



Australian
National
University

Sulawesi Symposium — Program

Singgasana Hotel Makassar

Jalan Kajaolaliddo No. 16 Makassar - 90013

Indonesia

31st January – 3rd February 2016

The Archaeology of Sulawesi – An Update

Sunday, 31st January 2016

2 - 5 p.m.

Registration open – Lobby of Singgasana Hotel

Monday, 1st February 2016

9:30 a.m. - Sue O'Connor, Fadhila Arifin Aziz and David Bulbeck

Introductions

9:40 a.m. - Muhammad Irfan Mahmud

Welcome – Keynote Address

10:10 a.m. - Mike Gagan, Wayhoe S. Hantoro and Hamdi Rifai

Speleothem evidence for vegetation collapse on Flores and Sulawesi 68,000-61,000 years ago: An environmental turning point for early human dispersal in Australasia?

Michael K. Gagan, Nicholas G. Scroxton, Linda K. Ayliffe, Gavin B. Dunbar, Heather Scott-Gagan, Wahyoe S. Hantoro, Hai Cheng, R. Lawrence Edwards, John C. Hellstrom, Jian-xin Zhao, Claire E. Krause, Bambang W. Suwargadi, Hamdi Rifai

Documenting the precise timing of past environmental turning points is central to judging their impact on early human history. A prevailing hypothesis is that, after leaving Africa, early humans migrated rapidly (within a few thousand years) from India to Southeast Asia at ~65 ka (Macaulay et al. 2005), but the potential role of environmental catastrophes in motivating this remarkably swift dispersal is still unknown. While the ash fall from the ~74 ka Toba super-eruption is well documented between Sumatra and India, the severity of any habitat destruction, and whether it displaced humans, is a matter of ongoing debate. Much less is known about Late Pleistocene environmental catastrophes in island southeast Asia (ISEA), east of the Wallace Line, which was traversed by the earliest colonizers of Australia by ~60-50 ka (Roberts et al. 1990, 1994). To help fill the knowledge gap in ISEA, we produced two U-Th dated, ~90-kyr-long speleothem 18O/16O and 13C/12C records for Flores and southwest Sulawesi (Maros) that reveal an abrupt, regional-scale reduction in vegetation cover around 68-61 ka. Clear decoupling of the 18O/16O (a proxy for monsoon rainfall) and 13C/12C (a proxy for vegetation cover) shows that the ~7 kyr-long environmental shift was not driven by climate change and, instead, was probably triggered by an unusual event. The

radiometrically dated onset of the signal is ~6 kyr too young to be directly related to Toba. However, new sediment cores from the Flores Sea contain a prominent magnetic susceptibility spike, interpreted as an air fall ash layer (Kuhnt et al. 2011 Sonne cruise report), that may attest to a volcanic trigger for the event. Lower sea levels, reduced atmospheric CO₂ and tropical cooling during MIS4 (~70-60 ka) could have served to prolong the environmental impact for ~7 kyr, making it the greatest event in the ~90 kyr records. The new speleothem records for Flores and Sulawesi suggest that the 68-61 ka environmental disruption in ISEA, together with the Toba ash fall in Sundaland, could have reduced tropical refugia and opened-up a heterogeneous ecological setting in southern Australasia. The combined event may have constituted an environmental “window of opportunity” that motivated rapid dispersal during a critical period in the early human history of Australasia. Determining whether the altered environment facilitated dispersal of hunter-gatherers along open-forest corridors, or motivated a rapid exodus via coastal migration, would provide insight into the innate adaptive capabilities of early humans.

10:30 a.m. - Janelle Stevenson

A 60,000-year record of vegetation and climate change from Lake Towuti, South Sulawesi, Indonesia

Janelle Stevenson, Rose Whitau, Jack Fenner, James M. Russell and Satria Bijaksana

Lake Towuti, a large lowland tectonic lake situated within the Indo-Pacific warm pool, is perfectly situated to evaluate how large scale changes in climate have manifested themselves in the tropics. High-resolution geochemical data serving as proxies of surface runoff and vegetation for the last 60,000 years suggest that the LGM was extremely dry, bracketed by the much wetter conditions of marine isotope stage 3 (MIS3) and the Holocene. Existing pollen based records for Sulawesi also suggest that the LGM was dryer, however, these records are short and discontinuous over the critical time period. A pollen record, still being refined for Lake Towuti, also shows a sudden and profound response in the vegetation over the LGM period, however, the expected increase in grassland, in line with the enriched $\delta^{13}\text{C}$ terrestrial leaf wax signal, is not apparent. Instead there is a loss of high altitude taxa and the expansion of several lowland dicots that remain taxonomically unresolved. In a bid to determine how representative the Lake Towuti vegetation record is for the lowlands, a new record spanning the last 17,000 years is being developed from a small neighbouring lake; Lake Lantoa.

