Indonesian Megaliths as the Result of the Interaction between Indigenous Peoples and Hindu-Buddhist Kingdoms

STEIMER-HERBET, Tara, BESSE, Marie


Available at: http://archive-ouverte.unige.ch/unige:92335

Disclaimer: layout of this document may differ from the published version.
AUSTRONESIAN DIASPORA
A NEW PERSPECTIVE

The National Research Centre of Archaeology
The Agency of Research and Development
The Ministry of Education and Culture

Gadjah Mada University Press
AUSTRONESIAN DIASPORA
A NEW PERSPECTIVE

Proceedings the International Symposium
on Austronesian Diaspora
AUSTRONESIAN DIASPORA
A NEW PERSPECTIVE

Proceedings the International Symposium
on Austronesian Diaspora
AUSTRONESIAN DIASPORA
A NEW PERSPECTIVE

Editors:
Bagyo Prasetyo
Titi Surti Nastiti
Truman Simanjuntak

Correctors:
Retno Handini
Aliza Diniasti
M. Ruly Fauzi

Layout:
Harry Octavianus Sofian
Adhi Agus Oktaviana
Atina Winaya
Nugroho Adi Wicaksono
Anthony Yulvianda

Copyright @ 2016

Publisher:
Gadjah Mada University Press

Address:
Jl. Grafika No. 1 Bulaksumur
Yogyakarta 55281
Telp./Fax.: (0274) 561037
gmuppress@ugm.ac.id | ugmpress.ugm.ac.id
This book is a proceeding from a number of papers presented in The International Symposium on Austronesian Diaspora on 18th to 23rd July 2016 at Nusa Dua, Bali, which was held by The National Research Centre of Archaeology in cooperation with The Directorate of Cultural Heritage and Museums. The symposium is the second event with regard to the Austronesian studies since the first symposium held eleven years ago by the Indonesian Institute of Sciences in cooperation with the International Centre for Prehistoric and Austronesia Study (ICPAS) in Solo on 28th June to 1st July 2005 with a theme of “the Dispersal of the Austronesian and the Ethno-geneses of People in the Indonesia Archipelago” that was attended by experts from eleven countries.

The studies on Austronesia are very interesting to discuss because Austronesia is a language family, which covers about 1200 languages spoken by populations that inhabit more than half the globe, from Madagascar in the west to Easter Island (Pacific Area) in the east and from Taiwan-Micronesia in the north to New Zealand in the south. Austronesia is a language family, which dispersed before the Western colonization in many places in the world. The Austronesian dispersal in very vast islands area is a huge phenomenon in the history of humankind. Groups of Austronesian-speaking people had emerged in ca. 7000-6000 BP in Taiwan before they migrated in 5000 BP to many places in the world, bringing with them the Neolithic Culture, characterized by sedentary, agricultural societies with animal domestication.

The Austronesian-speaking people are distinguished by Southern Mongoloid Race, which had the ability to adapt to various types of natural environment that enabled them to develop through space and time. The varied geographic environment where they lived, as well as intensive interactions with the outside world, had created cultural diversities. The population of the Austronesian speakers is more than 380 million people and the Indonesian Archipelago is where most of them develop. Indonesia also holds a key position in understanding the Austronesians. For this reason, the Austronesian studies are crucial in the attempt to understand the Indonesian societies in relation to their current cultural roots, history, and ethno-geneses.

This book discusses six sessions in the symposium. The first session is the prologue; the second is the keynote paper, which is Austronesia: an overview; the third is Diaspora and
Inter-regional Connection; the fourth is Regional highlight; the fifth is Harimau Cave: Research Progress; while the sixth session is the epilogue, which is a synthesis of 37 papers.

We hope that this book will inspire more researchers to study Austronesia, a field of never ending research in Indonesia.

Jakarta, December 2016
Publisher
# TABLE OF CONTENT

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface of Publisher</td>
<td>v</td>
</tr>
<tr>
<td>Table of Content</td>
<td>vi</td>
</tr>
<tr>
<td>Prologue</td>
<td>1</td>
</tr>
<tr>
<td><strong>Austronesia: an Overview</strong></td>
<td></td>
</tr>
<tr>
<td>Austronesian Studies in 2016: Where Are We Now?</td>
<td>7</td>
</tr>
<tr>
<td><em>Peter Bellwood</em></td>
<td></td>
</tr>
<tr>
<td><strong>Diaspora and Inter-Regional Connection</strong></td>
<td></td>
</tr>
<tr>
<td>Occupation and Diaspora of Austronesia: Learning from Geo-oceanoclimatology Perspective in Indonesian Maritime Island</td>
<td>25</td>
</tr>
<tr>
<td><em>Wahyoe S. Hantoro</em></td>
<td></td>
</tr>
<tr>
<td>Reframing the Island Southeast Asian Neolithic: Local vs Regional Adaptations</td>
<td>65</td>
</tr>
<tr>
<td><em>Peter V. Lape, Fadhila Arifin Aziz, Dian Ekowati, Jenn Huff, Wuri Handoko, Andre Huwae, Michael Lahallo, Simon Latupapua, Adhi Agus Oktaviana, Emily Peterson, Marlon Ririmasse, Karyamantha Surbakti, Joss Whittaker, and Lauryl Zenobi</em></td>
<td></td>
</tr>
<tr>
<td>Splitting Up Proto-Malayopolynesian; New Models of Dispersals from Taiwan</td>
<td>77</td>
</tr>
<tr>
<td><em>Roger Blench</em></td>
<td></td>
</tr>
<tr>
<td>“Ex Oriente Lux”: Recent Data from Lapita Culture Sites Bearing on the Austronesian Diaspora within Island Southeast Asia</td>
<td>105</td>
</tr>
<tr>
<td><em>Matthew Spriggs</em></td>
<td></td>
</tr>
<tr>
<td>The Formation and Dispersal of Early Austronesian-speaking Populations: New Evidence from Taiwan, the Philippines, and the Marianas of Western Micronesia</td>
<td>125</td>
</tr>
<tr>
<td><em>Hsiao-chun Hung</em></td>
<td></td>
</tr>
<tr>
<td>Austronesian and Australian Analogs in Vietnam through Paleoanthropological Evidence</td>
<td>145</td>
</tr>
<tr>
<td><em>Nguyen Lan Cuong</em></td>
<td></td>
</tr>
<tr>
<td>Rock art as an indication of (Austronesian) migration in Island Southeast Asia</td>
<td>165</td>
</tr>
<tr>
<td><em>Noel Hidalgo Tan</em></td>
<td></td>
</tr>
<tr>
<td>The Connection and Tradition - The Bark Cloth Making in Hawai‘i and Taiwan</td>
<td>181</td>
</tr>
<tr>
<td><em>Chi-shan Chang</em></td>
<td></td>
</tr>
<tr>
<td>Bali in the Global Contacts and the Rise of Complex Society</td>
<td>193</td>
</tr>
<tr>
<td><em>I Wayan Ardika</em></td>
<td></td>
</tr>
</tbody>
</table>
## Regional Highlights

