Archaeological Investigation of Sagel Cave at Maitum, Sarangani Province, Southern Mindanao, Philippines

Nida Cuevas[1] and Alexandra de Leon[2]

Abstract

This paper summarises the results of the archaeological investigation of Sagel Cave, located within Barangay Pinol, Maitum, Sarangani Province. Sagel Cave, which was revealed by quarrying activities, reportedly contained artefacts similar to the Ayub Cave anthropomorphic pottery. The archaeological excavations revealed a Metal Age (ca. 500 BC – 500 AD) non-anthropomorphic jar burial of an adult, possibly male, associated with an iron knife and a bead made from fossilised shell. This Sagel Cave jar burial enhances the already rich prehistoric jar burial tradition of Southern Mindanao and raises further questions on the development of the jar burial traditions of Island Southeast Asia and the likely existence of complex Metal Age communities in Southern Mindanao.

Introduction

This is a report on the archaeological investigation of Sagel Cave located at Sitio Sagel, Barangay Pinol in Maitum, Sarangani Province (Figure 1). Quarrying of limestone for road building resulted in the discovery of the cave, which prompted the governor of Sarangani Province, Miguel Dominguez, and the mayor of Maitum, Elsie Perrett, to request for the immediate archaeological investigation of the cave by the

[1] Museum Researcher II, Archaeology Division, National Museum of the Philippines. Email: ntc_cuevas@yahoo.com

[2] Museum Researcher I, Archaeology Division, National Museum of the Philippines. Email: sandydeleon@gmail.com

Hukay Volume 13, pp. 1-24

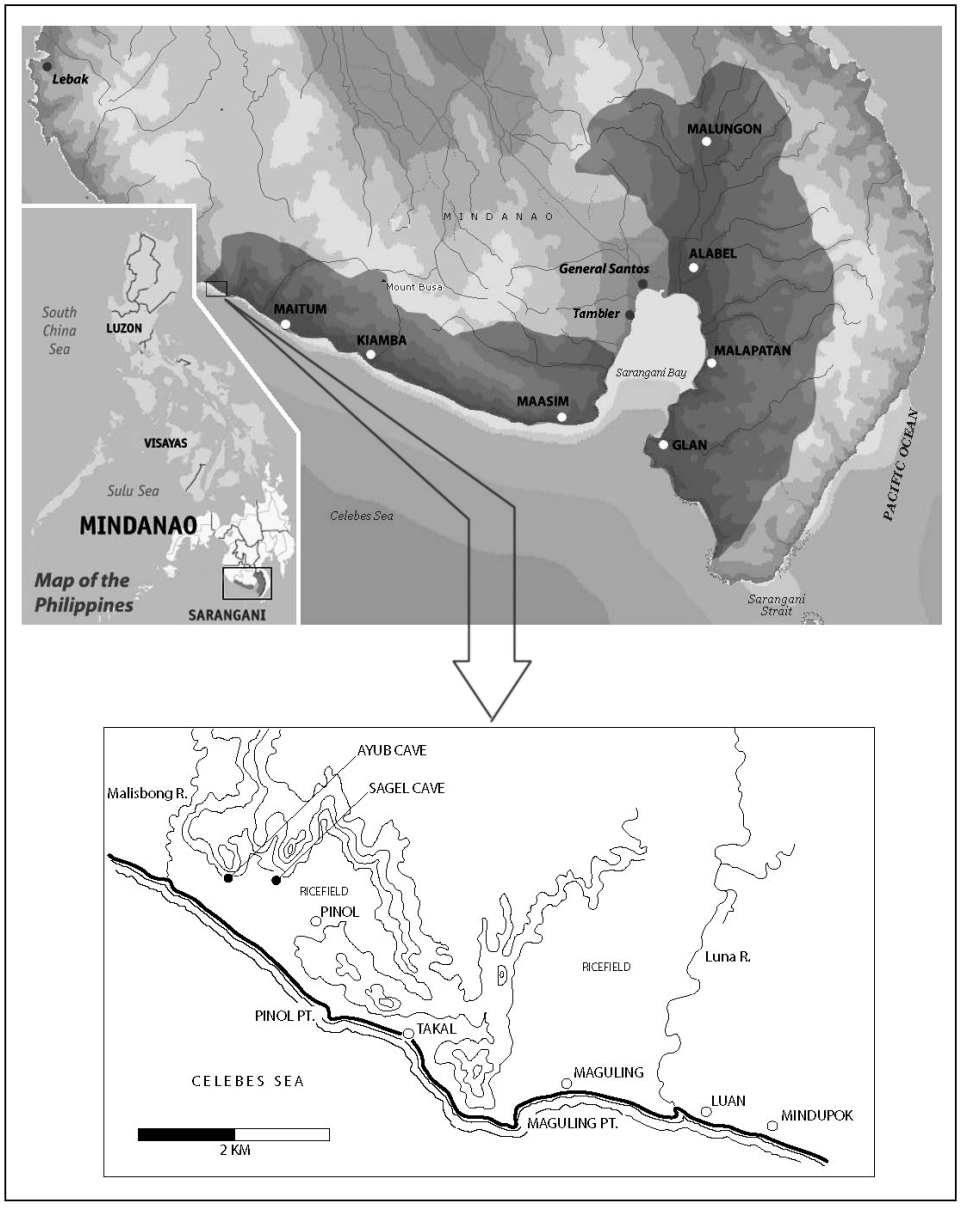

Figure 1. Location of Sarangani Province (top, modified from Microsoft Encarta 2003) and Sagel and Ayub caves (bottom)

National Museum. The archaeological investigation was conducted from April 15 to 22, 2008 by a team from the National Museum that includes Nida Cuevas, Alexandra de Leon, Eduardo Bersamira[3], Jonathan Jacar[4], and Eduardo Sarmiento[5].

This report describes the results of the archaeological excavation at Sagel cave, which revealed human skeletal remains interred in a non-anthropomorphic burial jar, possibly dated to the Metal Age (ca. 500 BC – AD 500) in Philippine prehistory. This new data enhance the significance of the Pinol area during the Philippine Metal Age.

Southern Mindanao Prehistory and Archaeology

The earliest written records on Southern Mindanao prehistory are Chinese references of trade missions and ports from the coast of Southern Mindanao dating to the early Ming (ca. mid-14th to early 15th centuries AD) period of Chinese history. A chiefdom from Southern Mindanao, ''Mintolang,'' is mentioned in Chinese explorer Wang Ta-yüan's *Tao i chih lüeh* (Summary Notices of the Barbarians of the Isles), written in 1349, as a maritime trading power in the 14th century (Junker 1999; Scott 1994). Mintolang, identified by scholars as a polity centred at the low-lying delta of the Pulangi River (in what is now known as the modern city of Cotabato), is the forerunner to 16th-19th century sultanate of Maguindanao (Junker 1999). Early to mid-16th century Spanish period texts describe the sultanate of Maguindanao as the ''most powerful and best known (polity) … strong enough to dominate its neighbors in the middle of the sixteenth century that the Portuguese, Spanish and Dutch applied its name to the whole of Mindanao island'' (Scott 1994:173). At the height of its economic and political power in the 17th century, its influence reached as far as the Zamboanga peninsula, Cagayan de Oro, Sarangani Bay, and Davao.

Prior to the 14th century AD, archaeological research is the only source of information for Southern Mindanao prehistory. The earliest archaeological surveys report accidental finds of adzes, porcelain, earthenware, iron artefacts, and some bark cloth beaters from the areas of Cotabato, Davao, Sarangani, and Balut islands (Beyer 1947:306-314).

