SPAFACON2021

Papers from the SEAMEO SPAFA International Conference on

SOUTHEAST ASIAN ARCHAEOLOGY AND FINE ARTS

13 - 17 December 2021

Editor: Noel Hidalgo Tan

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SEAMEO SPAFA Regional Centre for Archaeology and Fine Arts
81/1 Sri Ayutthaya Road, Dusit
Bangkok 10300, Thailand
Tel: +66 (0) 2280 4022 to 9
Fax: +66 (0) 2280 4030

www.seameo-spafa.org

E-mail: spafa@seameo-spafa.org

Editor
Dr Noel Hidalgo Tan

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CONTENT

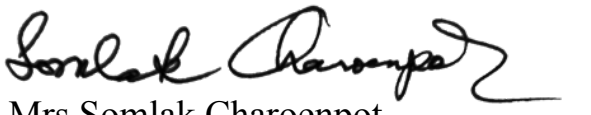
INTRODUCTION

This volume contains the extended abstracts from the papers presented at the SEAMEO SPAFA International Conference on Southeast Asian Archaeology and Fine Arts, which was held online from 13 to 17 December 2021. Also known as the SPAFACON2021, this conference was organised online due to the pandemic. Despite the disruption brought about by Covid-19 to our in-person events, training programmes and field research, it is heartening to see that archaeology and cultural heritage has continued under new modes of communication and collaboration.

This fourth iteration of the SPAFACON is also scheduled a year earlier than our usual triennial cycle to commemorate the 50th anniversary of SEAMEO initiating a centre dedicated towards archaeology and the fine arts. Over the past year, SPAFA has also been highlighting this legacy of international cooperation and capacity-building by sharing our photographic archives on our social media.

I am delighted by the high level of enthusiasm and intellectual curiosity brought by the participants to the conference. During our call for papers we received close to 90 submissions, but owing to the pressures of time and the online format, we were only able to accept 34 papers for the conference. The variety of papers present here, although a small set compared with our usual proceedings, reflects the breadth of the centre's ambit – covering not just archaeology, but also performing arts, visual arts, museum studies, and other aspects of Southeast Asian cultural heritage.

I would like to thank all the participants, without whom this conference would not be possible in its present form, in particular, our Governing Board members who represent every country in Southeast Asia, and to the Ministry of Culture, Thailand and the Ministry of Education, Thailand for their long-standing support of SEAMEO SPAFA and its activities.



Mrs Somlak Charoenpot
Centre Director
SEAMEO SPAFA

Old Burmese weights were not opium weights. They were weights. What else do we know about them?

ရှေးဟောင်းမြန်မာ့အလေးများသည် ဘိန်းချိန်သည့်အလေးများမဟုတ်ပါ။
အချိန်အတွယ်အလေးများသာ ဖစ်သည်။ ယင်းတို့အကြောင်း ဘာတွေများ သိရပါသနည်း။

10.26721/spafa.pqcnu8815a-29
Bob Hudson
Asian Studies Program, University of Sydney
bob.hudson@sydney.edu.au

Abstract

Bronze weights from Myanmar (old Burma) are popularly but incorrectly identified as "opium weights". This paper examines the historical evidence for a system of weights and measures in old Burma going back to the 11th to 14th century Bagan period. It also examines the challenge to Southeast Asian archaeology, history and museology posed by the popular "Angel Weights" website and Facebook pages, which claim that a hoard of bronzes and associated documentation kept in a so-far undisclosed location represents a hitherto unknown collection of weights that date back to the Bagan and 14th to 16th century First Ava periods. This (so far) private curatorship of alleged historical data presents a dilemma: how does an academic deal with data that is available only on the internet, presented only from the viewpoint of its owners?