10:50 a.m.

Morning Tea

11:20 a.m. - Gert van den Bergh

Early moderns or modern ancients? Occupation of Sulawesi before 60,000 years BP

Gert D. van den Bergh, Mark Moore, Adam Brumm, Li Bo, Dida Yurnaldi, Ruly Setiawan, Bert Roberts, Suyono, Fachroel Aziz

Based on archaeological and genetic evidence it is generally assumed that modern humans colonized Island Southeast Asia (ISEA) and reached Sahul 60 - 50 kya before present. Premodern humans reached the Wallacean island of Flores by 1 Mya ago. To reach Flores, an oceanic island with an endemic, impoverished Pleistocene terrestrial fauna, at least two sea-crossings had to be taken. New evidence of a stone tool assemblage from a dated, well-stratified context at the open air site of Talepu in the Walanae Basin of South Sulawesi indicates that hominins may have crossed to Sulawesi much earlier than previously thought. A minimum age of ~118 kya for fluvial layers containing in situ stone implements could either signify that, like on Flores, pre-modern humans had been able to reach Sulawesi at some early stage during the Pleistocene, or alternatively, that modern humans were present in the region much earlier than has been assumed.

11:40 a.m. - Adam Brumm

The First People of Sulawesi: Recent Archaeological Excavations in the Limestone Karsts of Maros

Adam Brumm, Muhammad Ramli, Budianto Hakim, Iwan Sumantri

Little is known about the earliest human colonisers of Sulawesi, their social organisation and cultural lifeways, their technology, economy, artistic traditions, and belief systems. Who were these people, and how did they adapt to, and in turn transform, the unique ecosystems of Sulawesi, and how did they change over the subsequent tens of millennia of Pleistocene settlement on this island? Concerning the environmental impacts of humans, in particular, Sulawesi was once home to an array of endemic, large-bodied mammals that are now extinct, including archaic elephants and a large warthog-like pig (Celebochoerus), and it remains an open question whether *H. sapiens* played a role in the demise of these and other Pleistocene 'megafauna'. Finally, given the presence of *Homo floresiensis* on the island of Flores to the south, and the mysterious small-bodied hominins from the Philippines to the north, how certain can we be that modern humans were the first people to colonise Sulawesi? In this presentation we will talk about our team's ongoing efforts to address these problems through archaeological excavations in the limestone karsts of Maros on Sulawesi's southern peninsula. We will describe the results of our deep-trench operations at two Maros sites: Leang Burung 2, a rock-shelter first excavated by Ian Glover in 1975 and that has long represented the oldest archaeological site on Sulawesi – but which we have now excavated to around twice the vertical depth attained by Glover – and at a nearby cave, Leang Bulu Bettue, which has yielded the longest, most complete record of human presence in this karst region.

12 p.m. - Mark Moore

Pleistocene stone-flaking technology in the Maros karsts of Sulawesi

Mark W. Moore, Adam Brumm, Muhammad Ramli, Budianto Hakim, Suryatman, Yinika Perston

Most of our knowledge of Pleistocene stone technology in Indonesia derives from a few key sites spread across the archipelago, and our understanding of landscape-scale variation is limited. Recent excavations at two sites in the Maros karsts, Leang Burung 2 and Leang Bulu Bettue, recovered stone artefact assemblages spanning the early to middle phases of the Last Glacial Maximum (~28-22 ka). These assemblages reflect a similar reduction sequence focused on the production of small flakes in the caves from larger flakes struck elsewhere on the landscape. Flaking conducted inside the caves was by the hard-hammer freehand or bipolar techniques. Despite this similarity, the Leang Bulu Bettue assemblage is characterized by an emphasis on exceptionally well-controlled bipolar flaking, whereas bipolar flaking was comparatively rare at Leang Burung 2. Hints of specialist Pleistocene macroblade production occur in both assemblages, but this was evidently undertaken outside the caves. Spatial differentiation in the reduction sequences may relate to specialized use of cave sites, or differing emphasis on contrasting reduction trajectories at different times. This variation hints at complex use of landscapes and cautions against extrapolating from reconstructing regional patterns from single-site excavations.

12:20 p.m.