Updated Views on the Austronesian Studies in Indonesia  
*Truman Simanjuntak, Adhi Agus Oktaviana, and Retno Handini* ........................................... 207

Reassessing the Neolithic-Metal Age Transition in Batangas, Philippines: A Distinct Southern Luzon Pottery Tradition  
*Grace Baretto-Tesoro*  ........................................................................................................ 223

Indication of Early Plant Domestication in Java Based on the Palinology Research  
*Andjarwati Sri Sajekti*  ........................................................................................................ 253

Austronesian Dispersal to Malaysian Borneo  
*Stephen Chia* ...................................................................................................................... 267

Sea, Stones and Stories: The Maritime Tradition in Southeast Moluccas Islands  
*Marlon Ririmasse* .................................................................................................................. 275

Swinging-like Movement: Pattern of Ancient Migration in Eastern Part of Indonesia  
*Toetik Koesbardiati, Rusyad Adi Suriyanto, Delta Bayu Murti, and Achmad Yudianto* .... 289

Indonesian Megaliths as the Result of the Interaction between Indigenous Peoples and Hindu-Buddhist Kingdoms  
*Tara Steimer-Herbet and Marie Besse* .................................................................................... 301

Austro-Protohistory: the Dispersal of Megaliths in Indonesia Islands  
*Bagyo Prasetyo* ...................................................................................................................... 319

Inter-islands Relations: The Javanese Factor in Barus and Padang Lawas, North Sumatra (9th – 16th c. CE)  
*Daniel Perret and Heddy Surachman* .................................................................................... 337

The Neolithic Cultures of Lingnan (Southern China)  
*XIE Guangmao* ...................................................................................................................... 351

The Origins of Orang Melayu  
*Amri Marzali* ......................................................................................................................... 367

Techno-Cultural Development of Toraja Textiles in Relation to Austronesian Origin: Materials, Dyes, Looms, and Weaves  
*Keiko Kusakabe* ...................................................................................................................... 375

Maritime People and Wetland Settlement  
*Bambang Budi Utomo* ............................................................................................................ 395

A Shifting Phenomenon in Tomini-Tolitoli Language Group: Tajio as a Case Study  
*Luh Anik Mayani* .................................................................................................................... 407
Small Island as a Bridge to Austronesian Diaspora: Case in Here Sorot Entapa Caves, Kisar Island, Maluku
Alifah, Mahirta, and Sue O’Connor ................................................................. 417

Tradition and Function of Cili on Agricultural Ritual of Subak in Bali
I Nyoman Wardi ................................................................................................ 427

Archaeolinguistics for a Study of Ethnic Group Formation: a Case Study of Speakers of Austronesian in Northern Sumatra
Ery Soedewo, Deni Sutrisna .......................................................................... 445

The Contribution of Sanskrit to the Balinese Language
Ni Luh Sutjiati Beratha .................................................................................. 465

The Continuity of Austronesian Tradition on Islamic and Early Colonial Period in Maluku
Wuri Handoko .................................................................................................. 481

Gua Harimau: Research Progress

Verifying Austronesian Hypothesis from the Skeletal Human Remains from Gua Harimau Site in Sumatra
Hirofumi Matsumura, Truman Simanjuntak, Adhi Agus Oktaviana, Sofwan Noerwidi, Dyah Prastiningtyas, Nguyen Lan Cuong, Marc Oxenham, Anna Willis, Rahayuningsih Restu, Martha Hana, and Hsiao Chun Hung ................................................................. 495

Determination of Genetic Characteristics of Ancient Skeletal Remains Excavated from the Gua Harimau Site in Sumatra
Ken-Ichi Shinoda, Tsuneo Kakuda, Hideaki Kanzawa-Kiriyama, Noboru Adachi, Dyah Prastiningtyas, Sofwan Noerwidi, and Hirofumi Matsumura .................................................................................. 511

Prehistoric Burial of Gua Harimau: Socio-Cultural Complexity of Austronesian Society

Continuity on Rainforest Foraging During the Course of Neolithic Period in Sumatera: Evidences, Artifacts and Its Chronology
M. Ruly Fauzi and Truman Simanjuntak .......................................................... 543

Comparative Analysis of Non-figurative Rock Art at Gua Harimau Site within the Scope of Indonesian Archipelago
Adhi Agus Oktaviana, Pindi Setiawan ................................................................ 559

