



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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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

The Mt. Popa Watershed and Bagan's Bronze-Iron Age

ပုပ္ဖီးတောင် ရေဝေ ရေလဲနယ်မြေနှင့် ပုဂံဒေသ ကြေး-သံခေတ်

10792/pqcnu8815a-16

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Abstract

Two bronze 'mother-goddess' figures were found last year near Wealaung, Central Myanmar. While typical of the late first millennium BCE to early CE Bronze-Iron culture of Halin and the Samon valley south of Mandalay, Wealaung and nearby sites like Inde, Songon and Sardwingyi are located to the west, in the Mt. Popa watershed. Thus the 'Samon culture' may not have been an offshoot of the Dian cultures of Yunnan but an indigenous development that spread east and north while locally absorbed within the early first millennium CE clan-based societies of Bagan.

မြန်မာပြည်အလယ်ပိုင်း ဝဲလောင်ရွာအနီးမှ အမိနတ်သမီးကြေးပြားအရုပ်နှစ်ခုကို ယမန်နှစ်က တွေ့ရှိခဲ့ရပါသည်။ ယင်းတွေ့ရှိမှုသည် ဟန်လင်းနှင့် မန္တလေးမြို့တောင်ဘက်ရှိ စမုံမြစ်ဝှမ်းဒေသရှိ ခရစ်နှစ်မတိုင်မီ ပထမထောင်စုနှစ်နောက်ပိုင်းမှ ခရစ်နှစ်ဦးပိုင်းကာလ ကြေး-သံခေတ် ယဉ်ကျေးမှုထွန်းကားရာ စံနမူနာပြနေရာများ၏ အနောက်ဘက်တွင် ကျရောက်နေ သော ဝဲလောင်၊ အင်းတဲ ပတ်ဝန်းကျင်နေရာများ၊ ဆုံကုန်းနှင့် ဆားတွင်းကြီးစသည့် ပုပ္ဖီးတောင် ၏ ရေဝေ ရေလဲဒေသများပင်ဖြစ်သည်။ သို့ဖြစ်၍ စမုံမြစ်ဝှမ်းယဉ်ကျေးမှုသည် ယူနန်ပြည်နယ် ဒီယန်ယဉ်ကျေးမှု၏ အစွယ်အပွားတစ်ခုမဟုတ်တော့ဘဲ ခရစ်နှစ် ပထမထောင်စုနှစ်အစောပိုင်း ကာလ ပုဂံဒေသ၏ ဓလေ့တူလူမျိုးစုအဖွဲ့အစည်းများအတွင်း အရပ်ဒေသအလိုက် လက်ခံ ကျင့်သုံးမှုကြောင့် အရှေ့ဘက်၊ မြောက်ဘက်အရပ်တို့တွင် ပျံ့နှံ့ခဲ့သော ဒေသတွင်း ဖွံ့ဖြိုး တိုးတက်လာမှုပင် ဖြစ်သည်။

Keywords

Mt. Popa; Samon Valley culture; Bronze-Iron; Bagan

ပုပ္ဖီးတောင်၊ စမုံမြစ်ဝှမ်းယဉ်ကျေးမှုလေ့၊ ကြေး-သံ၊ ပုဂံ²

2 My thanks to U Win Kyaing for the translation.

Introduction

ပဟားနတ်တောင် At the lofty heights of Mt. Popa
 ထခေါင်မြင့်ပျား ၊ ဝံတောပြား၍ The abode of gods fair
 နံ့ရှားကြိုင်လွင့် ၊ ခါတန်ပွင့်သည်။ In the woods are scattered
 ရွှေနှင့်ယိုးမှား ၊ ပန်း စကား. The timely blossoms of scented Saga; Seemingly gold flowers.
 [Anon. (Bagan period) 400-500 BE] (Thein 1985:5)