Lunch

1:20 p.m. - Michelle Langley

A Unique Osseous Tool Tradition: Suidae Tooth Use at Leang Bulu Bettue

Michelle C. Langley, Adam Brumm, Muhammad Ramil, Budianto Hakim, and Iwan Sumantri

Recent excavations at Leang Bulu Bettue resulted in the recovery of several artefacts made on Suidae teeth, including those of *Babyrousa* sp. tooth dating back to >26,000 cal. BP. Including a projectile point tip, a piercing tool, and two adjoining disc bead blanks, this small collection suggests that a unique tradition of wild pig raw material use was being enacted at this site during the Late Pleistocene.

These artefacts, being a part of a larger symbolic assemblage, indicate that Leang Bulu Bettue may have acted as an aggregation site, similar to those evidenced in Upper Palaeolithic Europe.

1:40 p.m. - Paul Taçon

The contemporary importance and future of Sulawesi's ancient rock art

Paul S.C. Taçon, Muhammad Ramli, Budianto Hakim, Adam Brumm and Maxime Aubert

In October 2014 the world learned that the oldest surviving hand stencils and rock paintings of animals that have been scientifically dated are located in southern Sulawesi rather than in Europe. We summarise this and related research before situating Sulawesi rock art in regional and global contexts, as well as human evolution and Southeast Asian archaeological debates. Contemporary concerns about the rock art's conservation are also outlined.

2 p.m. - Susan Hayes

Cave art, art and geometric morphometrics: Shape changes and the Babirusa of Sulawesi

Susan Hayes and Gert van den Bergh

There is considerable evidence that the Babirusa of Sulawesi has long attracted human attention. This is probably in part due to the male Babirusa appearing as a bizarre compound of two familiar ungulates (*babi* = pig, *rusa* = deer) in that the male's upper canines resemble deer antlers. In October 2014, Aubert et al. announced in *Nature* that a cave art depiction in Leang Timpuseng, Maros, interpreted by the authors to depict a female Babirusa, was created at least 35,400 years ago, and is therefore of comparable antiquity to the Late Pleistocene cave art of Europe. Using geometric morphometrics we have analysed over 100 images depicting the Babirusa, including those produced by Europeans travelling through Sulawesi in the 18-19th Century, together with images of other Suids, to better understand the social and anatomical form of this Maros iconic cave art. Our results indicate a strong socio-cultural and historical bias in how the Babirusa is displayed, which includes the fantastic, the infantile and the fearful. Overall our analysis indicates the cave art of Maros bears some relationship to the methods of figurative depiction of ungulates favoured in Europe some 20,000 years after the Leang Timpuseng cave art first appeared, but is a more anatomically accurate depiction of the Babirusa than those created by Europeans some 300 years ago to the present.

2:20 p.m. - Adhi Agus Oktaviana

Advanced rock art research in Muna Island, Southeast Sulawesi

Adhi Agus Oktaviana

Muna Island has been studied for rock art research almost 40 years ago by The National Research Center of Archaeology, Jakarta, the result by the images are figuratif likes human figure, animal, sun, and boat motif with brown colour. The images are representation of the hunting scene, battle, and etc. Before 2005 there no reporting of negatif hand stencil on this island, by research of Balai Arkeologi Makassar they found 6 negatif hand stencil on Pominsa cave. On this theme we explained another cave with negatif hand stencil who found at 2015 documentation leading by Directorate of Cultural Heritage Preservation and Museum ad also new rock art sites on this Island. We hope this studied contributed rock art research in Island Southeast Asia.

2:40 p.m.

Afternoon Tea

3 p.m. - Budianto Hakim

Black drawings at the site of Gna Pondo, Southeast Sulawesi: Interpretation of their Meaning and Motifs

Budianto Hakim

Drawings constitute a human production which involved depicting objects or real events in the form of art works, and which moreover were a reflection of life at the time. With this perspective we can gain an insight into aspects of the life of earlier communities through the drawings that they made. Until now, the issue of cave drawings is still debated as part of a body of thought dedicated to determining human social systems in the past.

3:20 p.m. - Sue O'Connor

Human Occupation in the Towuti Routa Region of South-Eastern Sulawesi

Sue O'Connor, David Bulbeck, Philip J. Piper, Fadhila Aziz, Fredeliza Campos, Rachel Wood, Ken Aplin, Ben Marwick, Fakhri, Suryatman

Research on the pre Neolithic period in Sulawesi has largely been focused on the limestone region near Maros. Here we report on new excavations in the Towuti–Routa Region of South-eastern Sulawesi at the cave sites Talimbue, Mo'o hono and Sambangowala. These sites have produced glass beads, ceramics and metal in mortuary contexts, pottery, dense faunal and lithic assemblages, a diversity of bone tool types and an unusual class of material; baked clay with impressions. Here we focus on the pre Metal Age assemblages which at Talimbue extend back to the Last Glacial Maximum.