Metal Artifacts Analysis from Gua Harimau, South Sumatera, Indonesia
Harry Octavianus Sofian, Thomas Oliver Pryce, Truman Simanjuntak, and François Sémah .................................................................................................................. 571

Epilogue ............................................................................................................. 587
Austronesian Diaspora
One of the most spectacular phenomena in the history of human migration comprising vast and diverse geographic area must be addressed to the diaspora of Austronesian speakers. Prior to AD 1500 the Austronesian languages belonged to the most widespread language family in the world, with a distribution extending more than half way around the globe from Madagascar in the west to the Easter Island in the east (Bellwood, Fox, and Tryon 2006; Bellwood 1985). For Peter Bellwood, as one of researchers who has dedicated many years on studying Austronesian, the development on methods and theories in this study have growth incredibly fast. New methods involving powerful scientific techniques which is supported by sophisticated equipment recently have brought an incredibly important result on this study, especially during the last few years. Hence, several important solution for the questions regarding the form, spatial distribution, and chronological aspects related with Austronesian Speaking Peoples have been produced, not only by senior researchers but also many young researchers. Nowadays, the study of Austronesian peoples and their diaspora is almost impossible for not involving biological aspects which is even reach its molecular aspect such as represented by and DNA study.

In just several hundreds of years since the development of the earliest agriculture in Formosa Island in ca. 6000 BP, Austronesian have successfully reached the northernmost island (the Philippines) and most of major islands in Southeast Asia. Their arrivals have made a major impact in the development of subsistence and technology in Southeast Asia as well as habitation in the remote area of the Pacific and Indian Ocean. We have to be grateful to the linguistic studies because the connection between the homeland of Austronesian and its descendant population was not yet clear until 70’s and 80’s. It is Robert Blust who have produced an important linguistic-based of work related with the origins, variation, and distribution of Austronesian language family, even the hypothetical timing of their language split (Blust 1976; Blust 1984). Subsequently, archaeology have become the major study of this vast language family which comprise of many tribes and ethnic groups. It was just a few decades ago since the term ‘neolithic package’ related with Austronesian diaspora became widely known and used to describe the appearance of Neolithic in several sites. This cultural package consists of Austronesian language, knowledge on domestication of edible plants and animals, and also technology on producing polished stone-adze and body ornaments (bangle and pendant). Amongst several contemporaneous sites, their artifacts are considerably
Austronesian Diaspora
diverse rather than merely similar. This is simply marking a successful adaptation and local innovation that emerged amongst each population which now represented by incredibly high cultural diversity within Austronesian language family.

The most favorable habitation for Austronesian peoples situated within the tropical zone with its archipelagic characteristics. There is no doubt that the mastering on maritime technology have supported their vast and rapid movements from one island to another since the configuration of Southeast Asian Archipelago and global sea-level after the last glacial period were similar with today. Technology on maritime resources exploitation have flourished in relation to the occupation of coastal area by the earliest group of Austronesian. This logic even became very clear as what we can see on the rock-art images depicting aquatic animals such as fish and tortoises as well as their boat images (Pyatt, Wilson, and Barker 2005). However, their habitation is not only limited to the coastal area but also deep into the heart of the tropical rainforest in several major Island in Indonesia and Malaysia (Sather 2006; Simanjuntak et al. 2015; Simanjuntak et al. 2008; Datan and Bellwood 1991). Interaction among different communities were well established although the distance between each population could reach hundreds even thousands of kilometers (e.g. Bellwood and Koon 1989).

The main issue being well-established and frequently discussed recently are the migration route, adaptation, the development of cultural diversity with multiple ethnogenesis, and a potentially shared of DNA among earlier inhabitants and Austronesian speakers (Simanjuntak 2015). The first was rely on significant results yielded on several new and rediscovered sites such as Xuntangpu (Taiwan), Harimau Cave and Minanga Sipakko (Indonesia), Sireh Cave and Niah Cave (Malaysia), and Batangas (the Philippines). Many of these sites produced a complete history of habitation supported with highly accurate radiocarbon dating results which is important on the establishment of Austronesian migration and cultural developments during Neolithic. At the other hand, a long history of site occupation in several areas provide clues on cultural adaptation to the environment. The last subject was just flourished in the past few years. Our capability on establishing not only genomic study on present day communities but also extracting ancient DNA from human and animals took us on a leap into much better understanding about the origins of the Austronesian and their interaction with earlier inhabitants (e.g. Lansing et al. 2011; Kusuma et al. 2015; Karafet et al. 2010). It seems that the ancestor of today’s Austronesian speakers were not only sharing their idea and knowledge, but also shared biological affinities with the earlier inhabitants. This facts have brought us into more complex problematic issue of interaction amongst different population rather than just understanding the cultural-entity of Austronesian speakers a few decades ago which is still rely on narrow perspectives.
This book compiles 37 papers written by experts from various fields such as linguistics, genetics, art, material culture, technology, palynology, palaeclimatology, palaeoanthropology, which were all related Austronesia.

References


INDONESIAN MEGALITHS AS THE RESULT OF THE INTERACTION BETWEEN INDIGENOUS PEOPLES AND HINDU-BUDDHIST KINGDOMS

Tara Steimer-Herbet and Marie Besse

Introduction

On the margins of the better known Hindu-Buddhist kingdoms of Srivijaya, Majapahit, and Malayu, adjacent indigenous societies were settled in the forests, mountains, and plateaus of Indonesia, where they practiced “primitive” religions based on ancestor cults and the spirits of nature, a shared cultural heritage from Bondowoso in East Java to Toba in North Sumatra. Bondowoso, Sukabumi on Java, Pasemah on Sumatra and Lore Lindu in Bada/Besoa valleys of Sulawesi are areas inhabited by societies with a megalithic tradition. Our selection is primarily based on the quality of the archaeological remains but we will also use examples taken from other areas such Jambi in central Sumatra, Lampung in South Sumatra or Sarawak (Malaysia).