[3] Artist/Illustrator, Archaeology Division, National Museum of the Philippines

[4] Technician II, Archaeology Division, National Museum of the Philippines

[5] Museum Researcher I, Cultural Properties Division, National Museum of the Philippines

Sourced from uncontrolled excavations, however, these finds are inadequate for research into lifeways of early societies and the reconstruction of Southern Mindanao prehistory.

The earliest systematic archaeological research in Southern Mindanao centred on the Kulaman Plateau at Lebak, South Cotabato (now part of Sultan Kudarat province), where separate investigations by researchers from the San Carlos University of Cebu and Silliman University at Dumaguete revealed over 1000 limestone burial jars from several caves and rockshelters here (Briones 1972; Briones and Chiong 1977; Kurjack and Sheldon 1970; Kurjack *et al*. 1971; Maceda 1964, 1965, 1966). The limestone jars occur with anthropomorphic and non-anthropomorphic (both plain and decorated) earthenware vessels, brass and iron bracelets, shell bracelets and earrings, and some clay and carnelian beads (Briones 1972; Kurjack and Sheldon 1970; Kurjack *et al*. 1971; Maceda 1964; 1965; 1966). These artefacts, along with a radiocarbon date of 585±85 AD obtained from human skeletal remains recovered at Seminoho Cave (Kurjack *et al*. 1971:147), pegs a utilisation of the Kulaman Plateau area during the Philippine Metal Age.

Additional archaeological surveys carried out in Southern Mindanao in 1972 by researchers from the National Museum and the University of Hawaii also revealed Metal Age sites (Solheim *et al*. 1979). Though this archaeological survey focused on the southeastern (rather than the southwestern) provinces of Mindanao Island (Davao del Sur, Davao City, and Davao Oriental), areas of South Cotabato were also explored, particularly at Glan and Malapatan (now part of Sarangani Province), and Dadiangas (now General Santos City). While the survey at Glan and Malapatan did not reveal any significant archaeological finds, test excavations at T'boli Rockshelter in the vicinity of Maasim and at Holy Cross Monastery in Calumpang, Dadiangas revealed decorated pottery sherds with some iron fragments (Solheim *et al*. 1979) that suggest site utilisation during the Metal age (ca. 500 BC – AD 500).

Archaeological research in Southern Mindanao ceased for most of the 1970s and 1980s until the most recent series of archaeological surveys and excavations carried out by the National Museum in the 1990s. Surveys were carried out in Tambler at General Santos City in relation to the construction of the Agro-Industrial Fish Port (Aguilera 1991) and the General Santos City airport (Dizon 1993). Excavations here, particularly at Sitio Sapa, revealed Metal Age (ca. 500 BC–AD 500) and AD 16th-17th

century habitation sites (Aguilera 1991). Additionally, a series of excavations undertaken by the National Museum from 1991 to 1995 at Ayub cave in Maitum, South Cotabato (now part of Sarangani Province) revealed a remarkable collection of earthenware anthropomorphic burial jars dated to 1830±60 BP (calibrated date AD 70–370) and 1920±50 BP (calibrated 5 BC-AD 225) (Dizon and Santiago 1996:52). Although Ayub cave was already looted, a rescue archaeological work was able to provide scientific data that allude to the complexity of Metal Age societies from Southern Mindanao (Dizon 1993; Dizon and Santiago 1996) as well as provide insight into the representation of sex and gender in Metal Age societies (Cuevas 2007). Another site from Maitum, Linao cave, was investigated in 1998 but was considered to be too disturbed to yield any *in situ* material useful for scientific study. The pottery recovered from Linao suggests a culture possibly older than that from Ayub cave (E. Dizon, pers. comm. 2008). This, however, cannot be proven based on current data.

The archaeological evidence from Southwestern Mindanao, particularly from Lebak (in what is now part of Sultan Kudarat) and Maitum (Sarangani Province), suggests the existence of complex Metal Age cultures in Southwestern Mindanao at around 2000 years ago. While the archaeological evidence indicates that these cultures observed complex burial/spiritual practices, there is a gap in information concerning their prehistoric political, economic, and social lifeways. Whether these cultures were related in any way to the remaining ethnic Maguindanao population is also unknown. These gaps in prehistoric knowledge can only be filled by data from further archaeological research (of both habitation and burial sites). The archaeological data from this Sagel cave investigation will hopefully contribute to the body of information on Philippine prehistory and its early societies.

The Archaeology of Sagel Cave

Sagel Cave is located on the southern coast of Mindanao island that faces the Sulawesi Sea [(Celebes Sea) Figure 1]. It falls within the westernmost limits of Sarangani Province, particularly at Barangay Pinol in the Municipality of Maitum. This western part of Sarangani is physiographically characterised by the moderately low foothills at the west of Mt. Busa that descend abruptly to the coast, leaving minimal coastal lowland areas. Sagel, a previously unknown cave, was revealed by bulldozing activities. It is named after the sitio where it is located. The

cave is situated within a property owned by Salilingl Jabel but dispute within the community over cave naming/designation prompted Mayor E. Perrett to step in and name it as Sagel Cave.

Physical Setting, Site Description, and Site Formation

Sagel Cave is located at the base of a Miocene uplifted limestone massif that lies about 700 metres inland from the coast and is about 600 metres northwest of the village of Pinol (Figure 1). This is also the same limestone formation where Ayub Cave is located, which is about 600 metres west of Sagel Cave. The mouths of both Sagel and Ayub caves face the southern coast and are presently fronting the rice paddies and coconut trees before reaching the coast about 700 metres south. Sagel Cave has a small opening, which measures approximately 0.5 metre high and 0.5 metre wide and slopes downward, at a 20° angle, into a bigger chamber inside measuring approximately 2.25 metres at its highest point, 10.3 metres at its longest point, and 4.5 metres at its widest point (Figures 2 and 3). Original cave dimensions, however, are now undetermined since quarrying activities have already damaged and reportedly removed eight metres of limestone material from the front portion of the cave that faces the road. Sagel Cave is a very dry cave with a highly friable and unstable limestone composition. Though no water action is observed inside the cave at present, small pools of water at the bottom end of the northwestern and eastern sections suggest that some water action occurs within the cave formation. This suggests that the thick silty sand deposits inside the cave were most likely formed by water action and erosional processes. Aeolian deposits that are wind generated and occasional earthquakes, which are reported in the area, are also contributing factors to the formation of sediments inside the cave.

Excavation Results: Stratigraphic Layers and Finds

The excavation of Test Pits 1 and 2 shows that most of the excavation as revealed in the stratigraphic profile is undisturbed (Figure 4). A disturbance, which was most likely caused by treasure hunting activities, is fortunately confined to the northern area of Test Pit 1. Four stratigraphic layers of sediment deposits were observed. These are described below by texture, sediment mineralogy, and colour using a Munsell Color Chart.