3:40 p.m. - Fakhri

Fauna of Sambangoala Cave Sites

Fakhri

The purpose of the research is to determine the variability of fauna that lived and interacted with humans who supporting Sambangoala Cave culture during the occupation. The method for sampling is doing by survey and excavation. The analysis methods using Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) to count the number of fauna samples from excavation. From radiocarbon chronology dates of this dwelling cave shows that this site was occupied at 5500 to 3500 Before Present. The analysis shows that the animal that once lived together with Sambangoala cave man supporters include fish, toads/frogs, lizard, snakes, birds, Sulawesi bears possum, small possum, bats, monkeys, rats, squirrels, raccoons, hog deer (Babi russa), Sulawesi pig (*Sus Celebensis*), and anoa. This site also has other archaeological remains, in the form of stone artefacts, bone artefacts, fragments of pottery, and the burning former as charcoal. From later cultural layer, discovered fragments of porcelain and clinker and it was found overall context and associated with fauna bones fragment finds. The bone fragments of fauna used as food as well as bone artefacts that have been modified. The ancient environment of Gua Sambangoala sites at the occupation period, there is not much changed in topography. Identified faunas indicates that environmental conditions of Sambangoala Caves are an open field, valleys, karstic hills and wet rain forest habitat of faunas of Sambangoala Cave site.

4 p.m. - Fadhila Arifin Aziz

Subsistence Strategy of Community on Holocene, South Celebes

Fadhila Arifin Aziz

Community of a cave dweller who lived in the end of Pleistosen until the beginning of Holosen maintain their life by utilizing surrounding natural environment. The problem at that time is cannot be separated from the aspect of skillfulness using technology and equipment (stone, bone, a mollusk shell, pottery), organizing resources (human and nature) that is available, the choice of location is that is not far from some of their essential needs (food), and others. Until now the reconstruction of subsistence in Holosen have been done on a cave or a niche in Java (Lawa, Ponorogo) and Borneo

(Babi, Tabalong), but never been tested in a cave or a niche in south Celebes. The result of this research in several cave dwelling in South Celebes could contribute for modelling and characteristics and subsistence region strategy of Nusantara in the past.

4:20 p.m. –

Discussion and Thanks

5 p.m. – Finish

Tuesday, 2nd February 2016

9:30 a.m. - Sue O'Connor, Fadhila Arifin Aziz and David Bulbeck

Introductions

9:40 a.m. - Campbell Macknight

The joint Australian-Indonesian archaeological expedition to South Sulawesi in 1969 in context

Campbell Macknight

The original impetus for the joint Australian-Indonesian archaeological expedition which visited South Sulawesi in July and August 1969 can be traced back to the beginning of the twentieth century, but its more immediate background lay in a particular conjunction of personal, intellectual, political and security factors in both Indonesia and Australia. The opportunity to apply radiocarbon dating and an interest in stone tool typology were important aspects of the archaeological work itself. The expedition was highly successful in terms of its objectives and the archaeological data it recovered has continued to attract attention even as research interests have shifted to new questions. Participation in the work of the expedition also opened up opportunities in unexpected areas which some of those associated with the expedition's activities have followed up in subsequent years. The conduct of the expedition established a precedent for collaboration between local, national and foreign researchers which has been particularly happy and productive.

10 a.m. - David Bulbeck

Holocene site occupancy in Sulawesi

David Bulbeck

This contribution presents an analysis of the number of Sulawesi sites (summed probability) occupied per 500-year interval between 10,000 and 0 BP, based on radiometric dates. The total number of occupied sites was low between 10,000 and 4500 BP, ranging between 1 and 3.5 per half-millennium. There were subsequent leaps in the number of occupied sites per half-millennium to 5 to 6 between 4500 and 2000 BP, 8 to 11 between 2000 and 1000 BP, and around 30 between 1000 and 0 BP. These figures would be consistent with a scenario of substantial population increases at around 4500, 2000 and 1000 BP. However, care should be exercised in making a literal interpretation of these figures. For instance, with respect to the 4500–2500 BP period, the number of closed sites peaked between 4500–3500 BP while the number of open sites peaked between 3500–2000 BP. Also, the large number of documented sites dating to the last millennium BP reflects a particular focus of Sulawesi archaeological research on sites related ethnohistorically to the Bugis and other major ethno-linguistic divisions in Sulawesi.