Figure 1. Map of the areas concerned. 1. Bondowoso valley (East Java); 2. Sukabumi region (West Java); 3. Pasemah Plateau (South Sumatra); 4. Lore Lindu (Central Sulawesi)
Most of the archaeological data on megaliths was collected during Dutch colonial rule. Two archaeologists of that period: Th. Hoop (1932) and R. Heine-Geldern (1945) suggested that the megalithic cultures had foreign origins perhaps coming from India, Laos, Japan or the Mediterranean. Indonesian archaeologists have kept on cataloguing these monuments without really questioning their origin and dates. At that time the discovery of polished axes in the graves of Cipari near Kuningan (East Java) constituted sufficient evidence for dating the megalithic tombs to the Neolithic period (3000-500 BC). Images of bronze drums resembling those of the Dong Son period were found on the reliefs of the Pasemah plateau, which helped lower the chronological range to the Paleo-metallic Period between 2000 and 500 BC. But excavations in Pasemah by Th. Hoop (1932), in Pakauman by W. J. A. Willems (1938), and more recently those of E. E. McKinnon in Lampung (1993), B. Prasetyo in Bondowoso (2006), J. Miksic in Minangkabau (2004), D. Bonatz in Jambi (2006), M. Janowski (2016) in Sarawak (Malaysia) revealed iron objects, glass beads, Chinese porcelain, and gold objects, all of these artifacts where acquired between the 7th and 15th century depending on the region. In the light of these discoveries, and despite the national desire to see these megaliths as evidence of an ancient civilization, the first Indonesian megalithic phenomenon is contemporary to the classical Hindu-Buddhist period. The second period of the Indonesian megalithic phenomenon will begin around the 16th century with the new arrivals of the Europeans traders in Sumba, Nias, and Flores.

**Table 1.** Dating of two megalithic sites in Indonesia issued from a table published by Prasetyo (2006, 166).

<table>
<thead>
<tr>
<th>No</th>
<th>Sites</th>
<th>Location</th>
<th>Context</th>
<th>Dating</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Doplang</td>
<td>Jember, East Java</td>
<td>Dolmen</td>
<td>580±100 BP</td>
<td>RDL 1977</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GRDC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bandung</td>
</tr>
<tr>
<td>5</td>
<td>Dawulan</td>
<td>Bondowoso, East Java</td>
<td>Dolmen (pandhusa)</td>
<td>1230±100 BP</td>
<td>RDL 1977</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>GRDC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Bandung</td>
</tr>
</tbody>
</table>

We know little about the lifestyle of the indigenous people of that period. But most of the megaliths are established in settlement contexts. In East Java or central Sumatra archaeologists (Steimer-Herbet 2013; Bonatz 2006: 318) have discovered stone pillars or posts holes (for wooden posts) that are house foundations near the megalithic sites, a sign of sedentary populations (Tjoa-Bonatz 2009: 198). Analysis of macro-remains mainly indicates a livelihood based on exploitation of roots and harvesting resources from the forest. Chinese ceramics, Indo-Pacific beads and iron tools, all of which were found at various

---

7 Radiocarbon Dating Laboratory Geology Research and Development Centre.
megalithic sites, attested trade relations. They are often to be found in the main axis of circulation or trading routes. However, in contact with Hindu-Buddhist kingdoms, the demand for specific inland raw material would appear to have significantly raised the prosperity of the settlements. These connections to Hindu-Buddhist kingdoms most likely explain the Indian influence. As observed by D. Bonatz (2006: 322) in the highland of central Sumatra the initiative of the trade came from the Hindu-Buddhist kingdoms who tried to establish a system of tributary trade where small village communities rapidly developed; they were quick to adopt rice cultivation and used megaliths to honor their ancestors or even living individuals. The differences observed between the monuments and common burial methods shows the emergence of an elite in a hierarchic society. M. L. Tjoa-Bonatz (2009: 208) argues that the erection of the stones monuments can be understood as an elite-sponsored phenomenon within a polity, which may also have mushroomed into the establishment of federations. H. Forestier et D. Guillaud (2005: 31) do observe the link between a social organization and its spatial expression in the hamlet of Ngada in Flores. We have also seen this in Sumba, Nias, up to Pasemah, Minangkabau in Sumatra and Bondowoso in Java where clans signal their presence and rank in a symbolic stone monument placed in the collective space, nearby the ancestor grave, where everybody can immediately read one’s lineage within the village context. It’s difficult with the actual data to determine if in the pre-modern Indonesian megalithic societies the leadership system belongs to the big man type, or to a genealogically-based selection (Tjoa-Bonatz 2009: 208). But the density of megalithic tradition in certain areas deserves to be described in order to better understand the patterns of the phenomena’s appearance among local populations, a subject pretty much at the heart of current research in western megalithism.

"Pandhusa", cylindrical sarcophagi and dolmens from the Bondowoso valley (East Java)

In East Java, from Jember to Sitibondo, megalithic funerary monuments are located in rice fields and small traditional villages of the Bondowoso valley. In 1898, H. E. Steinmetz, a Dutchman, was one of the first to identify hundreds of megalithic monuments, which he called the "Pandhusa" and cylindrical sarcophagi (Kretek, Kemuningan, Tanggulangin, Pakisan, Tlogosari, and Sukosari Pakauman). He was followed by H. van Heekeren in 1931. In 1938, W.