မြန်မာပြည် (ယခင်ဗမာပြည်)မှ ကြေးရုပ်အလေးများကို လူသိများလှသော်လည်း ဘိန်းချိန်အလေးများဟူ၍ လွဲမှားစွာ ဖွင့်ဆိုလေ့ရှိသည်။ ယခုစာတမ်းမှာ အဒီ(၁၁)ရာစုမှ (၁၄)ရာစု ရှေးခေတ်မြန်မာပြည် ပုဂံခေတ်ကာလတွင် သုံးစွဲခဲ့သော အလေးချိန်စနစ်တစ်ခုအတွက် သမိုင်းဆိုင်ရာအထောက်အထားများကို လေ့လာရှာဖွေရန်ဖစ်သည်။ အလားတူပင် အရှေ့တောင်အာရှ ရှေးဟောင်းသုတေသန၊ သမိုင်းနှင့် ပတ်သက်ဆိုင်ရာ ကြေးထည်ပစ္စည်းများနှင့် ဆက်စပ်အထောက်အထားများကို ယင်းတို့၏ မူရင်းနရော အတိအကျ မသိရှိဘဲ ပုဂံခေတ်မှ အဒီ(၁၄_၁၆) ရာစု အင်းဝခေတ်တို့နှင့် သက်ဆိုင်သည့် ကြေးထည်ပစ္စည်းနှင့် အလေးများဟူ၍ "နတ်ရုပ်အလေးများ" ကွန်ယက်နှင့် ဖွင့်ဝှက်ထား လူမှုကွန်ယက်စာမျက်နှာများတွင် လူသိထင်ရှားဖော်ပြထားခြင်းတို့အပေါ် စောဒကတက်စရာရှိသည် များကို စစ်ဆေးလေ့လာသွားရန်လည်းဖစ်သည်။ ဤသို့ (ဖော်ပြထားသည့်) ကိုယ်ပိုင်ပြုမှု များမှ သမိုင်းဆိုင်ရာ အချက်အလက် များကို လိုသလို သုံးစွဲနမှေများသည်- "ပစ္စည်းပိုင်ရှင်တို့၏ အထင် အမြင်ဖငြ့်သာ ဖော်ပြထားသည့် အင်တာနက် တွင်သာရနိုင်သော အချက်အလက်များနှင့် ပညာရပ်ဆိုင်ရာ လေ့လာမှုတို့မည်ကဲ့သို့ ဆက်စပ်နိုင်ကြမည်နည်း"ဟူသော အကပြိအတည်းတစ်ခုကိုလည်း ဖော်ပြလျက်ရှိသည်။

Keywords

Burma; Myanmar; bronze; weights
ဗမာ၊; မြန်မာ၊; ကြေးထည်၊; အလေးများ

Bronze weights from Myanmar (old Burma) as well as Thailand and Laos are often identified by dealers, collectors and even museums as "opium weights". This term appears to have been introduced in the 1960s as a marketing device, to sell the weights as souvenirs to hippies visiting northern Thailand in search of new pharmacological frontiers. Willis and Herman placed an early use of the expression in 1961 (Willis and Herman 2019). Sylvia Fraser-Lu writes: "The term 'opium' weight for these measures was probably coined by a foreigner with a vivid imagination and a fascination for the forbidden. While it is true that some of the smaller weights could have been used for measuring this drug, 'opium' weights served a much wider, more useful and down-to-earth purpose: they were used to gauge the weight of the daily items of commerce found in the Burmese market-place" (Fraser-Lu 1982). Similarly, moulded terracotta pipes made in old Burma since tobacco arrived from the New World are often misidentified as "opium pipes". Don Hein's extensive study of tobacco pipes has demonstrated that this is not the case (Hein 1997).

Fig. 1 Three bronze weights from different sources in Myanmar, chinthe (mythical lion) and two hintha/hamsa (mythical goose). Each weighs 81 grams = 5 ticals (author photo and collection).

Bronze weights by their sheer number form a major class of historical artefact in Myanmar. Weights are represented in museum and antiquarian collections in Myanmar, Thailand, Germany and the Netherlands, as an internet search will reveal. Modern publication on weights has largely involved antiquarians and antique dealers (see, for example, Braun and Braun 1983; Gear and Gear 1992; Galerie Michael Herrfurth 2017; Mikkelsen 2017; Willis and Herman 2019; Herrfurth and Mollat 2021).