10:20 a.m. - Wiebke Kirleis and Johannes Mueller

Megalithic Landscapes of central Sulawesi and northern Germany

Wiebke Kirleis, Johannes Mueller, Hermann Behling and Santoso Soeghondo

Monumentality, expressed through the erection of megaliths is a world-wide phenomenon. But, how do megaliths relate to the environment and to society? A structural comparison of megalithic sites in northern Germany and central Sulawesi shows divergent specifications of monumentality. In the northern German megalithic society, a strict separation of the domestic and the ritual societal sphere is observable with respect to the spatial site distribution/arrangement as well as to the artefacts and to plant use. The allocation of the megalithic tombs within the landscape follows diverse strategies. These megalithic ritual sites are mostly distributed in the hinterland, while the domestic sites are found in the lowlands with access to rivers or fresh water. Focusing on the land-cover, which consisted of dense mixed-oak-forest, the megaliths partly were hidden in the woodlands, while many were erected on small-scale woodland openings of former arable or farmstead land. In central Sulawesi, next to standing-stones, huge stone vessels of up to 1.7 m height and 1.2 m in diameter, the so-called kalambas, occur as burial containers. The megalithic sites are distributed in three valleys. A survey on these structures revealed the existence of a central domestic site linked with ritual activities. Here, the burial customs formed an integral part of society. With respect to site allocation in the landscape, two inconsistent aspects are observable. There is the integration in the domestic structures, linked with a clear botanical signal for landscape openness. At the same time, there is a remote distribution of megaliths, at the woodland margins, which hints to an obvious possible function as landmarks. From an environmental perspective, the megalithic societies in both landscapes had to arrange with dense woodlands. Societal organization differed. However, the impact of both was the development of a cultural landscape with increasing open habitats.

10:40 a.m.

Morning Tea

11 a.m. - Julien Louys

Late Holocene and Recent murids recovered from archaeological and natural deposits in the Talaud Islands, northern Sulawesi

Julien Louys, Stuart Hawkins, Ken Aplin, Christian Reepmeyer, Michael Herrera, Felicitas Hopf, Sue O'Connor, Daud Tanudirjo

The Talaud-Sangihe Archipelago represents a group of 77 remote islands located between Mindanao and North Sulawesi, in the north-eastern sector of Indonesia. To date, the only Pleistocene-aged site reported from the Talaud Islands is Leang Sarru, a rock shelter which shows evidence of human occupation starting from approximately 35,000 cal BP and 30,000 cal BP. The Leang Sarru fauna consists solely of marine shellfish, predominantly Neritidae, Turbinidae and Trochidae, as well as few urchin remains. The complete lack of any archaeological murid remains from the Talaud Islands was puzzling as the islands host at least 27 species of mammals including two endemic rat species. Here we report on vertebrate material excavated from a late Holocene rock shelter on Karakelong, the main island in the Talaud group. This material consists predominately of murid elements, with at least four rodent taxa (*Rattus rattus*, *Rattus exulans*, and two *Melomys* spp.) recorded from the deposits. It represents the first time any murid material has been recovered from an archaeological excavation on these islands. Surveys of the Talaud-Sangihe Archipelago also resulted in the discovery of several rodent specimens from caves and open air sites in the Talaud group, but not on Sangihe Island, which is probably related to differences in geology and survey intensity between the islands. We report on attempts to extract aDNA from the rodents recovered to date, and the implications for understanding past human and faunal movements within the region.

11:20 a.m. - Wiwik Sriwigati and Joko Siswanto

Marine and Terrestrial Resource use in remoted islands during the 10th to 19th Centuries: Excavation results of Leang Buida and Bukit Tiwing in the Talaud Islands, Northern Sulawesi.