Two bronze ‘mother-goddess’ figures were found recently in Wealaung, Taungtha, Upper Myanmar. Emblematic of the Samon Bronze-Iron culture of Hanlin and the Samon valley south of Mandalay, the mother-goddesses have not been recorded outside of Central Myanmar. This is also the case with other diagnostic Samon mortuary goods such as *kye doke*, packets of high-copper wire recalling hay bundles in the Hanlin region today and floral elements and cylindrical domical coffin decorations. Additional grave goods can be compared to others from Central Myanmar: pottery, metal artefacts and beads of semi-precious polished stone, fossil wood and glass. The *kye doke* (circa 2 - 4 cm) and occasionally the floral (18 x 15 cm) ornaments were subsequently found in systematic excavations of cemeteries, but to date, the distinctive mother-goddess figures have not been recorded in context. These locally made ritual artefacts contrast with imported bronzes goods of the Dian cultures of Yunnan including Heger I bronze drums and musical instruments. Notably, Wealaung and nearby sites such as Inde, Songon and Sardwingyi are in the Mt. Popa watershed near Bagan, not in the Samon River drainage system. This raises questions reviewed in this paper about the origins and trajectory of the Samon societies during the late first millennium BCE to the first half of the first millennium CE.

Geology

Mt. Popa sits on the far horizon of Bagan, an isolated tall cone (1518 meters). Geologically, it is part of the Bago Yoma that to the south includes Singguttara Hill on which the Shwedagon Pagoda is located. Popa’s geology is complex, seen in the variety of stones from basalt to beds of stratified ash at the mountain’s base. Indication of early habitation includes stone artefacts from silicified tuff and lavas of the Kyaukpadaung hills immediately southwest of Popa (de Terra and Movius 1943: 353). While chronicles cite a recent origin for the volcano, 101 years after the demise of the Buddha, geologically it falls within the late Cenozoic Era (Win Kyaing 2019)². ‘Popa’ derives from a Pali word,

2 In that same year (443 BCE) five portents occurred, four natural: the emergence of Popa, the rising of the Samon and Samyit, a great lake and a massive earthquake. The last was Tharehkittara (Sri Ksetra) when Gavampati, Rishi, Sakra, Naga, Garuda, Sandi and Paramesura met and conferred on the founding of the city

puppa, or flower, a reminder of the abundant flora and fauna benefitting from the volcanic soils and high rainfall, *circa* 1150 mm per annum in comparison with less than 1000 mm in the arid surroundings. The horseshoe-shaped crater is surrounded by four peaks: Hmanpya-taung (532 m), Sapapon-taung (714 m N), Saymon-taung (514 m E) and the plug-like Taungkalat (429 m) on the southwest, famed as the abode of spirits or *nats* (Chhibber 1934: 395). The Sindewa Stream flows down from the east, continues north, and then makes a wide curve to the west before draining into the Ayeyarwaddy.