Typology and chronology.

Burmese weights are popular collectibles, and in response to this popularity they are widely and accurately reproduced in the workshops of Tampawaddy (*bronze-town*), a southern suburb of Mandalay. Weights are not individually described in the *Royal Orders of Burma* or the Burmese Chronicles. Bronze can be analysed for its component metals, but it cannot be directly dated. No weights have been located in Myanmar in any securely dateable archaeological context. So as a class of artefact, weights have been studied according to typology, and provisionally dated according to style characteristics

Fig. 2 Weights from Temple (1898).

In the late 19th century, Temple published some illustrations of weights. He quoted historical records that mentioned animal-shaped weights as far back as 1786. He was unconvinced by some of the explanations attached to the weights he had collected, notably that the animal forms of weights changed according to the animal that represented the day on which the king of the period had been born. This was a simple enough notion to debunk. Temple compared the ascribed dates of the various weights he collected with the birthdays of the kings reigning at that time, and found that there was no correlation (Temple 1898). By "birthday" in Myanmar, we mean the day of the week on which the person was born. This is an auspicious element of the horoscope of an individual. The birthday animals are Monday, tiger; Tuesday, lion; Wednesday until noon, elephant with tusks; Wednesday afternoon/evening, elephant without tusks; Thursday, *jwe*, rat; Friday, *bu*, usually described in English as a guinea pig; Saturday, *naga* or dragon; Sunday, *galon* or garuda.

Decades later, Gear and Gear based their dating system on variables that are somewhat subjective: for example, they stated that some weights "look older" than others, and they proposed that changes in style relate to events occurring in Burmese history: for example, a *hamsa* (mythical goose) carrying something in its mouth symbolises the material prosperity and spirituality of the reign of 15th century Queen Shinsawbu (Gear and Gear 1992: 199-213; 243-249). This methodology is characteristic of publications dealing with old Burmese weights, whose authors often ruefully admit that, as Mollat put it, "the door is open to speculation" (Mollat 2009; Mikkelsen 2017; Willis and Herman 2019). Chronological markers and stylistic variables used in such publications are, however, generally clearly stated, and are at least open to hypothesis testing

Historical documentation.

In the modern era, bronze weights, usually in animal form, as part of a weights and measures system, have been well attested since Temple paid them attention in the late 19th century. There is little substantial evidence of earlier use. Two small animal weights were excavated at the First Millennium site of Beikthano (Aung Thaw 1968), but their specific archaeological context among the debris of a corridor gate was not noted by the excavators, and they may very well have been from the continuing occupation of the site. At 11th to 14th century Bagan, goods were exchanged within a system that used measures of weight and volume (Luce 1940) but no physical weighing apparatus has survived in any recorded archaeological context. A terracotta plaque at the 11th century East Hpetleik stupa (Pichard 1992-2002, monument 1030) bears a caption indicating that the otherwise damaged relief portrayed the torments of "False Weights Hell" (Luce 1969 Plate 188c).

This is a documentary indication that the system of weights and measures was extensive enough to have its abuse subject to a threat of punishment in the next life.

From the number of mentions in the ten-volume Royal Orders of Burma (Than Tun 1983-1990), it seems that the standards of weights and measures were regularly abused in the 18th and 19th centuries, as they appear to have been in the Bagan period. Enforcement of a standard was as much in the interests of the administration as the consumer, as state taxation benefitted from a system of weights and measures. These examples from the *Royal Orders (ROB)* demonstrate how the Burmese kingdom tried to maintain the standards.

> "Nanda Bahu shall fix the official seal on various weights and baskets·after having them checked by the standards prescribed for use in the palace enclosure". "Weights and measures for use in the city must be checked at the Office of *Myo Wun* (Officer in charge of the City) before use". (*ROB King Alaungpaya 4 November 1755)*.