Rintaro Ono (Tokai University, Japan), Wiwik Sriwigati, and Joko Siswanto (Balai Arkeologi Manado, Indonesia)

This presentation aims to discuss the possible development of marine and terrestrial resource use (mainly fish, shellfish and animals) in the Talaud Islands during the 10th to 19th centuries. Talaud groups are one of the remote islands located about 100 km off from the northern coast of Northern Sulawesi. The 10th to 19th centuries in Talaud Islands and Northern Sulawesi mostly correspond to the Metal age to Age of Commerce, and the Colonial times in Eastern Indonesia. Among the Talaud Islands, we firstly report our excavation result at the Leang Buida site on Kabaruan Island and Bukit Tiwing on Salibabu Island. Our archaeological excavations on these sites were conducted as co-research with Balai Arkeologi and Ono during 2004 to 2005. These excavations unearthed thousands of shellfish, fish and animal remains with potsherds, trade ceramics, bone tool, chert flakes, stone adzes, nutcrackers, and fragments of iron. Among these two sites, Leang Buida has two layers dated to around 10th century (lower layer) and to around 18th century (upper layer), while Bukit Tiwing dated to around the 15th to 19th centuries. In terms of marine exploitation, Leang Buida produced large numbers of marine fish and shellfish together with some possible fishing tools including clayed net sinkers with two holes and various sizes dated to around the 10th century. The site also produced two possible *Tridacna* shell made lure shanks. On the other hand, Bukit Tiwing produced some marine fish remains including sharks and larger sized deep-water fish. The site also produced a possible iron-fish hook, and these archaeological evidences indicate the possible development of fishing techniques from the 10th to 19th centuries in the Talaud. For terrestrial use, Leang Buida produced some pig, goat and monkey bones back to the 10th century and they are so far the oldest evidences of domesticated animals or animal transfer to the Talaud since the islands did not have these mammals naturally. Based on such new evidences, we will discuss further about the possible development of marine and land resources use as well as maritime networks in and around the Talaud and Northern Sulawesi during the 10th to 19th centuries.

11:40 a.m. - Christian Reepmeyer

Mansiri: A new dentate-stamped pottery site in Northern Sulawesi

N. Azis, C. Reepmeyer, G. Clark, D.A. Tanudirjo, Sriwigati

This paper reports on the Mansiri site, a new-found dentate stamped pottery site in Northern Sulawesi. The site has been excavated in three field seasons by the Balai Arkeologi, Manado, since 2011 and in 2015 in a joined field season with a team from the Australian National University. Located in the upland region of Northern Sulawesi it follows a similar settlement pattern as sites in the Karama Valley in Western Sulawesi, being associated with main inland river valleys. Tentative radiocarbon dating indicates an initial colonisation prior to 3000 BP.

12 p.m. – Anggraeni

The development of Neolithic-Palaeometallic pottery with a special reference to the Karama Valley, West Sulawesi

Anggraeni

Hugh amount of potsherds assemblages were found in various prehistoric sites in Indonesia, but most of them were undated. Current researches along the Karama River have uncovered Neolithic and Palaeometallic assemblages especially at Kalumpang district, which contained potsherds in good stratigraphical contexts. The sherds have distinctive characteristics of decorations, rim shapes and material provenance which allow us to explain its chronological order. Carved paddle-impression on sherds which previously absent among Minanga Sipakko and Kamassi Neolithic sites occurred obviously at Palaeometallic sites, especially at Palembang which located in the same district. The appearance of the distinctive decorated sherds which coincided with the emergence of two groups of

material cultures in the Karama Valley, provide important account for the development of Neolithic-Palaeometallic culture in Sulawesi.

12:20 p.m.

Lunch

1:20 p.m. – Hasanuddin

A Neolithic Site on the Enrekang Plateau, South Sulawesi

Hasanuddin

Research on the prehistory of Enrekang, South Sulawesi was directed towards collecting data that can illuminate early human occupation from the artefactual evidence. To attain that goal, a series of surveys was undertaken of the sites of Mendatte, Buttu Banue and Buttu Batu, which have indications of prehistoric habitation. In addition, a test pit was excavated in the rockshelter of Buttu Batu so as to learn the cultural processes reflected in the sediment from analysis of the artefacts deposited in each sedimentary level. The survey results show that the three above-mentioned sites possess strong archaeological indications of their prehistoric status in the form of artefacts such as earthenware pottery sherds, shale blades, grindstones, hammerstones, barkcloth beaters and iron knives. The survey results indicate that the collection of activities reflected by the artefacts sketch a settled lifeway pattern. In its regional perspective, the prehistoric occupation sites of Enrekang add to the reference sites for stone artefact industries in Southeast Asian land and islands.