---

8 The article of M. L. Tjoa-Bonatz 2009: 204 mentioned the contact between highland and lowland, a phenomenon known also in Pasemah’s plateau, all axis of circulation or connecting places.
9 In the area of Jambi in Sumatra the megaliths are distributed along the tributaries of the Batanghari, M. L. Tjoa-Bonatz argues that the waterways can explain the concentration of megaliths (Tjoa-Bonatz 2009: 204).
10 They provided minerals mainly gold, animals products, such as ivory and birds’ feathers (Miksic 1980) and forest products such as camphor and benzoin, goods upon which the wealth and power of Srivijaya’s maritime trade was based (Bonatz 2006).
11 The influence of the Hindu-Buddhist kingdom is more or less visible depending on the areas.
J. A. Willems published the results of his excavation of the Pakauman monuments. In 1983 a team of Indonesian archaeologists from Yogyakarta became interested in these sites. Since then 47 sites have been identified, including those of Wringin and Grujugan, which were excavated. The results of their excavations confirmed previous results established by W. J. A. Willems and H. van Heekeren that these rooms were tombs (Willems 1938; van Heekeren 1931). Chinese porcelain fragments, glass beads and clay as well as buffalo horns accompanied the deceased. Two samples of charcoal found in the Dawulan and Doplang dolmens and carbon dated by B. Prasetio (2006b: 166, cf. Figure 2) place Bondowoso Valley dolmens in a time range from the 7th century to the 14th century AD.

The stone cylindrical sarcophagi are of an impressive size. Situated in the middle of rice fields only their huge stone cylinder lids can be seen covering an underground burial chamber. The pictures published by W. J. A. Willems of the 1938 excavations showed upright slabs forming a rectangular funerary space covered by a stone lid. Grave robbers who were looking for treasure cut the cylindrical lid (Figure 3). It is therefore not uncommon to find holes in the rock or broken cylinders.

In the village of Grujugan (Figs. 4-5), two megalithic graves are still intact. These are dolmens; the first one called Pandhusa by the locals has a rectangular chamber identical to those of the cylindrical coffins but with a differently shaped lid. The stone has been cut so that its flat surface rests on the walls; the upper part is rounded into a sort of half-cylinder. The second tomb is built with crude blocks. Its cover rests on scattered blocks leaving an open space below.
On the outskirts of Grujugan (Figure 6), between the road and rice fields, the remains of an indigenous traditional dwelling of the Bondowoso region can be seen. Kenong, cut stones with one or more protrusions on the top, served as a foundation for a wooden dwelling. In these settlement sites archaeologists have discovered similar materials to those found in the megalithic tombs: glass beads and earthenware, bracelets, and metal tools (Prasetyo 2006).

Next to the foundation stones, lie two anthropomorphic statues, one of which has been straightened and is still in place. This sculpture is rough but its feminine curves are well rendered. The Bondowoso valley is rich in stone monuments. The humans groups who erected the megalithic monuments at that period lived in houses which were close to
traditional Javanese houses in appearance. The livelihood model is not known but the possibility of exchanges of raw material like the sulfur of Kawa Ijen mines have enriched local populations, and most probably an elite among them, as attested by the rich imported artefacts found in monumental tombs. The carbon dates (Figure 2) show that the megalithic phenomenon started in the valley of Bondowoso before the arrival of the Majapahit Empire in the 13th century in the neighboring valley (Brantas). The increase of the megalithic monuments seems to parallel the intensification of the exchanges. Most of the artifacts discovered in the tombs or in settlements area come from the Hindu-Buddhist Kingdom. Despite its expansion the Majapahit Empire seemed to have respected inhabitants’ traditions. The megalithic phenomenon in East Java does not survive to the fall of the Majapahit Empire.

Monumental Structures from the Sukabumi Region (West Java)

The Sukabumi region, close to the Hindu-Buddhist Kingdom of Bogor, is famous for the monumental structures like temples, pyramidal platforms, standing stones and stelae. Gunung Padang, one of the pyramidal platforms, is mentioned in the tales and legends of the people of Sukabumi area. Prabu Siliwangi, a Hindu king of the Bogor region, would have travelled there in the late 15th century. Discovered in 1914 by the Dutch N. J. Krom, the site located on top of a mountain disappeared again under the vegetation and was rediscovered in 1979 by the villagers of Karyamukti. It was the subject of an archaeological report in 1985 by the National Research Centre of Archaeology in Jakarta before falling again into oblivion. Since 2011, Gunung Padang is back on the front page of Indonesian media. According to electromagnetic surveys, a huge cavity was located under the megalithic remains, corresponding to the burial chamber of a pyramid which would pre-date Egyptian pyramids. Fortunately the site of Gunung Padang is classified as cultural heritage and therefore a protected area. The known remains are a series of terraces and stairs that rise 150m from the village square in Karyamukti to the top.

The staircase leading to the site is steep, but its four hundred steps are in good condition. The stone blocks used are from the Cikuta River about 300m away. Similar blocks can also be found in the rice fields a little further down the valley. The blocks are igneous prismatic rocks whose dark brown color contrasts with the green of the surrounding vegetation. The hill is arranged in 13 terraces but only the last 5 are sufficiently well preserved and developed. Shortly before reaching the summit a strong retaining wall supports the first of the last five terraces. At this location are the remains of a rectangular structure with an opening to the north, facing Gunung Gede. The floor of this structure is paved in stones. To access the fourth terrace one has to climb a narrow staircase in a partially collapsed retaining wall. Terraces 3, 2, and 1 are separated by low field gradients marked by
standing stones. Lines of stones also delineate the East and West borders terraces. In the center, rectangular and circular buildings are distributed without apparent order (Figure 7).