> "*Shay Yon Sadan* (East Court Manual). Duties include: visit once in the morning and again in the evening to bazaars to check the use of weights, capacity measures, length measures below the standards with the assistance of Zay Sit (Bazaar Inspectors), and *Zay Nagan* (Bazaar Liaison Officers)". (*ROB 12 February 1785*)

> "The King sent an order to *Maha Dan Wun*, Officer of Religious Affairs, and Thiri Kyaw Thu, Guardian of Religion, requesting them to submit a treatise on weight measure, capacity measure and length measure with reference to Pali religious texts". (*ROB 17 July 1789*). "Using false weight or false basket or false money is considered theft. Use only the standard weight and standard basket". (*ROB 28 January 1795*)

> "A *Myo Wun* (Town Officer) shall check and confirm that only the good and correct or standardized weights and measures are used in all the business transactions by all shop keepers in the city and by traders who come to the city by land and water routes; he shall fix marks to all weights and measures used in the city to signify that they are the standard and recognized ones". (*ROB This Order was passed on 21 AprIl 1813 and proclaimed by Zayya Theinga Thu, Liaison Officer*).

At the risk of killing off our hypothesis that weights were simply weights, and not opium weights, we must note this Royal Order from 1817. Opium was certainly known in Old Burma. So *some* use of weights (and for that matter tobacco pipes) with opium may have occurred, as with any other saleable commodity. "Any form of opium consumption (whether smoking it or eating it) has never been habitually done by people living in Burma; the Order to arrest anyone who has been found indulging in this practice is confined only to Burmese nationals; foreigners are exempted from this Order; *Myo Wun* (Town Officer) shall get all opium addicts among the Burmese arrested; opium confiscated shall be sent to palace stores; and the Order applies to opium found in the hands of Chinese". (*ROB This Order was passed on 16 December 1817 and proclaimed by Liaison Officer Chief of Caduceus Bearers. 18 December 1817*).

> "Brahmins, Councillors Wise and Learned and Officers are to fix standard capacity, length and weight measures; check the instruments of measure and fix a seal on each correct one; also fix a seal on all Royal Orders, letters of instructions, etc." (*ROB This Order was passed on 3 July 1837 and proclaimed by Nay Myo M in Hla Think ha Thu, Liaison Officer, Chief of Caduceus Bearers.*)

> When King Mindon moved his capital from Amarapura to Mandalay, he pronounced that "the weights and measures as well as the quality of silver used in buying and selling varies considerably; this might lead to ill consequences, especially in having business·with British subjects. A big country like us should not allow this. The Chief of Blood Bond Brothers is to check that only standard weights etc. are used, and submit a Iist of traders". (*ROB 11 November 1854*), And in 1880 King Thibaw introduced a new criminal code based on the Indian Penal Code that was already in use in the parts of Burma that had been colonised by the British. Chapter 12 of this code outlined "*Three Punishments on Use of False Weight, Capacity and Length measures*".(ROB Vol IX p xii).

The historical presence of a system of weights and measures, as referred to in the *Royal Orders*, suggests that we can throw away the patronising notion that bronze weights were designed to be used solely or primarily to measure out opium for addicted natives. They were used for weighing things. Weights and measures were integral to the trade that contributed to the wealth of the Burmese Empire: wealth that, by the 19th century, helped make Burma attractive to colonisation.

The "Angel Weights" hoard.

In recent years there have been claims on a website and Facebook page called *Angel Weights* of the discovery of a hoard of hundreds of weights from the 11th to 14th century Bagan and 14th to 16th century Ava periods, along with documentation said to have been provided by the custodians of the hoard. The story is dramatic:

> King Mobye Narapati's secret temple was hidden far from Ava city in the jungle. The king commanded his servants to make four large Buddha's, one on each of the four sides of the temple. One of the Buddha's was a secret door. When inside, there were 3 rooms in the secret temple. From inside, also was a secret way to go underground to the Irrawaddy River to escape, if needed. The three rooms, one room for king Mobye Narapati and family, one room for his advisor U Tha-nu-hto and family, and one room kept Ava's Angel Weights and cultural treasures from the royal chambers. The Secret Temple, King Mobye Narapati's built to preserve Ava Kingdoms legacy, took servants approximately four years to build. (Facebook December 2014)