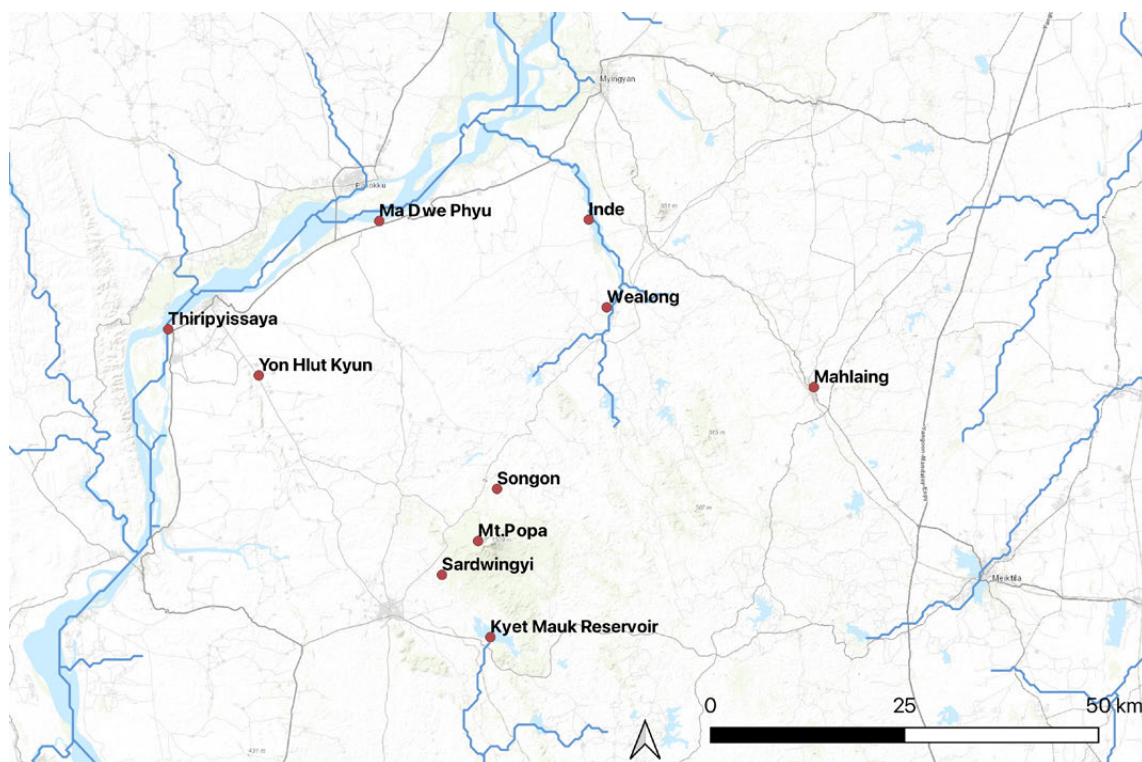


Fig. 1 Map showing sites discussed in the text around Mt. Popa and Bagan. Map by the author.

Other streams drain on the south flank of Mt. Popa, their ancient hydrology altered by the construction of the Kyet Mauk Reservoir located just south of the mountain (Shwe Sin Phyo 2020: 54). The only east-west road is the Byat-ta Pan San which by tradition the hero Byat-ta ran from the Bagan capital to Popa peak to collect flowers for King Anawrahta; the others stretch out north to Nyaung-U, Ngathayauk and Myingyan.

The historicity of the Mt. Popa *nat* tradition has been queried, and indeed earlier accounts such as Yule's do note that the top of was "inaccessible" (Yule 1968: 326, Hudson 2004: 200). While Yule did not ascend the peak, he nonetheless considered it important enough

to include a sketch profile highlighting the detached plug-like Taungkalat. Yule also notes the abundance of iron and a stream of “considerable size” running in a gorge between the taller peak and Taungkalat (Yule 1968: 338). Indeed, it is the natural setting within which *nat* and *weiza* traditions of whatever date have developed, stretching back to the Chalcolithic and Bronze-Iron cultures from which the Pyu settlements later arose. Important preliminary surveys and excavations have taken place of the Mt. Poba-Sindewa area that are considered below.

Wealaung – Taungtha

In early March 2020, a new discovery of two mother-goddesses was made in a field adjacent to a small stream adjacent to the Sindewa Chaung near Wea Long, Taungtha³. The site is *circa* thirty kilometres northwest of Mahlaing, where the first mother-goddess was discovered in 1998. While not far from Mahlaing, Wea Long is within the Mt. Poba watershed draining into the Ayeyarwaddy River near Bagan. The location is thus exceptional as all the previous mother-goddess finds came from a narrow north-south corridor stretching from Hanlin near Shwebo south to cemeteries such as Myo Hla not far from Nay Pyi Taw; routes to Dian areas were through Bhamo or Muse. For the Mt. Poba watershed, inter-regional links may have been north via the Chindwin to Pakhangyi and Hanlin, creating multiple routes of exchange.

At Taungtha, goods removed by villagers prior to the arrival of the Department of Archaeology included two single-bodied mother-goddess figures with legs bent (*circa* 60 centimetres if extended), numerous low repousse conical roundels (*circa* 7 cm) at times divided by lines into quadrants, small (2 to 3 cm) elongated bells, medium (7 to 8 cm) cylindrical bells, and flat swords (*circa* 10-35 cm). Taking other Samon goods as examples, they are probably a very high-copper bronze. The objects were reputedly found near the ground surface with evidence of layering in their placement, perhaps a wooden coffin now disintegrated. The mother-goddess figures were placed on the top with floral elements on the sides.