Layer 1 is a 20 centimetre thick grayish brown (Munsell Soil Color

Figure 2. The opening of Sagel Cave (centre) protected by a fence and soldiers of the Philippine Army. Photo by Coccoy Sexcion

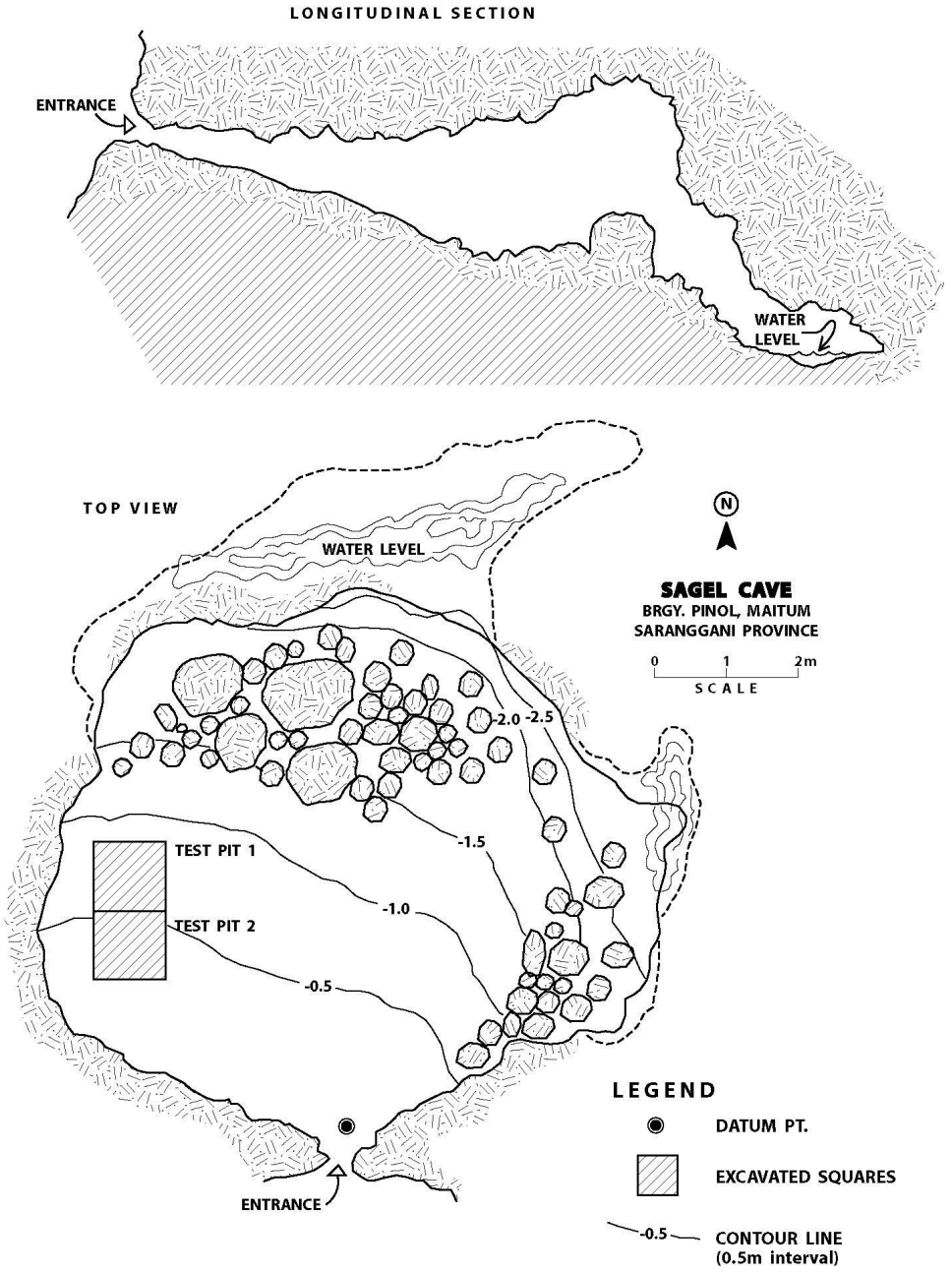

Figure 3. Sagel Cave longitudinal section (top) and plan (bottom)

chart 10 YR 5/2) sediment of loose fine sand and underneath this is Layer 2, a 20 centimetre layer of loose gray (10 YR 6/1) sand characterised by the occasional presence of tree roots. Both Layers 1 and 2 are relatively sterile containing some skeletal remains, earthenware fragments, and shells (gastropods), mostly found in a disturbed portion at the northern section of Test Pit 1. This disturbed portion is observed from present soil surface until a depth of about 80 centimetres (see Figure 4). The earthenware fragments recovered from this disturbed section show red-slipped, incised, and excised decoration, while some appear to be parts of an anthropomorphic burial jar (e.g., arm painted with hematite in rows of circles or broken lines).

Layer 3 is an accumulation of compact grayish brown (2.5 YR 5/2) sandy silt deposit that contains limestone rubble and thickness ranges from 30 to 110 centimetres at several points. The lower part of Layer 3 occurs with a concentration of human skeletal remains, sherds of earthenware burial jars and vessels, an iron implement, shells, and a shell pendant. Underneath Layer 3 is Layer 4, an almost sterile 10–20 centimetre thick compact layer of grayish brown (10 YR 5/2) sandy silt that occurs with limestone pebbles. Based on the location of the archaeological materials in the stratigraphic profile and an understanding of the natural depositional processes inside the cave, the top of Layer 4 appears to have been the cave floor at the time when the mortuary vessels were deposited inside Sagel Cave. Natural and possibly cultural processes subsequently occurred inside the cave forming layer 3, which eventually covered the top of Layer 4, in which the burial jar and mortuary goods were located.

In the excavation of Ayub Cave, Dizon and Santiago (1996:71) hypothesised that ancient people modified the sloping cave floor so as to prevent round-bottomed jars from rolling down the cave. This was not observed in Sagel Cave, since the cave floor (Layer 4) does not slope. It appears that some limestone cobbles, which are present in Layer 3, were probably used as wedges to hold burial jars in place.

Moreover, the systematic excavation undertaken in Sagel Cave yielded *in situ* materials important in understanding mortuary behaviour of early people in the area. The next subsection discusses the cultural materials recovered from the Sagel Cave excavation.