As of June 2021, the website owners had provided this information:

> "We're in the final process of translating the 15 generations of caretakers diaries. We're excited to share them! The diaries document centuries of events in Ava's history, while giving us a first-hand glimpse into Burmese ideology and folklore. They explain religious markings and symbols in Myanmar, disclosing their origins and significance in Burmese Buddhism. Their reverence for Angel Weights is explained, also detailing the spiritual uses of animals and objects in the Ava Kingdom. Perhaps most interesting, the world will hear the incredible story of generations of devotees sacrificing all to preserve their beloved Angel Weights. The website will be updated during the process until completion. Also, we'll continue to explore other appropriate venues to share a story that for centuries has been "untellable." (https://www.angelweights.com/home.html)

Fig. 3 Angel Weight. Source: Rick Willis (2019).

This information, illustrated by some impressive photos of artefacts at https://www.facebook.com/royalangelweights, has attracted over 47,000 followers, many of them from Myanmar. By way of an admittedly rough contrast, Volume 27 of *Indian Antiquary*, which contains the Temple article on weights referred to above, has been viewed on the freely accessible website archive.org 55 times. The Angel Weights website owners have contributed information and images to a book on Burmese weights by Willis and Herman, who while at pains to point out the unverified nature of the claims, have also accepted the cache as authentic for the purpose of creating a typology of these allegedly early weights. They provide images of bronzes they say weigh up to 9 kilograms. The published images largely portray animals or Burmese folk themes (Willis and Herman 2019).

The self-styled custodians of the hoard, identified in the Willis and Herman book as Michael and Justin White, though anonymous on their website, say the artefacts and associated documents are in a secure location. The website also says that "the entirety of this amazing discovery of treasures from Ava's first kingdom must be disclosed by the countries [sic] government, whose care it is in". I have been unable to find anyone at the Myanmar National Museum or Ministry of Religious Affairs and Culture who can confirm that they hold such a collection. I received a behind-the-scenes tour of the new National Museum in Naypyidaw in 2016, and I saw no artefacts on display or in storage that were anything like those on the *Angel Weights* website. The website was registered through GoDaddy.com LLC in 2011 in the US state of Utah.

"Angel" is the website authors' version of the Burmese word "nat" (a spiritual being). The term is more commonly transposed directly into English as "nat" (Temple 1906). The king, who according to the internet story built a temple as a home and personal treasure repository, something otherwise unheard of from a donor of a Buddhist work of merit, is the Mobwe/Myobye sawbwa, Narapati III, one of a dynasty of Shan chieftains who briefly held power at the end of the First Ava/Inwa period (1364-1555) before they were overcome by the 1531-1752 Toungoo Dynasty (Aung-Thwin 2017). We noted above that one of the "weights" published on the website is a mounted *garuda*, one of the eight "birthday" animals seen at the planetary posts of every Burmese pagoda. This is not the place to critique the "angel weights" material in depth, but OK, here's just one more. The claim on the website that King Narapati III "mysteriously disappeared" is not backed up by the *Great Chronicle* of U Kala, which records that he surrendered, along with his family, to the advancing Toungoo king, and was allowed to continue as a vassal and a donor of religious buildings (Fernquist 2006, section 233).

The comments on the Facebook page, in English as well as Burmese, are sometimes enthusiastic, patriotic, expressing pride in this new historical discovery. Other participants are more critical. In 2020, Yan Naing Thein wrote

> "We need to have proper documents/evidence or literature works that shows that the item is used as a weight … It is hard for me to criticize if they are genuine by seeing the pictures alone".

The website owners responded:

> "Everything presented on Angel Weights is ancient history kept since Ava's first period by Burmese caretakers of such. … We are just messengers of that history nothing more, and are committed to the preservation of such. The history will be disclosed in it's entirety to further validate the truthfulness of Ava's first periods Royal Yadaya* Angel Weights and Statues".