While researchers see similarities in this series of terraces with the Penanggungan temple in East Java built by the Majapahit in the 15th century, it is likely that the megalithic site of Gunung Padang is older. It is part of a set of homogeneous sites located on the slopes of Gunung Salak, Gunung Halimun, and in the Sukabumi area, all built around the 12th and 13th centuries AD. Surveys from Indonesian archaeologist (National Research Center of Archaeology) have documented dozens of standing stones sites (Tugu Gede, Salak Datar, Tenjolaya, Kampung Kuta Batu Jolan, Ciawitali, Pasir Gada), pyramidal platforms (Pangguyangan, Ciawitali, Lemah Duhūr, Ciranjang) and statues (Ciarca). All of these monuments are flanked by stone seats, basins, and stones with pits in the surface (Tugu Gede Ciarca, Bukit Tontgu). The architectural style is specific to this region but we also observe a strong influence of the Indian iconography.

In this area it was really difficult to find remains of settlements. Megalithic monuments are all covert by a permanent cover. It is still impossible to determine their functions. Annual festivals in some of these sites could be reminder of persistent animist practice like in Tugu Gede, 20km north of Pelabuhan Ratu, where an up-right stone of 4m high is still honored. Each year after the harvest, the people of the region tie a white cloth to it and make offerings in honor of the spirits of nature (Figure 8). Other sites are abandoned and overgrown, yet some of them have been restored like the one at Pangguyangan, where

**Figure 7.** Picture of terrace 1 in the site of Gunung Padang (©T. Steimer)
an Islamic grave covers the top of a pyramidal platform. With its seven terraces and a small narrow staircase, the monument covered with Islamic inscriptions doesn’t overshadow its megalithic foundations belonging to another belief system.

Though there is no significant information on the use of Gunung Padang by the indigenous people of Sukabumi, the considerable effort needed to achieve the construction of the 13 terraces certainly involved more than one clan. This site, one of the most spectacular in Indonesia, was functioning as a gathering center for the people who erected the numerous megalithic sites in surrounding area. If the role of the Hindu Kingdom from Bogor is not clearly identified in the Sukabumi region (nature of the exchanges), the visit of Prabu Siliwangi in Gunung Padang is a testimony of the good relations that inhabitants practicing megalithic tradition had with Hindu community.

**Dolmens and Anthropomorphic Statues on the Pasemah Plateau (South Sumatra)**

In his thesis "Megaliths remains in South Sumatra" (1932), Th. van der Hoop identified a similarity between this style of representation and conventions used in Javanese and Balinese wayang where features like those found on the statues would identify the character as a "kasar" or villain. According to him even though these figures resembled those of wayang, they were nevertheless part of the circle of the Ancestors that the Rejang, the indigenous tribes of the Pasemah plateau, believed in. The presence of helmets, arm band and leggings is reminiscent of warrior; however, large bags or objects on their backs would be too bulky for fighting.
Strange enough and despite the many surveys carried out on the Pasemah's complexes since 1850, both during the Dutch Colonial rule (L. Uhlmann, E. P. Tombrink, H. O. Forbes, Th. van der Hoops, C. W. P. Bie, H. W. Vonk, C. W. Schüller) and after Independence (E. E. McKinnon, Soeroso, I. Caldwell), these monuments have never been convincingly dated. Bronze drums of the Dong Son period (2500 BP to 1700 BP) appear on a bas relief at Batu Tatahan and in a scene carved on a wall in Tegurwangi. These drum images place the megaliths of the Pasemah complexes as the oldest megaliths in Indonesia but these dates should be viewed with caution. Drawings made from a photograph taken in 2012 by one of us (TS) (Figure 9) shows that the figure is holding an object in his hands described as a kettledrum by I. Caldwell (1997: 176). If the object really turns out to be a kettledrum, in our point of view it is most probably a bag, I. Caldwell cautions however that this figure could be a reference to the mythical figures known in the Early Metal phase. Metal objects represented on Pasemah’s stone monuments are not a strong enough reference to date these monuments, bronze items could have been brought to the region long after they were manufactured. In addition to that, the megalithic tombs excavated by Hoop (1932) at Tegurwangi contained large numbers of glass beads and a few metal objects both of which are recent, even this material has not been studied properly. With the recent work of J. Miksic (1986), E. E. McKinnon (1993), D. Bonatz (2006) and M. L. Tjoa-Bonatz (2012) on similar monuments in central and southern Sumatra, the date range is thought to be between the 7th and 14th centuries. These conclusions are based on carbon-14 dating, and from the types of pottery, and Chinese porcelain that date from the 5th Dynasty and Northern Song period found during excavations at the Kerinci/Sinamar sites in Jambi, in the Mahat Valley (Minangkabau) and in Sumberjaya in northwest Lampung.

Figure 9. Drawing of the scene carved on a rock in Tegurwangi (©T. Steimer)
The stylistic qualities of Pasemah’s sculptures surprise visitors. They do not have the delicacy of Hindu-Buddhist statuary, yet they exude a dynamic form in which the form-matter relationship expresses raw power. The rocks grainy rough andesite did not make the task of the sculptor easy, but he skillfully played with it. He used metal tools and did not express a need to polish his work in the majority of sculptures, leaving a bumpy and imperfect surface.