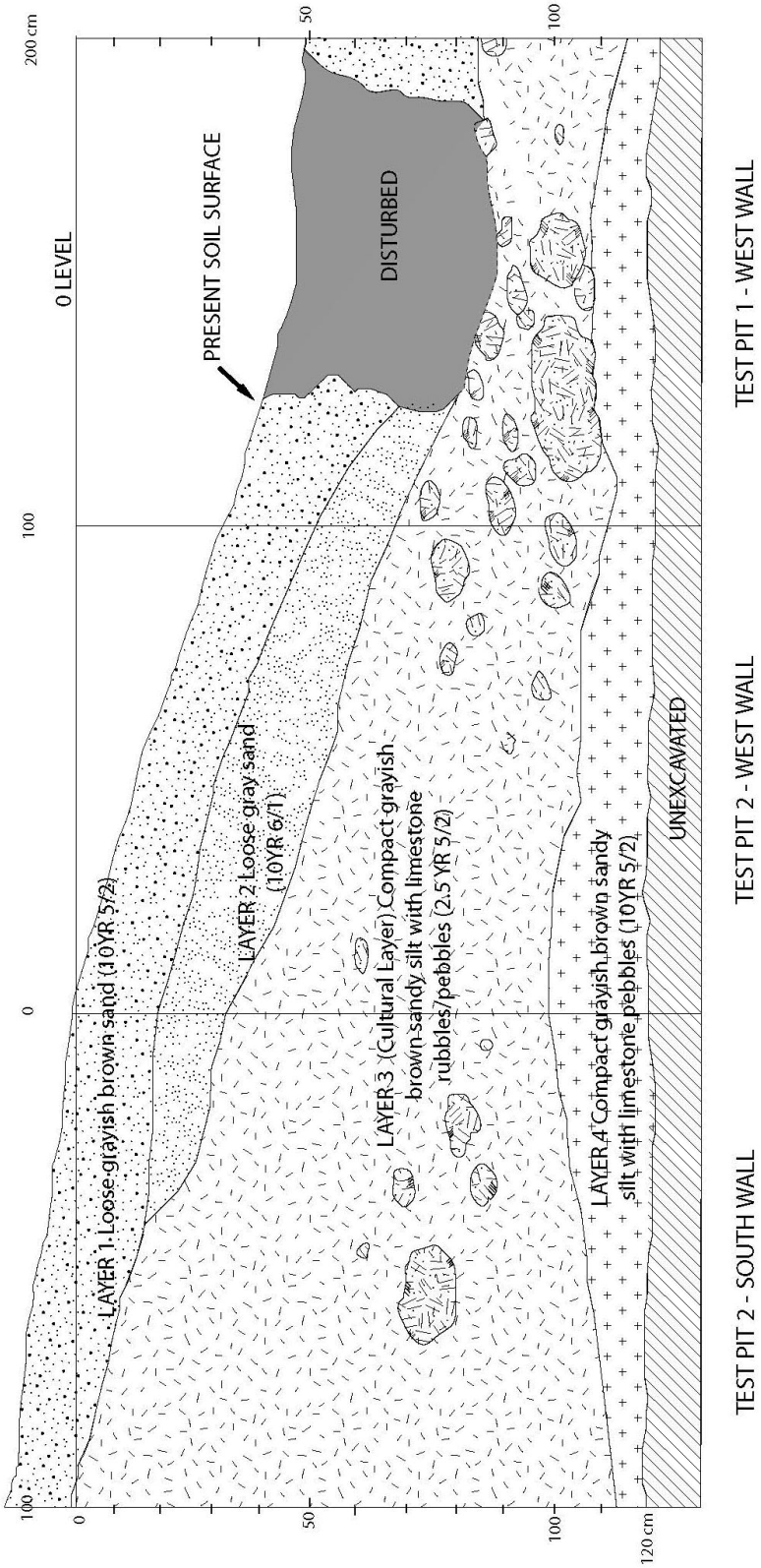

Figure 4. Stratigraphic profile of Test Pits 1 and 2

The Finds

This subsection describes the archaeological materials recovered from Sagel Cave which are very important in the reconstruction of the area's prehistory. Finds include an iron implement, a pendant made from fossilised shell, a burial jar, and other earthenware sherds.

Iron Implement

Among the significant finds from Sagel Cave are the remains of an iron implement that is about 1.4 centimetre wide and 0.35 centimetre thick (Figure 5). The length of the original tool though, remains undetermined due to its incomplete and fragmented nature. It was recovered from Layer 3 and associated with human skeletal remains, pottery fragments, and a shell pendant. This iron implement is severely corroded and is very fragile.

The implement is unique, which appears to have a form different from previously recovered iron blades from the Philippine Islands (Dizon 1988). It has a straight and parallel blade that is upturned at the tip forming a horn. This iron implement from Sagel Cave differs morphologically from those recovered from Ayub Cave, which are categorised as *bolos* (Dizon and Santiago 1996:90) and are usually associated with agricultural and other common day-to-day human activities. The unique morphology of this tool from Sagel is suggestive of a ritual or ceremonial function (E. Dizon, pers. comm. 2008); however, further research is necessary in order to establish this hypothesis.

Fossilised shell modified into a pendant

Another significant find from Sagel Cave is a pendant manufactured from a fossilised shell. Retrieved from Layer 3 at a depth of 60 centimetres from surface, this artefact was almost completely encrusted with limestone and was first assumed to be a carnelian bead due to its reddish nature and opaqueness. Subsequent cleaning and microscopic analysis, however, revealed that the pendant is made from fossilised shell.

This bottle-shaped pendant, which is perforated in the head area, has a maximum length of 2.8 centimetres, a maximum thickness of 0.9 centimetre, and a maximum width of 1.26 centimetres (Figure 6). To produce this pendant, the hinge of a bivalve shell was ground and polished in order to attain its form. Fossilised shells are presumably not