They maintain an atmosphere of mystery and drama.

> "The Burmese history of Ava's first period Kings, their Royal Yadaya* statues and weights as given to us, will be revealed in its entirety soon. We are nearly done with both the Burmese and English translations. Our intentions are the same as yours ... to preserve Burmese history, accurately, as given to us by centuries of caretakers, many whom gave their lives to do so".

(*"Yadaya refers to magical rituals done to delay, neutralize or prevent misfortune, widely practiced in Burma. These rituals, which originate from Brahmanism, are guided and prescribed by soothsayers and astrologers, who use a combination of mathematical equations and astrology to formulate a 'prescription' to avert misfortune". Under the circumstances, it seems fair to have acquired this definition from *Wikipedia*).

The invention of tradition and the manufacture of provenance.

We might keep in mind two notions when dealing with claims of antiquity. The first, examined in a classic study of invented or exaggerated British traditions (Hobsbawm and Ranger 1983), is that evidence may be misconstrued or fabricated to fill a perceived gap in the historical record. The second is there is such a thing as outright, profit-seeking forgery. A heritage architect colleague in Myanmar described to me the process of producing "antique" bronzes by unscrupulous persons in Mandalay. A new bronze in an old style, say Bagan period, is coated with a sulphur mixture, and acquires a patina suggesting great antiquity. The statue is held by a farmer until a scout for an antique dealer visits the village. The scout buys the statue, believing that he has made a profitable purchase from this yokel who does not know its true value. Everyone from the scout onward is convinced of the authenticity of the bronze, supposedly dug up in the village fields. By the time the bronze is owned by a collector or a museum, it has an apparently unimpeachable

provenance. A more formal assessment of antiquities forgery in the Myanmar context is included in Than Htun (2007).

Discussion and conclusion

There have been cases in Myanmar scholarship in which opinion has turned into historical fact. When the government archaeologist Dr Forchhammer visited Arakan (the city now called Mrauk-U) on the west coast of Burma in 1885, he looked at several of the stone temples there which have square slots to allow light and air into the buildings, and opined (perhaps because of a similarity to gunports on western warships, though he did not say so) that these slots must have been used for firing cannon at invaders (Forchhammer 1891). He did not consider the practicality of aiming and firing a cannon along a two metre stone slot. His opinion, seemingly based only on a similarity of form, became the received wisdom, and has been accepted in official publications (Aung Thaw 1972). The irony should not be lost that the Aung Thaw volume, published during a period of hyper-nationalist military government, was happy to rely on the authority of one of the former colonialist masters of the country as to this aspect of Burmese history.

The authority of Forchhammer in the case of the Arakan "fortresses" carried the weight of his official position and of the subsequent publications that have quoted him. But the presentation of the online collection of images of "angel weights" and associated documentation outside the usual structures of academia is something relatively new. The claimants to the "angel weights" hoard do not appear so far to have published the material that is on their website and Facebook in any peer-reviewed form. They have claimed, in response to one query on their Facebook page, that "experts have already validated the authenticity" of the artifacts they have presented, though no experts are named or quoted. Academic discourse, it would seem, is set for a clash with the authority of the internet.

I hope this has not come across as an elitist academic claiming ground on which others must not dare tread. The "angel weights" hoard and associated literature, if it becomes available for genuine scrutiny, may very well open up a new chapter in the study of the Bagan and Ava/Inwa periods. But the online custodians of the hoard, some of the thousands of enthusiasts who have subscribed to their Facebook page, and however many more have visited their website and enjoyed what is certainly a magnificent collection of images of bronzes from some time, somewhere, seem to be uncritical believers in something that is unproven, which sits within a field of study that itself is lacking in "falsifiable" evidence, as Karl Popper put it: that is to say, evidence that can be tested. This presents a scholarly dilemma. It may also be an excellent thesis prospect for postgraduates who are interested

in exploring the historiography of old Burma, the chronology and categorisation of its system of weights, and more broadly, the relationship between belief and evidence.

Acknowledgements

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