1977), "the early centuries of the Christian era" for the Batanes (Solheim 1960:131), Tang or Sung times in the Babuyan Islands (Solheim 1960:127), and even later in the oral traditions on Lan Yü (Beauchair 1972:168, 175; Stamps's field notes). Given the A.D. 780 date for the jar burial from Lobusbussan, we now have a better understanding of the early occupation of this island. There is no claim that this is the earliest date of occupation for the island, but it does push known examples of this tradition back in time.

It is important again to point out the similarities of this unique burial practice, that of the double jar burials found on both the Babuyan Islands and Orchid Island, which suggest some cultural continuity between the two. This line of reasoning supports the oral traditions as recorded by Beauclair (1974) and Kano and Segawa (1956), suggesting southern origins for the Yami. Further research is recommended to understand better not only the internal time-space sequences for Orchid Island but also how the Yami fit into the larger picture of western Pacific history. Questions of changing cultural adaptations to this island ecological setting would also be informative in trying to understand better both the

subsystems of culture and how they work. Hopefully, with this better understanding, we anthropologists will be able to explain the past more clearly, while developing general laws of culture change that will help us predict cultural responses at other times and places.

ACKNOWLEDGMENTS

I wish to acknowledge the support given by the Pacific Cultural Foundation, Taipei, which made this project possible. I also express thanks to the Institute of Ethnology, Academia Sinica, which supported the work and where I was given the standing of a Visiting Researcher. Special thanks go to the late Inez de Beauclair for her counsel; Liu Pin-hsiung, Sung Wen-hsun, and Father Hans Egli for their advice; Chen Chi-nan and Timothy Liang for their ideas; and Lien Chiao-mei for her work with the skeletal material. Howard Alexander and Pat Bartils helped with the illustrations. Last but not least, thanks to Chen Chung-min, who inspired the work but was unable to participate.

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