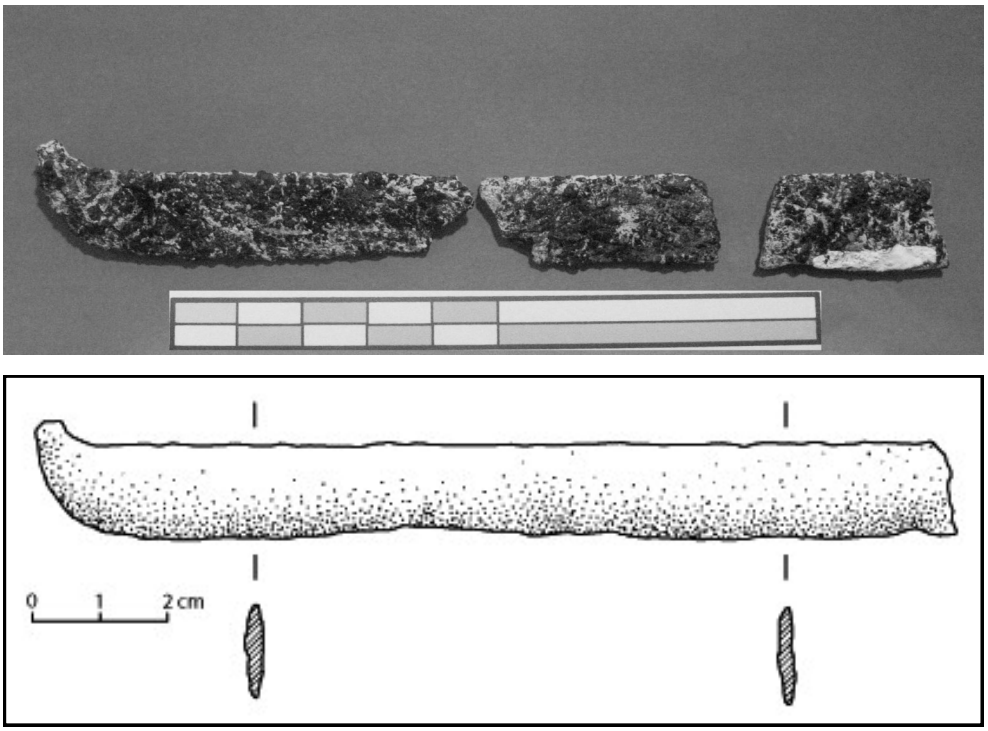

Figure 5. Iron knife from Sagel Cave excavation, Test Pit 1 Layer 3

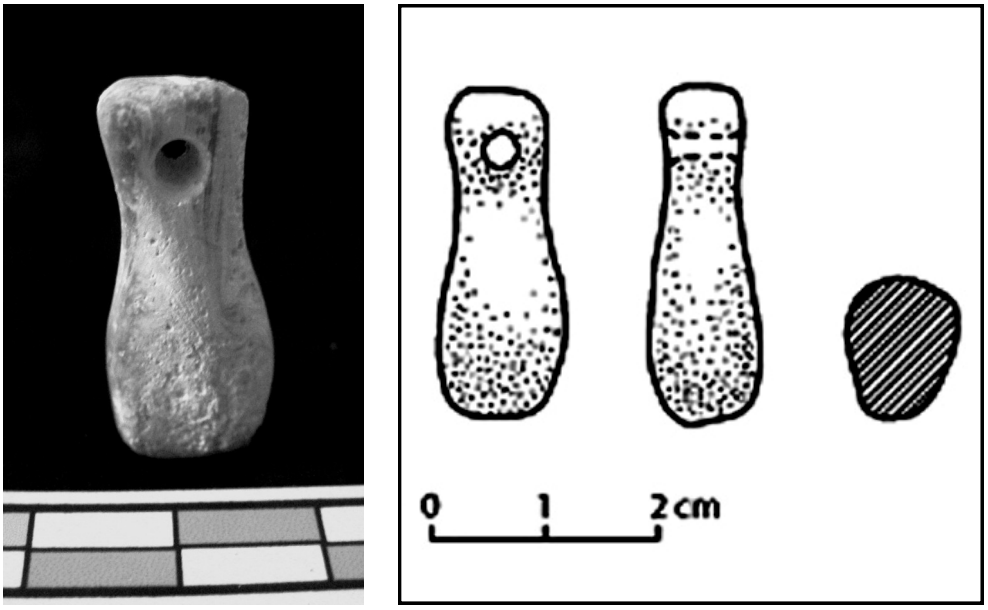

Figure 6. A pendant made of fossilised shell from Sagel Cave, Test Pit 1 Layer 3

difficult to procure, considering that Sagel is located within an uplifted coralline environment.

Burial jar and other earthenware sherds

The excavation of Test Pits 1 and 2 produced a total number of 39 earthenware sherds concentrated at the 78–120 centimetre level within Layer 3 (Figure 7). Apart from the three mouth rims, most are plain earthenware body fragments. Occurring with limestone rubble and cobbles, the sherds are highly fragmented with breakage most likely caused by natural processes, such as earthquakes that intermittently occurred in the area (Dizon and Santiago 1996).

Morphological analysis of diagnostic pottery fragments indicates the presence of at least three vessels having mouth diameters of 34 and 9 centimeters and another which was too small to be determined. The size of the mouth rim suggests that the vessel with the bigger diameter is a secondary burial jar that is of a plain, undecorated direct-rimmed non-anthropomorphic vessel (Figure 8, second from top, left). The second vessel with a smaller diameter most likely served as a vessel for mortuary rituals or formed part of grave goods. These vessels, along with the presence of human skeletal remains and other artefacts, strongly suggest mortuary utilisation of Sagel Cave.

Human skeletal remains

The skeletal remains from Sagel Cave were retrieved within Layer 3 from a depth of 60–120 centimetres from the present cave surface. The bones are very fragmented, most have been calcified and are coated with limestone, making bone analysis difficult. Osteological analysis was carried out at the Zooarchaeology Section of the National Museum which involved species/part identification and determining the minimum number of individuals (MNI).

Osteological analysis indicates at least one individual (modern human, *Homo sapiens sapiens*) was interred in the burial jar. The skeletal remains recovered from Test Pits 1 and 2 are listed in Table 1, which include fragments of femur, humerus (shaft), ribs, clavicle, sternum, cranium, patella, mastoid process, tibia, fibula, thoracic vertebrae, tarsals, metacarpals, metatarsals, phalanges, and teeth (lower canine and incisors).