Mother goddess figures

Mother-goddess figures have been recorded from at least fourteen graves in the Samon valley and now Taungtha. There may well have been others around Mt. Poba and in the Samon, lost with villager ‘bead-hunting’. This tunnelling into graves has been occurring from Magway on the Ayeyarwaddy to Pyawbwe in the Samon Valley since the 1920’s. Remarkably, it has yet to be depleted with new discoveries continuing, circulated on social

3 21.191537°, 95.395097° northeast of Mt. Poba and Bagan

media. The beautifully polished beads of carnelian, chalcedony, quartzes, agates and fossil woods are both simple round and cylindrical shapes as well as zoomorphic. Some changes over time have been established, such as green chalcedony elephants preceding orange-red carnelian tigers. However, most are difficult to distinguish between Bronze-iron and Iron Age early Buddhist cultures co-existing in the same area. Taken together, they suggest a sizeable population during the Bronze-iron era that continued to grow with the expanded iron production of early Pyu cultures of the early first millennium CE. The Bronze-iron goods are primarily mortuary whereas the early Pyu ones are associated with ritual structures, some ancestral with burials as well. Typical artefacts such as finger-marked bricks and beads are not clearly Buddhist. This period begins in chronicles with the formation of a nineteen-village federation and the hero Pyusawhti; it ends with the arrival of Min Mahagiri to Mt. Popa and the dissolution of the nineteen Pyu villages (Pe Maung Tin and Luce 1921/1960: 28-46).

There are some indications of earlier burials with mother-goddess figures. For example, villagers at Inde described having found armour-like pieces on skeletons during survey of the site in the 1990s (Win Maung (Tampawaddy), Pers.Comm., 12.06.21). These may be bronze 'plates' noted as parts of containers or mirrors (Thaw Tint and Sein Tun 1985: 67). Bronze mirrors with tangs are reported today at times in association with skeletons, from Taungtha to Maingmaw (Khin Nyo, Pers.Comm., 08.06.21).

The figures are slim with attention to the breasts and womb. Notably, since the first discovery of the mother-goddess figures in 1998, villagers have regularly described the legs as bent over at the knee and having been beside the head with the upper body over the pelvis. The shortening enabled them to fit within hollowed-out tree trunk coffins. The body in some examples is flanked by designs that replicate a double-pointed bronze axe associated with an earlier culture.

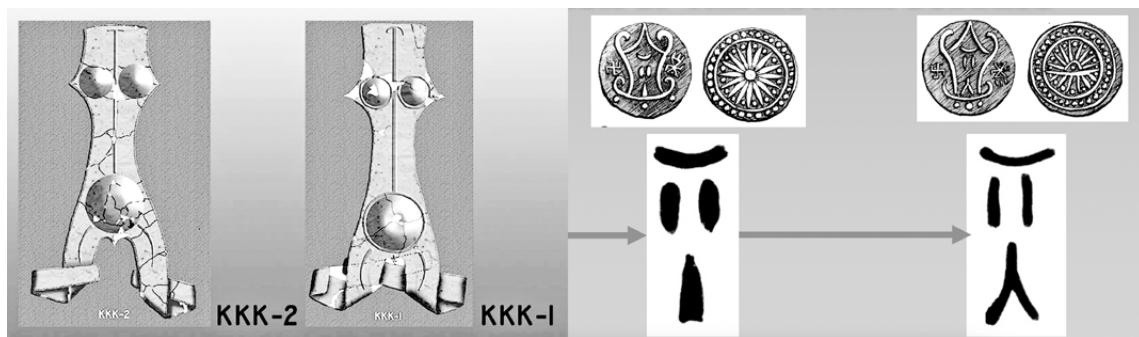


Fig. 2 Mother-goddess figures and suggested contribution to Pyu coins. Courtesy of U Win Maung (Tampawaddy) 2019.

It has also been suggested that the striking design highlighting the breastbone, breasts, backbone, and womb of the mother-goddess figures shared a regenerative vocabulary with the *Srivasta*, a recurrent motif on silver coins of the protohistoric Pyu cultures (Win Maung (Tampawaddy) 2019). While notional, the comparison importantly addresses the gap in our understanding of the relationship between Samon and Pyu cultures, particularly in the early first millennium CE.

Inde (Theinkon)

Inde village is located circa 10 km north of Wealaung. Survey in the 1990s documented three sites. In the south, a late Stone Age site, bronze in the middle and on the north near the present village, iron. Earlier survey identified the site as Theingon, with Neolithic, bronze and later historic period goods in an elevated area protected from floods, with wells yielding water even in the dry season and wood available from the Taungtha hills to the east (Thaw Tint and Sein Tun 1985: 67, Win Maung (Tampawaddy), pers.comm. 05.05.21). The stone implements and rings have been compared to those at Letpanchibaw, 29 kilometres southwest, with two distinct phases of pottery as seen at Inde and around Mt. Popa. As noted above, with mention of armour or plates in association with skeletons, the mother-goddess figures may once have been at this site.