1:40 p.m. - Suryatman

The Sakkarra Site: New Data on Prehistoric Occupation from the Metal Phase (2000 BP) along the Karama River drainage, Western Sulawesi, Indonesia

Suryatman, Budianto Hakim and Fakhri

The Karama River drainage supported the lifeways of prehistoric Austronesian speakers from their first arrival in Sulawesi. Beginning in 1935, research along the Karama River drainage has already brought to light various occupation phases related to the originating lineages and dispersal of Austronesian speakers within Southeast Asia's borders. More recent research indicates a Neolithic occupation phase between 3500 years ago and the last centuries before 2000 years ago, when the Metal Phase began, with its full expression represented at the Sakkarra site. Cultural developments associated with the Neolithic continued unabated into the Metal Phase, including the technology of polishing stone artefacts which indeed appears to have been practised with greater skill.

2 p.m. - Siria Biagioni

Unravelling the past 1,000 years of history of human–climate–landscape interactions at the Lindu plain in Central Sulawesi, Indonesia

Siria Biagioni, Wiebke Kirleis, Hermann Behling

The Lindu plain, located in the northern mountainous region of the Lore Lindu National Park in Central Sulawesi (Indonesia), provides many ecosystem services and harbors a unique biodiversity. Multi-proxy palaeoecological analyses (pollen, charcoal and diatom) of a 123-cm long sediment core from Lake Lindu (1°19'16"S, 120°04'36"E at 1,000 m asl) were used to reconstruct the vegetation, climate and fire history at the Lindu plain. Combined results reveal that, during the past 1,000 years, the Lindu plain was modified by human activities. Evidence of frequent burning and shifting cultivations from AD 1000 to AD 1200 might be related to the metal age population which used megaliths in the Central Sulawesi area. From AD 1200 to AD 1700 wetter climate conditions established. At the same time, decrease of macro-charcoal concentrations and pioneer vegetation indicate that a more permanent use of the landscape at the Lindu plain occurred. Following a phase of forest recovery from AD 1730 to 1910, the most recent part of the Lake Lindu sediment record shows

a trend towards deforestation that intensified from the late 20th century until now. A decreasing trend of the lake level started at the beginning of the 20th century as revealed by an increase in sedimentation rate of one order of magnitude and supported by low pollen concentration, palaeomagnetic data and historical accounts. Such an event has no link to the climate variability as reconstructed for the last hundred years and suggest that the recent siltation of the lake was not triggered by natural climatic variability, but rather by increasing deforestation and human activities around the lake. This highlights the need for a better management of the forests surrounding the plain and for improved irrigation systems for agriculture. The Lindu sediment record represents one step further defining the human and landscape history of Central Sulawesi and it highlights the potential and the need for further palaeoecological and for archaeological investigations in the area.

2:20 p.m. - Akin Duli

Reflections of social and cultural aspects at the megalithic site of Onto, South Sulawesi

Akin Duli

A variety of archaeological remains have been found at the Onto site such as menhirs, engraved stones, rings of stacked stones, stone mortars, stone tablets, and a range of stones with holes including those with a matrix of circular impressions. In addition, the site includes royal installation stones, structural stone walls, stone altars, and pottery (imported and locally made). The main characteristic of the Onto site is its dominance by megalithic cultural remains, which provides flavour and direction for research into the issues related to settlements attached to megalithic culture. A synchronic approach was taken to describing each of the types of remains from the site and interpreting their meaning. Surface survey was undertaken to document the boundaries of the Onto cultural remains and their internal distribution and spatial structure. The theoretical objective was to understand the functional relationships between the artefacts and the other artefacts flanking them. This approach generates knowledge into the role of the Onto site in relation to the origins of the early historical kingdoms of Bantaeng.

2:40 p.m.

Afternoon tea

3 p.m. - Rosmawati

Typology and Efflorescence of the Tomb and Gravestone Forms of Ancient Islamic Graves in South Sulawesi

Rosmawati

South Sulawesi is rich with the remains of Islamic culture, one of which is the ancient tombs that are widespread across the province. The distribution of ancient tombs has not been much studied scientifically, so not much is understood about the cultural meaning of the form and content contained in these tombs. For that purpose, this article will construct a typology of the tombs and gravestones located in the region, with the aim of simplifying further studies in the future. In terms of typology, the form of the gravestones in particular indicates influences of Malay culture (the Aceh type of gravestone) and Javanese culture (the Troloyo-Demak type of gravestone), as well as local cultural development (Bugis-Makassar tomb and gravestone types).