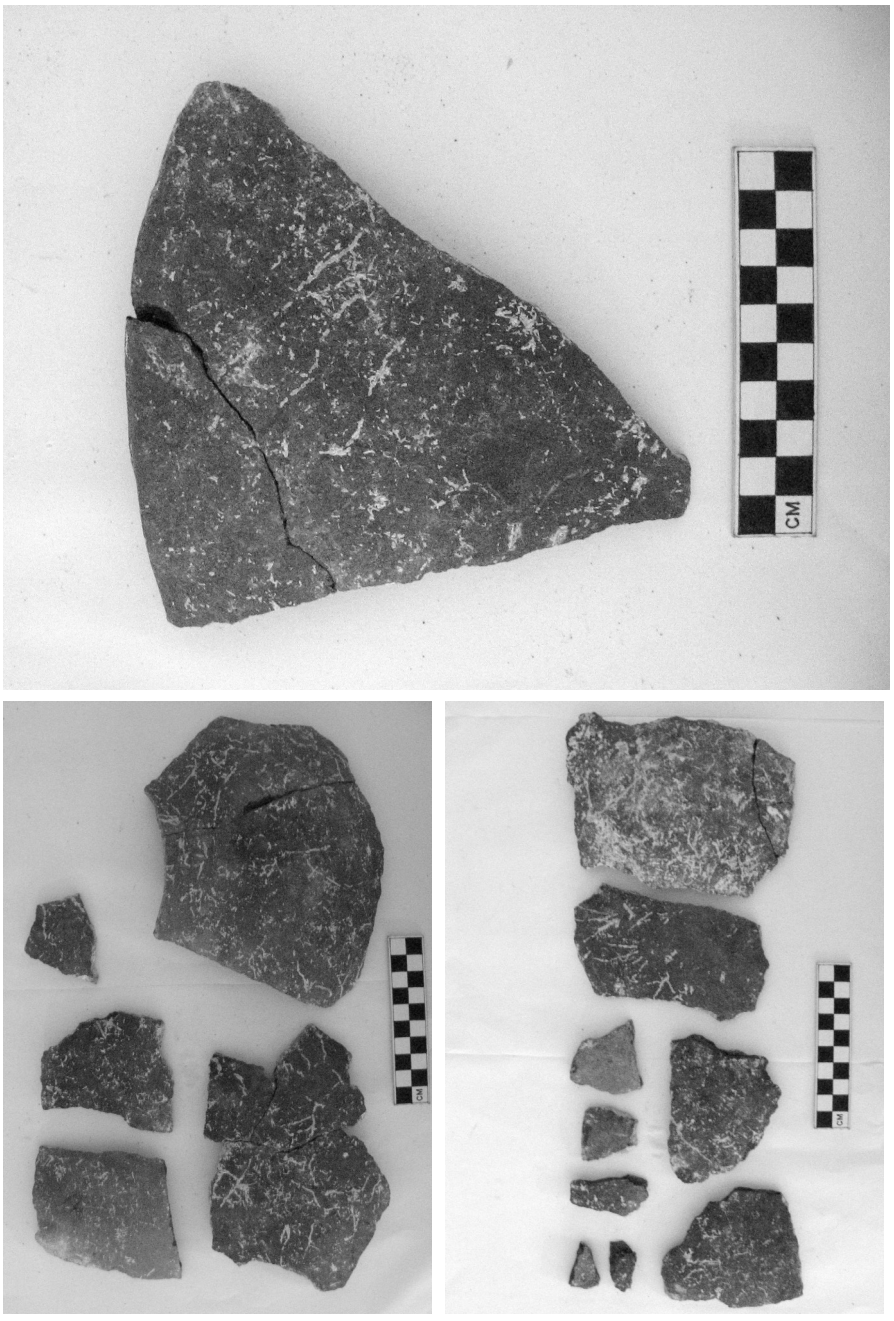

Figure 7. Pottery sherds recovered from Sagel Cave

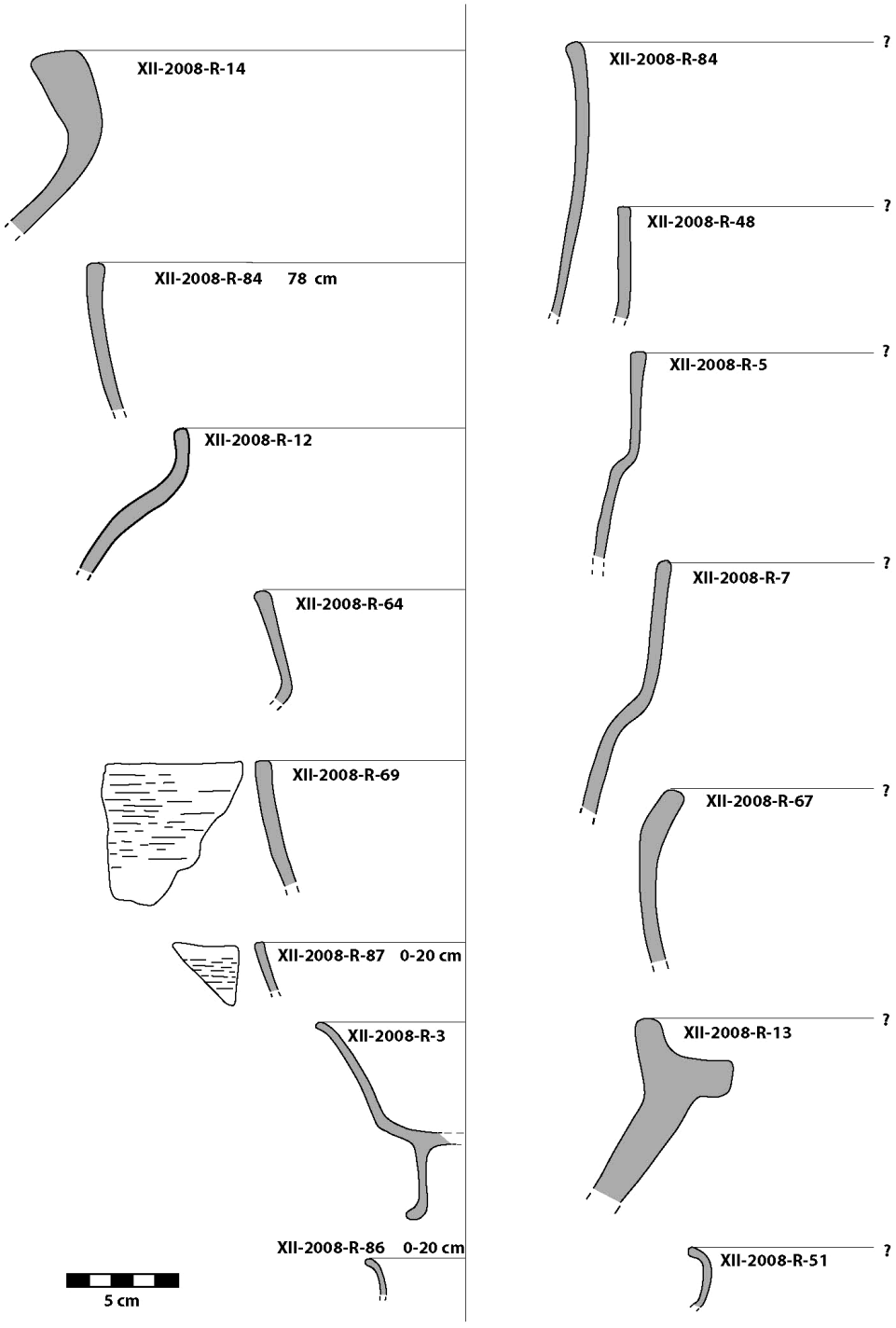

Figure 8. Pottery rims from Sagel cave surface (unless otherwise indicated)

Determining the individual's sex, age, and probable disease was made difficult by the condition of the remains, but approximation of age and sex was determined based on skeletal indicators (i.e., teeth and cranial fragments). Analysis indicates that the excavated teeth belong to an adult, and cranial fragments, which exhibit thickened walls, are typical of a male.

Accession no.	Description	Depth (cm)	Remarks	No. of pieces
X11-2008-R-99	Head of long bone	7	*Homo sapiens*	1
X11-2008-R-106	Thoracic vertebrae, tarsals	110	*Homo sapiens*	5
X11-2008-R-107	Metacarpals, metatarsals, phalanges, ribs	110	*Homo sapiens*	53
X11-2008-R-108	Ribs, clavicle	110	*Homo sapiens*	22
X11-2008-R-109	Sternal bone/ Bone fragments	110	*Homo sapiens*	32
X11-2008-R-115	Skull fragments	0	*Homo sapiens*	16
X11-2008-R-116	Distal part of Femur	0	*Homo sapiens*	2
X11-2008-R-117	Bone fragments	0		20
X11-2008-R-121	Thoracic vertebrae	40	*Homo sapiens*	1
X11-2008-R-125	Metatarsals, phalanges, humerus (shaft), rib	80	*Homo sapiens*	13
X11-2008-R-126	Patella/Bone fragments	80	*Homo sapiens*	3
X11-2008-R-127	Bone fragments	8		8
X11-2008-R-131	Metacarpals, phalanges, sternum	120	*Homo sapiens*	5
X11-2008-R-132	Metatarsal	120	*Homo sapiens*	5
X11-2008-R-51	Skull	0	*Homo sapiens*	5
X11-2008-R-52	Mastoid process	0	*Homo sapiens*	1
X11-2008-R-54	Humerus (distal part)	0	*Homo sapiens*	1
X11-2008-R-55	Metatarsal	0	*Homo sapiens*	1
X11-2008-R-56	Tibia	0	*Homo sapiens*	1
X11-2008-R-57	Tibia, Fibula (shaft)	0	*Homo sapiens*	3
X11-2008-R-75	Long bones (shaft)	0	*Homo sapiens*	6

Table 1. Osteological materials recovered from the excavation in Sagel Cave, Barangay Pinol, Municipality of Maitum, Sarangani Province

Accession no.	Description	Depth (cm)	Remarks	No. of pieces
X11-2008-R-80	Tibia, Fibula	0	*Homo sapiens*	8
X11-2008-R-82	Metatarsal	68	*Homo sapiens*	1
X11-2008-R-90	Shaft fragments	80		14
X11-2008-R-91	Metacarpal	80	*Homo sapiens*	1
X11-2008-R-93	Lower canine	78	*Homo sapiens*	1
X11-2008-R-94	Incisor	60	*Homo sapiens*	1
X11-2008-R-97	Rib fragments	60	*Homo sapiens*	2
X11-2008-R-98	Phalanges	78	*Homo sapiens*	3

Table 1. (cont.)

Discussion and Conclusion

The data obtained from the archaeological excavation indicate that Sagel cave were a single component burial site relatively dated to the Metal Age in Philippine prehistory (ca. 500 BC–AD 500). Fragments of a non-anthropomorphic burial jar associated with human skeletal remains confirm the mortuary context of the cave. Funerary goods, which were possibly offered during mortuary rituals, include an iron implement and a pendant made of fossilised shell. While these findings add to current data on the prehistory of Southern Mindanao, these also raise questions on the relation of the Sagel and Ayub caves burial assemblage to other jar burials in Island Southeast Asia.