Figure 10. Picture of a man of Pasemah’s Plateau in Belumai (©T. Steimer)

The Pasemah artists were gifted and driven by a specific purpose: to integrate their work into the environment, nature and carving were at the heart of their concerns. Men were facing the powers and spirits of nature which they respected and, at the same time, feared. Thus at Tegurwangu, four kneeling men can be seen who, in their original positions, were staring the four cardinal points of the compass. Did they represent the dead who were buried in the dolmens found behind them? Are they simply protectors of important people? Inside the dolmens, although no bones were found, rich funeral offerings were discovered: gold, bronze, glass beads and a set of amazing paintings in natural pigments that covered the interior walls. Paintings were also found at Tanjung Arau (called Tanjungara in van Heekeren 1958, Figure 21). At Tegurwangu these paintings represented a man and a buffalo, at Tanjung Arau (Kota Raya) a rooster and a bird (Soejono 1991). Unfortunately, since the opening of the graves, the paintings disappeared after exposure to the air, and today only spots of red and black pigment can be distinguished, ochre and white have disappeared (Figures 11-12).
In the Lampung region (South of the Pasemah Plateau), dolmens, standing stones, and large cylindrical tanks (known as Kalamba in Sulawesi) were discovered in Sumberjaya near Wai Besai, a tributary of the Tulangbawang River that flows into the Sunda Strait. As on the Pasemah plateau, the dolmen walls are covered with paintings.

The objects discovered around the statues or within dolmens are thought to come from trade with the kingdom of Srivijaya but there was also an important and previously unrecorded indigenous pottery tradition (7th – 14th century). Known for its maritime power and its long distance trading, the kingdom imported and exported goods through the ports of Indrapura, Muko-Muko, and Menjuto on the west coast, Pauh, Tembesi, Batang Asai on the east coast and Tulangbawang on the south coast (McKinnon 1993). The bags depicted on the statues of the Pasemah plateau may have been full of goods from the plateau (forestry products as honey or birds’ nests, pepper, camphor, benzoin, ivory, rhinoceros horns, feathers and gold). Some of the earthenware sherds have heavy deposits of carbon which may indicate the burning of resins or some other source of material (McKinnon 1993). The natives of south and central Sumatra traded these goods for imported tools and materials, probably carrying it on their backs from one coast to the other. Perhaps the eyes bulging with effort and the grins on the lips of Pasemah statues are a testimony of their suffering during the journey; the sculptors have also highlighted their joints by using circles, perhaps signaling the Achilles heel of these heavy load carriers. This region would appear to have been part of a network of small Srivijayan riverine harbours which provided access to valuable products from an extensive mountainous hinterland (McKinnon 1993).

The amazing statues and cylindrical stone vats of Lore Lindu (Central Sulawesi)

The impressive leaning megalith known locally as Palindo (Watu Molindo) is 4.5m tall. This massive statue has a face that takes up a third of the block of granite. Only the front is polished, its back, roughly trimmed at the top, is undressed. A ring defines the shape of the

---

12 The Bukit Barisan Mountains in western Lampung are known to have been a source of alluvial gold (McKinnon 1993).
face. On the top of the head, a protuberance perhaps represents knotted fabric or a crown. The ears, two protuberances are simply outlined in contrast to the nose, the eyes, and the mouth which are the result of meticulous work. The eyebrows and the bridge of the nose form a single line. The rain has left stains, but the color of the rock is clear. The face has no chin. Under the oval face a groove has been hollowed out, indicating the neck and shoulders. The line of the arm is barely marked and two small protuberances mark the nipples. The sculptor’s chisel has been more incisive on the fingers of the hand, drawing attention to an erect phallus.

This statue is located south of the village of Sepe, in the Bada Valley in the Lore Lindu region. The first references to the Lore Lindu megaliths date back to 19th century with the descriptions of Dutch priests Dr. A. C. Kruyt and Dr. Adriani. Between 1917 and 1922, W. Kaudern (1938) made an archaeological inventory of the three connected valleys, Bada, Besoa and Napu. Classified by UNESCO in 1977 as a world biosphere reserve, Lore Lindu became a National Park in 1993. The region is rich in minerals: gold, sulfur, coal, and iron. Its fauna and flora are very diverse, cohabiting with the megalithic vestiges of the original inhabitants. The Bada and Besoa valleys, located 750m above sea level, are protected islets. The Bada Valley is cut in two by a wide river (Lariang); it is surrounded by hills 1200 to 1300m high and is covered with primary forest. A pass at 2000m takes you to the Besoa valley. Hidden in the hills or in the rice fields of the national park, anthropomorphic statues and cylindrical pitchers are not easy to spot.

Figure 13. Picture of the anthropomorphic statue of Loga in Besoa Valley (©T. Steimer)
In Bada, 14 anthropomorphic statues have been identified. Maturu, or "the sleeper", is 3.5m long, it can be seen by following a path covered with vegetation. Lying on its back the statue was designed to stand like the one in Palindo. The face is a bit different, elongated, and slightly convex; its forehead is marked with a headband. The arms are out of proportion and end in thick hands with detailed fingers. The hands are joined above an erect phallus. The statue at Langke Bulawa is not as tall (about 2.5m). Also male, the statue wears a crown or a slightly tall headdress held by a headband. The face is a mix of styles between the Palindo and Maturu statues. At Loga, the statues are closer to human size (Figure 13). The nose is clearly marked and the oval eyes traced back slightly, giving to it a different expression to the statues described above. Smaller in size, it is located on a hill overlooking the valley. On the facing hill are the remains of a former dwelling. The statue at Tinoe Badang-Kaya is of the same style as Loga, but has two very preeminent buttons for breasts. Deeper in the ground than the other statues, the phallus cannot be distinguished; it is nevertheless the representation of a man.