Sardwingyi and Songon

Sardwingyi, on the southwest of Mt. Popa, and Songon, on the northeast, illustrate the complementary ecology and resources of the area. Sardwingyi is a deserted village named after brine wells to the south, located on the Tangzin Chaung or stream running along the southwest slopes of Mt. Popa. Survey around Sardwingyi yielded two varieties of pottery, plain or cord-marked wares and others incised and notably hard, possibly with volcanic ash. There were also well-polished basaltic tools and crudely chipped ones from silicified tuff. Iron artefacts included implements and a bird-decorated iron-copper lid or weight, conceivably exploiting local hematites. The small (*circa* 6 cm) bird-like figure (or mold) with a large head and eyes is inclined forward with a second horizontal figure recalling a 'bird-man' documented at Myauk Mee Kon near Pyawbwe (Thaw Tint and Sein Tun 1985: 68, 73, fig. 17). Similar stone and iron goods were recorded around Sebauk, a village just to the north named after the earthen dam managing the water in a small lake. Hearths and burials were documented, some with polished stone adzes and protected by volcanic rocks. The site thus offered wooded forest on the east, water from springs and streams, fertile soils, salt from the brine deposits and raw materials for the manufacture of stone and iron implements (Thaw Tint and Sein Tun 1985: 67-74).

Songon finds also indicate multiple phases of occupation, the present village being located on the chalcolithic site benefitting from fertile soils and abundant waters (Thaw Tint and Sein Tun 1985: 76). It is located on the northeast slope of the Mt. Popa crater. Finds in 2009 were made just west of the present village with Bronze-iron age burials some ninety-one meters southeast of the village such as circa 14 cm socketed bronze axes like ones from the Nyaunggan cemetery in Budalin, polished beads of green chalcedony and orange carnelian, and pottery. Stone artefacts, in addition to tools, included rings like ones from Taungthaman-in. The pottery was thickly made, simple vessels with the coiling evident. These contrasted with pots documented in 2003 having thinner walls; several short and long pedestal vessels had two small holes on the foot (Win Maung (Tampawaddy), drawings, 2003). Similar wares have been recorded at Songon and Taunthaman-In (Thaw Tint and Sein Tun 1985: 69, 77).



Fig. 3 Songon bronze axe and coiled pot. Courtesy of U Win Kyaing 2009.