Burying the dead in burial jars was a widespread practice in Southeast Asia during prehistory as evidenced, for example, by archaeological excavations in China, Taiwan, Thailand, Laos, Vietnam, East Malaysia, Eastern Indonesia, and the Philippines (see Bellwood 1997:229, 240–241, 272–273, 290–307). There was great variation in the types of jar burial practices in these areas, for example, in terms of whether jar burials were primary or secondary, whether vessel material used was earthenware, tradeware, or limestone, whether vessels were anthropomorphic or non-anthropomorphic, and so on. Evidently, it follows that there were great degrees of variation in the jar burial traditions across these sites, for example, in terms of placement, vessel morphology and decoration, and associated grave goods.

In the Philippines, archaeological evidence of burial jars has been

found in several areas such as the Batanes Islands, Arku Cave in Cagayan Valley, Nueva Ecija, Batangas, Pampanga, Pangasinan, Camarines Sur, Sorsogon, Marinduque, Masbate, Samar, Cebu, Negros Oriental, Palawan, Sarangani, and South Cotabato (Beyer 1979; Briones 1972; Briones and Chiong 1977; Dela Torre 2003; Dinopol 1978; Dizon 1979; Dizon and Santiago 1996; Faylona 2003; Fox 1970; Kurjack and Sheldon 1970; Kurjack *et al*. 1971; Maceda 1964, 1965, 1966; Scott 1984; Solheim 1951, 1952, 1954, 1968; Tenazas 1974). There is also considerable variation in the types of jar burials recovered from these sites.

The types of burial jars found in Maitum, from both Sagel and Ayub Caves, are secondary burials. Secondary burial practice refers to the re-internment of the bones after remains of an earlier burial have sufficiently decomposed (Dela Torre 2003; Junker 1999; Tenazas 1974). Burying the dead in jars often includes a practice of offering funerary or grave goods to the dead, believing that such goods will be useful during the journey of the deceased into the afterworld (Dizon and Santiago 1996). This concept can be traced back to the Neolithic period (Barretto 2003). The secondary burial jars from Maitum include two types, such as anthropomorphic and non-anthropomorphic vessels (Cuevas 2007). An anthropomorphic burial jar is defined as a mortuary vessel that clearly portrays a human shape, while a non-anthropomorphic burial jar refers to a typical mortuary vessel without human form.

There are several views that discuss the origin of the jar burial tradition. Beyer (1979) espoused the view that the jar burial tradition generally began with the movement of the "jar burial people" from the interior of Fujian Province in China into Northern Philippines through the Batanes-Babuyan islands and subsequently spreading down the eastern side of the Philippines, reaching as far as Sulawesi. Beyer (1979) implied that a single jar burial culture was introduced by the Hakka people who occupied the interior of Fukien Province. Another view, advocated by Solheim (1960) disputed Beyer's (1979) view believing that the jar burial tradition was an isolated practice that may have diffused/spread with or without migration of people. Another view is Bellwood's (1997:306-7) hypothesis that the jar burial tradition was an indigenous development in Island Southeast Asia commencing possibly around the late second and early first millennia BC, as evidenced by early jar burials from Niah Cave in Sarawak and Tabon Caves in Palawan, with the bulk being not older than 200 BC. Bellwood (1997) said that though there were some infant jar burials in Thailand and Laos, Mainland Southeast Asia was totally devoid

of the jar burial tradition prior to the Iron Age on the Korat Plateau and central Vietnam (Sa Huynh). Furthermore, looking at various jar burial sites across South, East, and Southeast Asia, Bellwood (1997) believed that though Island Southeast Asian jar burials have some parallels with Indian/Sri Lankan and Japanese jar burials, there is considerable variation between these and Island Southeast Asian jar burial traditions particularly in terms of basic artefact forms such as metal and pottery (Bellwood 1997:307). Thus, Bellwood (1997) believed that the Island Southeast Asian jar burial tradition is an indigenous development. Based on more recent data, however, Bellwood now believes that the jar burial tradition as traveling with Austronesian-speaking populations, with a likely origin in Taiwan, where jar burials occur in Niuchouzi and Fushan contexts in Southwestern and Eastern Taiwan, from about 4500 BP onwards (A. S. B. Mijares, pers. comm. 2008). Unfortunately, however, there are no English language sources on all of this.

The anthropomorphic and non-anthropomorphic mortuary vessels from Pinol, Maitum, with unique anthropomorphic forms and astonishingly large number of vessels, are considerably different from Chinese, Japanese, and other Southeast Asian jar burial traditions. These certainly dispute Beyer's and Solheim's views on the origins of the jar burial tradition. It is not yet clear how these fit with the Austronesian tradition espoused by Bellwood (1997). It is possible though that if the jar burial tradition originated in Island Southeast Asia during the late Neolithic, the tradition appears to have evolved in local contexts during the Metal Age particularly in terms of craftsmanship, with the development of more intricate and complicated decorative designs. This, however, will need an examination of jar burial types and decorative styles coupled with an analysis of jar burial distribution in island Southeast Asia to understand the relationship of the Maitum jar burials (i.e., Ayub Cave and Sagel Cave) with the ''Austronesian'' or Island Southeast Asian tradition.

In addition, the findings from the Sagel Cave investigation also raise the possibility of the existence of complex Metal Age communities in Southern Mindanao. The 'complexity' or scale of a society is a subject in archaeological research that generally investigates social, political and economic organisation of early societies based on varied evidence such as settlement patterns, residential or chiefly structures, burials, and craft specialist work areas (Renfrew and Bahn 2000). So far, no in-depth studies of social groups inhabiting Southern Mindanao during the Metal Age

have yet been carried out. The archaeological data here have been limited to funerary sites, the chronological relationships of which have not yet been firmly established by radiocarbon dates. Goods found in mortuary contexts very often carry with them social, political, and economic meaning, and grave goods are usually positive indicators of social, political, economic status (Junker 1999). The artefacts associated with the Sagel cave jar burial, particularly the iron knife and the pendant of fossilised shell interred with the jar burial, are morphologically unique which may possibly indicate the social, political, and/or economic status of the deceased. Iron was especially difficult to acquire in prehistory, with acquisition and utilisation usually connoting prestige and power. Additionally, the unique morphology of the iron knife recovered from the Sagel Cave may also suggest a social, economic, or political role for the deceased in the community. According to Junker (1999), some grave goods show ascribed values of status and rank in prehistoric societies, where trade in such status goods created/strengthened economic and political currencies that are vital to the development of early groups into chiefdoms and states. The grave goods at Sagel cave may, therefore, indicate such a polity. However, further investigations (i.e., excavation of more burial and habitation sites and comparative studies of burials and burial practices in the area) are still necessary to fully understand the social, political, and economic implications of this Sagel burial.

A comparative look at the jar burial assemblages and mortuary practices in Ayub and Sagel Caves also raises further questions. For example, both anthropomorphic and non-anthropomorphic types of burial jars were found in Ayub Cave but only the non-anthropomorphic type was found *in situ* in Sagel Cave. Furthermore, evidence of multiple burials inside individual mortuary vessels was found in Ayub Cave but only an individual was buried in Sagel Cave. Moreover, the anthropomorphic and non-anthropomorphic vessels in Ayub Cave exhibit high degrees of variation in decoration having impressed and incised geometric decoration with some slipping or painting, while in Sagel Cave, only impressed decoration was found on a very small number of sherds. What do these variations in jar burial assemblages from these caves mean in terms of social, political and economic organisation of social groups in the Pinol area during the Metal Age? Of course, it must be remembered that both Sagel and Ayub Caves are heavily disturbed and the chronological relationship between the Ayub and Sagel Caves is not yet established, whether they were contemporaneous or one came

earlier or later. The implications of these variations in mortuary traditions, not only between burial caves in Pinol but also in Southwestern Mindanao, need to be investigated further. However, it is imperative first to understand the chronological relationships between all these Southern Mindanao funerary sites.

