

now divided, and how memories both persist and are erased in the current memorial landscape.

Virdee's work provides a synthesis of the existing literature on Partition that will benefit newcomers to the field who seek both a comprehensive overview and a sense of new scholarship. Her contribution to the field in balancing an emphasis on India with attention to Pakistani experiences, and in comparing cities and stories on both sides of the border, is well reflected in the volume and enhances the value of the work for a new generation of scholars who seek to work beyond the division of knowledge that Partition also enacted.

ANNE MURPHY

University of British Columbia

[anne.murphy@ubc.ca](mailto:anne.murphy@ubc.ca)

## SOUTHEAST ASIA

### *Ban Chiang's Contribution to Prehistory*

*Ban Chiang, Northeast Thailand, Volume 2A: Background to the Study of the Metal Remains.* Edited by JOYCE C. WHITE and ELIZABETH G. HAMILTON. Philadelphia: University of Pennsylvania Press, 2018. 296 pp. ISBN: 9781931707213 (cloth).

*Ban Chiang, Northeast Thailand, Volume 2B: Metals and Related Evidence from Ban Chiang, Ban Tong, Ban Phak Top, and Don Klang.* Edited by JOYCE C. WHITE and ELIZABETH G. HAMILTON. Philadelphia: University of Pennsylvania Press, 2018. 296 pp. ISBN: 9781931707787 (cloth).

*Ban Chiang, Northeast Thailand, Volume 2C: The Metal Remains in Regional Context.* Edited by JOYCE C. WHITE and ELIZABETH G. HAMILTON. Philadelphia: University of Pennsylvania Press, 2020. 240 pp. ISBN: 9781931707930 (cloth).  
doi:10.1017/S0021911820001606

We know a great deal more about emerging social complexity in the prehistoric societies of the Khorat Plateau, northeast Thailand, since the publication of these monographs from the Ban Chiang Project at the University of Pennsylvania's Museum of Archaeology and Anthropology, under the editorship of Dr. Joyce White. The Thai Archaeology Monograph Series began with a publication on the human skeletal remains from Ban Chiang in 2002. It has now published monographs 2A and 2B, exploring the metal remains and related evidence from Ban Chiang and nearby sites. This review addresses these two monographs and makes brief reference to the newly published volume 2C to consider the place of the site in a broader regional context and in world prehistory.

All chapters in the first two monographs are written by Joyce White or Elizabeth Hamilton, with specialist coauthors contributing some chapters. White and Hamilton

acknowledge the strong disagreements about the site and its place in Southeast Asian prehistory. Debates about the earliest appearance of bronze or iron at the site hardly detract from the overall importance of Ban Chiang. The monographs provide enough evidence for readers to form their own opinions about the accuracy of the interpretations and even to offer alternative hypotheses. They assemble and integrate data and arguments available in part elsewhere. But whereas earlier papers about Ban Chiang might be considered speculative and thus more provocative, these publications provide all possible evidence behind the arguments, particularly regarding metals, making information previously only available in Thai or in scattered conference proceedings available to everyone, all in one place.

Pottery from Ban Chiang, first dated by thermoluminescence at an astounding 4000 BCE, fueled looting and sensationalized speculation about the age of the site and the early appearance of bronze and later iron. Following formal excavation in 1974–75, the earliest bronze was dated at 3600 BCE and iron from 1600 BCE; these dates were later revised to 2000 BCE for bronze and 800 BCE for iron, confirming that bronze and iron metallurgy was not independently invented in Southeast Asia but came from elsewhere. Arguments continue about exactly where that “elsewhere” might be. Taken together, these monographs provide evidence for a paradigm shift in the study of Southeast Asia’s past and compelling evidence for the centrality of Southeast Asia in world prehistory.

The monographs examine the metal-related sociotechnical systems at Ban Chiang and related sites based on a detailed analysis of all metal finds. They address the following questions: How was metal technology transmitted to the region? Under what societal contexts was metal adopted and developed? What impact did the adoption of metallurgy have on prehistoric societies of Southeast Asia? These questions are more fully answered in monograph 2C.

Monograph 2A explores the assumptions underlying the analysis of the metal artifacts from Ban Chiang and related nearby sites, including detailed reviews of the relevant literatures on the context of early metallurgy. The first chapter begins the task of placing metal production in Thailand into a theoretically informed contemporary interpretive framework. White and Hamilton demonstrate impressive comparative knowledge about metallurgy in old and new world sites.

Chapter 2 begins with a summary of excavation techniques at Ban Chiang and the single test pits at nearby Ban Tong, Ban Phak To, and Don Klang. White and Hamilton explain contradictions around dating the sites and assume that there is no final absolute chronology for these sites or for other sites in Thailand. Dating techniques applied in the region all have their limitations, with the result that dates from radiocarbon, thermoluminescence, shell, bone/collagen, and other methods do not always cross-date harmoniously with each other. White and Hamilton carefully defend the position of the Ban Chiang Project team to produce a relative working chronology: early period (2100–900 BCE), middle period (900–300 BCE), and late period (300 BCE–200 CE).

Chapter 3 debunks the conventional technological determinism paradigm about metals and prehistoric society and critiques past assumptions about adoption, independent development, evolutionary stages and ages, and the constant search for origins, arguing that they promote oversimplification and distort complex social processes. Instead of using essentializing concepts such as Neolithic and Bronze Age, White and Hamilton use terms like “pre-metal” and “bronze period.”