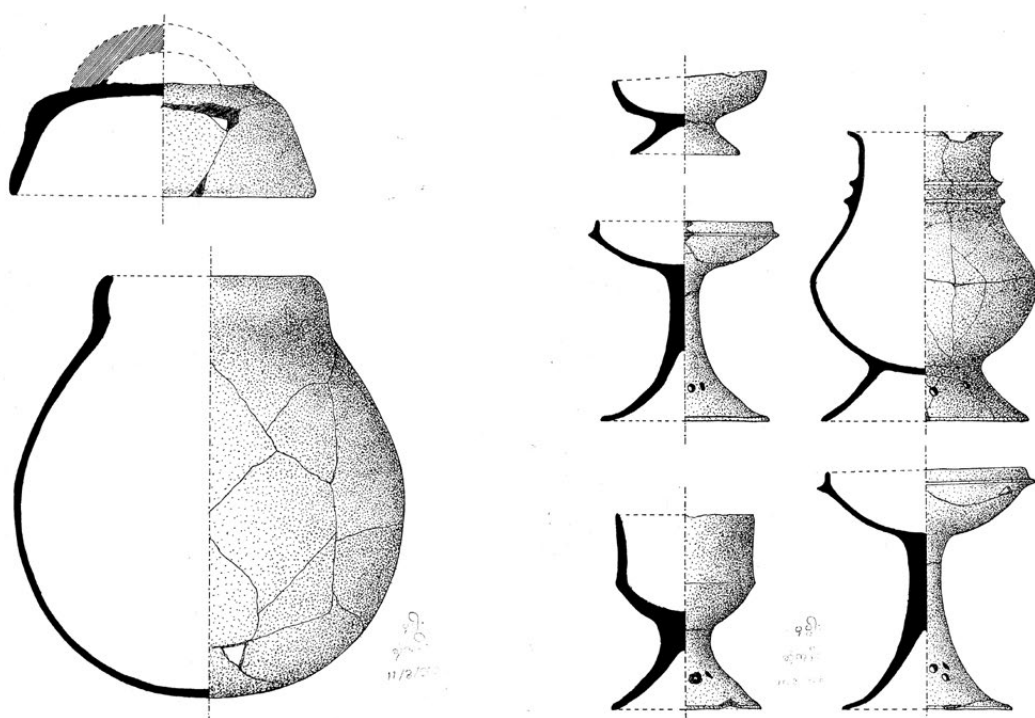


Fig. 4 Songon pottery. Drawings courtesy of U Win Maung (Tampawaddy) 2003.

While the village at Sardwingyi was abandoned within the last one hundred years, the salt lake and iron furnaces were intact during the author's visit in June 2021. On the slopes of the mountain are three pagodas, with the name of the largest Hsa-kyin Paya (ဆားကျင်း ဘုရား) recalling the salt deposits. The others are visible from Hsakyin Hpaya, higher on the slope and ridge. Songon on the north and Sardwingyi on the south slopes of Mt. Popa with artefacts of differing sophistication, illustrate the earlier comment of exhibiting, "Unmistakable evidence of continual human settlement without any detectable habitational or cultural hiatus since the Late Neolithic time." (Thaw Tint and Sein Tun 1985: 71).

Conclusion

Excavation of cemeteries at Oakaie and Nyaung'gan in the Chindwin River valley yielded evidence of the late second to early first millennia BCE, with copper-based technology from the 13- 12th century BCE through to the 6th century BCE without an onward transition to the Iron Age (Pyrce et al. 2018:704). In the Samon River Valley to the east, the dating is less secure, ranging from *circa* 600 BCE – 400/300 CE. As noted, the diagnostic 'mother-goddess' figures have not been dated, and the mother-goddess culture may not, as often presumed, have been an offshoot of the sophisticated Dian cultures of Yunnan. They may

date to the mid-second millennium BC but equally the early centuries CE. This second scenario suggests a possible overlap with the traditional chronology of early Bagan (including Mt Popa) in the early centuries CE.

The early centuries of the first millennium are one of the least informative of the chronicles but in 107 CE, Thamoddarit settled near Yon Hlut Kyun where he “began to build a city with the dwellers in nineteen villages” (Pe Maung Tin and Luce 1921/1960: 28). His heir, following the reign of the hermit benefactor of Pyusawhti, Yathekyang (152-167 CE), was Pyusawhti, extolled for having killed four giant creatures that were terrorising the area: a boar on the east, a bird on the west, a tiger on the south and a flying squirrel on the north. One of twelve festivals celebrated during his reign was the ritual ascent of Mt. Popa to review his massive army. Following the death of Pyusawhti in 152 CE, a succession of his sons and their heirs ruled. The fourth in this line was Thinlikyang (344-387 CE). At that time, two *Saga tree nats*, Min Mahagiri and his sister, were floated down the Ayeyarwaddy from Tagaung. At a spot just north of Bagan marked today by the *nat* shrine of Ma Dwe Phyu, the trees were brought to shore, carved into images and conveyed to Mt. Popa (Pe Maung Tin and Luce 1921/1960: 14, 31, 41, 46)⁴. Thinlikyang, also dissolved the federation of nineteen Pyu villages and moved his palace to Thiripyissaya village (Pe Maung Tin and Luce 1921/1960: 45). While speculative, the dissolution, like the earlier formation, may have been related to resource exploitation, east of Tuyin Taung and around Mt. Popa.

In short, the second to fifth century saw numerous interfaces with tutelary and other spirits. The construction of brick structures is likely but absolute dates in the Bagan region are needed. In addition, as with the Pyu walled sites, there were ‘memorial halls’ associated with ancestral practices within the emerging Buddhist practice. In this sequence, Mt. Popa is the sole location recurring in a narrative that shifts from place to place, and figures both in a tutelary and military guise from the prehistoric to the early historic era.

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⁴ In his lifetime, Min Mahagiri had been Maung Tin Deh, a Tagaung blacksmith, who threatened the ruler and was burned to death by the king, along with his sister, to become saga tree spirits.

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