On a final note, another significant observation from the Sagel Cave investigation is the absence of anthropomorphic pottery from the archaeological excavation. This puts in question the context of the anthropomorphic pottery recovered from the present cave surface. However, considering that almost half of the Sagel Cave has been removed due to quarrying operations in the area, the absence (or presence) of anthropomorphic pottery from Sagel Cave is not conclusively established.

Acknowledgements

Funding for this fieldwork was provided by the Provincial Government of Sarangani and the Local Government of Maitum. The team wishes to thank Governor Miguel Dominguez, Vice-Governor Steve Solon, and Mayor Elsie Perrett for initiating this investigation on significant prehistoric data. Thanks also to the Pinol Barangay Officials and Captain Lamia Mala, Sagel Cave property owners Saliling and Abdullah Jabel, and the community of Pinol for their assistance and support. Osteological analysis was carried out by Angel Bautista, Zooarchaeologist and Curator I of the National Museum Cultural Properties Division. All figures were illustrated by Ed Bersamira and digitally finalised by Rey Bautista. Special thanks to Kye Montemayor, Beth Palma-Gil, Arnelito Ramirez, Councilor Jess Bascuña, and Lt. Frank Lopez and his platoon (Philippine Army 66th Infantry Batallion).

References

Aguilera, M. 1991. *Land archaeology survey of the Agro-Industrial fish port complex at Sitio Sapa, Tambler, Gen. Santos City, South Cotabato*. Unpublished Manuscript. Manila: The National Museum of the Philippines.

Barretto, G. 2003. "Of earthenware, ancestors, gods and the living," in *Pang-alay Ritual Pottery of Ancient Philippines*. Edited by C. Valdes, pp. 70-74. Makati: Ayala Foundation, Inc. and Oriental Ceramic Society of the Philippines.

Bellwood, P. 1997. *Prehistory of the Indo-Malaysian Archipelago*. Honolulu: University of Hawaii Press.

Beyer, H. O. 1947. Outline review of Philippine archaeology by islands and provinces. *Philippine Journal of Science* 77**:** 205-374.

_____. 1979. "Early history of Philippine relation with foreign countries, especially China," in *Readings in Philippine Prehistory*. Edited by M. Garcia, pp. 112-127. Manila: The Filipiniana Book Guild.

Briones, S. 1972. "The burial sites of Salansang, Salaman, Lebak, Southern Cotabato, Philippines". *Paper presented at the Seminar on Southeast Asian Archaeology and Prehistory, June 26 - July 3, 1972*. Manila.

Briones, S. and L. Chiong. 1977. "Salansang urn burials," in *Filipino Heritage* 1, pp. 205-209. Lahing Pilipino Publishing, Inc., Singapore Times Printers Sdn. Bnd.

Cuevas, N. T. 2007. *Figuring sex and gender in Maitum anthropomorphic vessels: Ethnographic analogy and standardization*. Unpublished Master's Thesis. Quezon City: Archaeological Studies Program. University of the Philippines.

Dela Torre, A. 2003. "Jar burials: Abode of the ancestral spirits," in *Pang-alay Ritual Pottery in Ancient Philippines*. Edited by C. Valdes, pp. 26 -28. Makati: Ayala Foundation, Inc. and Oriental Ceramic Society of the Philippines, Inc.

Dinopol, D. P. 1978. The incised patterns of burial jars excavated in Cubay, San Dionisio, Iloilo. *Silliman Journal* 25**:** 187-194.

Dizon, E. 1979. *Tigkiw na Saday: A jar burial site*. Anthropological Papers No. 2. Manila: The National Museum of the Philippines.

_____. 1988. *The Metal Age in the Philippines*. Manila: The National Museum.

_____. 1993. *Archaeological survey of the new General Santos City airport, Tambler, South Cotabato*. Unpublished Manuscript. Manila: The National Museum of the Philippines.

_____. Personal communications (2008). The National Museum of the Philippines.

Dizon, E. and R. Santiago. 1996. *Faces from Maitum: The archaeological excavation of Ayub Cave*. Unpublished Manuscript. Manila: The National Museum of the Philippines.

Faylona, M. G. P. 2003. The Dipnay Supuan jar burials in Batanes.

Philippine Quarterly of Society and Culture 31**:** 119-219.

Fox, R. B. 1970. *The Tabon Caves: Archaeological explorations and excavations on Palawan Islands, Philippines*. Monograph of the National Museum No. 1. Manila: The National Museum of the Philippines.

Junker, L. L. 1999. *Raiding, Training, and Feasting: The Political Economy of Philippine Chiefdoms*. Honolulu: University of Hawaii Press.

Kurjack, E. and C. Sheldon. 1970. The archaeology of Seminoho Cave in Lebak, Cotabato. *Silliman Journal* 17(1)**:** 5-18.

Kurjack, E., C. Sheldon, and M. Keller. 1971. The urn burial caves of Southern Cotabato, Mindanao, Philippines. *Silliman Journal* 18(1)**:** 127-153.

Maceda, M. 1964. Preliminary report on ethnographic and archaeological field work in the Kulaman Plateau, Island of Mindanao, Philippines. *Anthropos* 59**:** 75-82.

_____. 1965. Second preliminary report on the archaeological excavation in Kulaman Plateau (Cotabato), island of Mindanao, Philippines. *Anthropos* 60**:** 237-240.

_____. 1966. Archaeological and socio-anthropological fieldwork in Kulaman Plateau, Southern Cotabato. *Science Review* 7**:** 12-20.

Mijares, A. S. B. Personal communications (2008). Archaeological Studies Program, University of the Philippines Diliman

Renfrew, C. and P. Bahn 2000. *Archaeology: Theories, Methods and Practice*. London: Thames and Hudson.

Scott, W. H. 1984. *Prehispanic Source Materials for the Study of Philippine History*. Quezon City: New Day Publishers.

_____. 1994. *Barangay: Sixteenth Century Culture and Society*. Quezon City: Ateneo de Manila University Press.

Solheim, W. G. II. 1951. Preliminary report on archaeological fieldwork in San Narciso, Tayabas, Philippine Islands. *University of Manila Journal of East Asiatic Studies* 1**:** 72-76.

_____. 1952. Jar burial in the Babuyan and Batanes islands and in central Philippines, and its relationship to jar burial elsewhere in the Far East. *The Philippine Journal of Science* 89**:** 115-148.

_____. 1954. The Makabog jar burial site. *Philippine Journal of Science* 83**:** 57-68.

_____. 1960. Jar Burial in the Babuyan and Batanes Islands and in Central

Philippines, and its Relationship to Jar Burial Elsewhere in the Far East. *Philippine Journal of Science* 89(1)**:** 115-148.

_____. 1968. "The Batungan Cave Sites, Masbate, Philippines," in *Anthropology at the Eight Pacific Science Congress*. Edited by Wilhelm G. II Solheim, pp. 20-62. Honolulu: University of Hawaii Press.

Solheim, W. G. II, A. M. Legaspi, and J. S. Neri. 1979. *Archaeological Survey in Southeastern Mindanao*. Monograph No. 8. Manila: National Museum of the Philippines and the University of Hawaii.

Tenazas, R. 1974. A progress report on the Magsuhot excavations in Bacong, Negros Oriental, Summer 1974. *Philippine Quarterly of Society and Culture* 2**:** 133-155.