3:20 p.m. – Muhaeminah

Typology of the Early Islamic Graves of Mamuju, West Sulawesi

Muhaeminah

Survey of the Islamic archaeological sites of Mamuju was aimed at producing information on an early Islamic presence along with its cultural remains. This research used the survey method of observation of form, style and distribution of the graves and gravestones during the early development of Islam in Mamuju. The survey results show that the tombs used rectangular stone plank beams and a notably variable range of gravestones, with forms such as cudgel crowns, kris handles and rectangular slabs

with a range of calligraphic inscriptions. The relationship between the tomb form and the gravestone form show that the gravestones with calligraphy and gyres were an influential figure in the dissemination of Islam. This situation also possesses links with the kris handle gravestones which, when recorded, are always paired with cudgel crown gravestones. The cudgel crown gravestones are the dominant form in Mamuju and indeed across Mandar (West Sulawesi). From this it can also be seen that the ideological system of Mamuju and its surroundings were pre-Islamic elements actualised in the gravestones, and their variety of adornments were the result of a process of acculturation of two cultural traditions.

3:40 p.m. - Ian Caldwell

The problem of Cina in the historical archaeology of South Sulawesi

Ian Caldwell and Kathryn Wellen

The importance of the central lakes region in the early history of South Sulawesi is now well established. This fertile region, with its mixed ecology of lake, floodplain and low hills, offers an ideal environment in which to practice fish farming, wet-rice cultivation, swidden farming, and hunting. In short, it is a perfect cradle for the development of complex society. This paper sets out a historical understanding of the evolution of the Bugis kingdoms of South Sulawesi between 1200 and 1600 CE. It builds on the OXIS Project (1997-2000), which provided archaeological evidence that a polity centred on Sengkang was a century or more older than the kingdom of Luwuq, traditionally the most ancient of South Sulawesi's kingdoms. This Sengkang-based kingdom has left almost no historical record, but can probably be identified with the kingdom of Cina in the epic poem *La Galigo*. New research on the genealogies of Bugis elite families has revealed the genesis of this kingdom in the upper Cenrana valley in the thirteenth century. It documents the expansion of this kingdom into the Gulf of Bone in the fourteenth century, and the Walanae Valley and the plain of Bone in the fifteenth century. Two major palace sites belonging to this polity are identified at Baringeng and Amali, and a number of anomalies in our understanding of early South Sulawesi are removed. The paper provides a unified history of the peninsula as an interpretive model for archaeologists working on the origins and development of Bugis kingdoms.

4 p.m. - Horst H. Liebner

First Stages for a Survey of the Pre-Islamic History and Archaeology of Mandar: Historiography vs Reality'

Horst H. Liebner

Despite directly bordering onto the Kalumpang Complex, one of South Sulawesi's oldest known Austronesian sites, the Mandar area, approximately between 3°29'S 119°26'E and 2°36'S 118°45'E, as yet has seen only rudimentary research into its pre-Islamic history. The proposed paper attempts to outline our present knowledge of the region and bids to suggest a possible survey and research strategy that could help closing this gap. In local historiography, apparently rooted in a period immediately preceding the advent of Islam, the Mandar 'confederation' of historic times is popularly portrayed as an alliance of seven estuarial polities and seven corresponding upstream districts, hence indicating an economic and political organisation akin to the dendritic model described for many an early 'kingdom' of the Malay Archipelago; as evidenced by the discovery there of a fifth to seventh century bronze Buddha statue, such a model obviously was operative also in the neighbouring Kalumpang basin. However, a very first survey of the area in 2008 brought to light a significant pre-Islamic settlement at the mouth of the Tubo river (ca. 3° 6'S 118°50'E, together with its tributaries draining a considerable section of the Mandar lands), that by surface collection of shards on looted cemeteries alone precedes the nearest member of the Pitu Ba'bana Binanga, the 'Seven River-mouths' of local folklore, by several centuries, but yet in the historiographic traditions is not mentioned as a chief player in Mandar politics. The same has to be suspected for the estuary of the Mapili river, the largest of the area's waterways flowing roughly N-S between 2°51'30"S 119° 9'E and 3°29'S 119°13'20"E, that likewise does not have a prominent role in the extant manuscript lore. Reports of megalithic structures at both rivers apparently support such contentions, and will hopefully be confirmed in a short survey trip planned for the coming month. Moreover, I recently have been

furnished with a copy of a yet unpublished manuscript on the history of Tubo that is bound to be outline translated for this presentation. This and any additional information which, with any luck, will be gathered in the coming weeks shall outline a preliminary scheme for an extended research into the topic, to be discussed with the participants of the conference.

4:20 p.m.

Discussion and Thanks

5 p.m. – Finish

Wednesday, 3rd February 2016

8:30 a.m.

Meet in Lobby

9 a.m.

Depart Singgasana Hotel for Maros Caves

5 p.m.

Return to Singgasana Hotel from Maros Caves