Hidden in a paddy field, a meter high statue looks more like a monkey than a man; so the inhabitants of the Bada call it, “Watu Oba”. Its small size distinguishes it from other statues. The sculptor has depicted a compact figure, head caught in the shoulders and without chin. The skull, thick and stretched backwards resembles that of a primate. The figure is standing; his arms have a hieratic position and meet on a protuberance, the outline of a phallus. Not far away lies the head of "Watu Balao". This statue was not meant to stand upright, the sculpted head is at the end of a natural block of stone. When the rice reaches maturity the stone face can hardly be seen. At the back of the head, on the surface of the rock, small cups and deep lines were carved out. The sculptor may have been trying to represent the skin of an animal.

What we observe it is that near the statues cylindrical stone vats known locally as kalamba can be found. In the Bada Valley they are not in good condition, and are often in fragments or missing a lid (site of Suso -Lore Barat) (Figure 14). Similar artifacts are known in Lampung south of Sumatra, Borneo (Arifin and Sellato 2003) and from Laos (Colani 1935).

The most beautiful kalambas are in the Besoa valley northwest of the Bada valley. It opens into the Napu valley towards the city of Palu. Fifteen sites have been identified here; the richest are Pokekea, Tadulako, Padalalu, Bangkelua, Halodo, Potabakoa, Padang Taipa, Padang Hadoa, and Entovera. Pokekea is the most important site in Lore Lindu Park where there is 27 kalambas. The one at the entrance to the site is exceptional. Its outer wall is decorated with a strip of faces whose features are similar to those on the statues at Bada and particularly that at Palindo. Also, at Pokekea, a group of 11 kalambas is interesting for its sculptures (0.92 to 1.80 m high and 0.77 to 2.16 m diameter.). In this group only the lids are decorated; from simple protrusions to small figures: monkeys and lizards.
Excavations done in 2000 by Dwi Yuniawati in Tadulako and Pokekea (2000; 2008) have established that *kalambas*, with or without compartments, served as multiple burial chambers. Enclosing a minimum of ten people, these tombs were made for families. Anthropologists have found traces of mutilation on teeth exhumed and evidence of cremation of the bones. Dwi Yuniawati mentioned funerary jars around kalambas. It is probable that the kalambas did not accommodate all the members of the tribe, but were reserved for important people and their families. Offerings accompanied the deceased: pots and earthenware jars, chalcedony beads (round or diamond shape), bark clothes, a grindstone, an iron axe, a spear, and an incense burner. The report of the researches does not specify if there were houses nearby.

Analysis carried out by a German team in 2006 (Kirleis et al. 2011, p. 174) on two of kalambas from Pokekea indicate a date range between 766-898 AD and 1146-1272 AD. The region of Lore Lindu abounds in resources, the inhabitants of valleys Bada and Besoa were probably at the heart of numerous exchanges with the Hindu-Buddhist kingdom of central Sulawesi.

**Conclusion: Back to the Middle-East and the birth of megalithism**

Despite recent excavations the data about societies with megaliths are still rare on the scale of such a large country as Indonesia. From them and from the available scientific documentation as well as observations in the field it appears however plausible that through exchanges of resources and services with Hindu-Buddhist kingdoms the descendant of the Austronesian in Java, Sumatra and Sulawesi acquired goods of prestige progressively affecting the local socio-political balance leading to an increased competition between...
leaders. This process led to the erection of megalithic monuments to bury the dead, honor, commemorate and/or communicate with the ancestors serving as a physical materialization of social status for individuals and groups. For cultures who did not use writing these stones, or these carvings, marked the landscape and efficiently transmitted a social memory from one generation to another. In Java, central and south Sumatra, and at Lore Lindu in central Sulawesi, megalithic monuments ceased to be erected when the Hindu-Buddhist kingdoms declined. Relatively recent in time compared to their middle eastern cousins the Indonesian megaliths are similarly the trace of a common cultural background that appear during period of coexistence and growing inter-dependence between indigenous people and state societies mastering writing. Their studies contribute significantly to the archaeological research of this native civilization.

In the case of Indonesian megalithism the social, cultural and political impact of contacts with larger, more sophisticated and expansionist societies can be documented. The patterns on which this influence plays out such as the asymmetry of the relationship between scriptural and non-scriptural cultures, between commercial empires and local economy, between believes in gods and on ancestor cults and the spirits of nature could prove useful models in our understanding of the Middle-East megalithism for which we can unfortunately draw on very little archeological evidence to when it comes to the inter-action between two social systems but whose patterns of ostentation are very similar to the Indonesian case. Our idea here is to draw from the resources of history and ethnology much more readily accessible to help solve the open questions pertaining to the role and usefulness of megalithism for societies that have found it an effective response to a given situation. In Indonesia Austronesian populations have twice adopted it (first age from the 7th to the 12th centuries and second age starting from the 16th until today) when confronted with foreign influence. Was it a way to better delimitate their own boundaries? Was it a way of managing and controlling increased resources as suggested by R. Adams for Sumba (Adams 2011: 25)? The answer to these questions could be important analytical clues for the study of sites where the resources of history and ethnology are not available. In the same line of thoughts the question of the disappearance of the phenomenon is an interesting one to ask in a comparative manner. Whereas it seems to have been linked to the declining fate of Hindu-Buddhist kingdoms in Indonesia would the end of state-society in the Middle-East be the reason for the disappearance of the great megalithic tradition there? The question remains open.
References


Krom, N. J. 1914. Voorloopige lijst van Oudheden in de Buitenbezittingen. OV, Bijlage T. Westenenk.


Steinmetz H. E. 1898, Oudheidkundige beschrijving van de Afdeeling Bandawasa (Residentie Besoeki), *Tijdschrift van het Bataviaasch Genootschap van Kunsten en Wetenschappen* 40.


Yuniawati D. 2008. Stones burials, one of the megalithic remains in Sulawesi, Capita Selecta, Aspek-aspek arkeologi Indonesia: 107-129.