Chapter 4 presents an alternative approach, the new archaeometallurgy paradigm, and although it is technically complex, White and Hamilton provide detailed definitions

and supporting literature every step of the way. They explain their use of concepts such as complex technology, performance characteristics, materials analysis, complex technological systems, life history framework, primary and secondary metal production, technology life cycles, style, technological traditions, and communities of practice. The sophisticated review of theory results in precise definitions that are then used in the analysis of the metal artifacts from Ban Chiang. For example, prestige goods refer to goods produced for elite patrons or goods acquired by long-distance exchange to promote elite status in a stratified society, while valuables are not made for or controlled by elites but rather serve to integrate social groups through distribution at rites of passage or ritual gift exchanges. Readers may agree or disagree, but the premises are always made crystal clear.

Chapter 5 provides the economic context for the development of metal in what White and Hamilton call “middle-range societies” such as Ban Chiang—societies that are neither mobile bands nor bureaucratic states, yet demonstrate social complexity and great local variability. Through a comparative study of the richness of metal technology and the economic specifics of craft production, trade, and exchange, the analysis of metal artifacts has the potential to reveal important details of past social and economic networks, including the fact that the introduction of metal has had no uniform effect on societies in Southeast Asia or elsewhere.

Chapter 6 on the geomorphology of the region identifies where known metal resources are located. For example, no metallic minerals were found close to Ban Chiang tradition sites. However, copper and tin sources were found a few hundred kilometers away from the Khorat Plateau sites. The chapter provides a detailed tectonic history of island and mainland Southeast Asia to explain the origin of potential metal deposits in the region. While gold, copper, and silver were found as native metals, most could only be extracted with difficulty.

Chapter 7 reconstructs the technical processes and sequences of metal production, noting the difference between technical requirements and choices made by the producers. Attention is focused on copper, tin bronze, high-tin bronze, and low-carbon iron, metals that are used in the Ban Chiang artifacts analyzed in detail in the next monograph.

Volume 2B contains the detailed analysis of the metal remains from Ban Chiang and related sites based on the conceptual and comparative reviews in volume 2A. The first chapter introduces the analyses of metals from the Ban Chiang sites, followed by a chapter on the methods of analysis. White and Hamilton subjected more than 170 artifacts to metallographic analysis and over 50 to elemental analysis out of 639 well-provenienced artifacts from the Ban Chiang sites excavated in 1974–75. By chapter 3, we learn directly about the 639 cleaned and preserved prehistoric metal artifacts found at the Ban Chiang sites. Copper-base metal was used primarily for ornaments, with copper-base tools less common and copper-base weapons almost nonexistent at the site. All metal artifacts, complete and fragmentary, are then grouped into classes: personal ornaments, implements such as adze/axes, blades and points, and other fragmentary pieces. Bangles, the most common ornaments found at the sites, are categorized into standardized types, as well as unique shapes. Bells, too, were both standardized and unique in form. Detailed drawings are provided of all artifacts.

The results of the detailed technical analysis of the metal from the sites are provided in chapter 4, to learn more about the complex technological system in the region and how the metal technology changed over time. Laboratory examination included metallography and elemental analyses, and was done on 163 copper-base and 8 iron artifacts, revealing that bronze technology arrived in the region well developed.

Chapter 5 examines crucibles in detail, demonstrating what molds and slag reveal about the technological process of metal production. Crucibles tempered with rice chaff, quartz, and grog suggest widely distributed sophisticated crucible metallurgy around Ban Chiang. This could mean that villages had their own metalworkers or that itinerant metalworkers visited villages and made the crucibles locally on-site.

Chapter 6 reviews the depositional contexts of the metal artifacts and demonstrates the importance of examining all artifacts (both broken and intact) from all contexts (both burial and nonburial), used in ritual and in everyday domestic life. Ban Chiang and other nearby sites were not cemeteries but mixed mortuary/occupation sites, with burials located close to houses. Clearly, metal production at Ban Chiang was integrated with other activities of life, and not segregated as a separate elite or ritual activity. Over 80 percent of ornaments such as bangles, rings, bracelets, and anklets come from burial sites. Blades, adzes, and points were found in burial and nonburial contexts. Surprisingly, over half of the burials with metal artifacts belonged to infants or young children, a point I speculated about long before these monographs confirmed the evidence.<sup>1</sup> The goods buried with each body appear to be unique to that individual, suggesting the accumulation of valuables rather than prestige markers of elite class.

The final chapter presents a life history perspective of metal artifacts from Ban Chiang and puts the site into a broader regional context. The chapter summarizes the social context for metal use at the site, including the initial appearance of copper-base and iron technology, the variation in the role of metal-related activities over time and space, and a detailed comparison of grave goods and occupation evidence. The initial appearance of metal commonly consists of small ornaments, simple implements and fragments; both copper and iron artifacts appeared in nonburial deposits before they appear as grave goods.

Both monographs have excellent tables, figures, glossaries, and bibliographies, as well as useful and much-needed indices (with no entries for ceramics or pottery). Monographs 2A and 2B do not stress “big-picture” breakthroughs, but rather meticulously detailed evidence for local processes of change in metal production and use that shed light on the human condition in prehistoric northeast Thailand. They focus on the evidence in context, the carefully excavated knowable past, not on “the origins of” or “the foundation for the future.”

Volume 2C does more of the work of synthesis, as it moves beyond Ban Chiang, both geographically and conceptually, and places the site in broader regional context, starting with northeast and central Thailand, regions drained by the Middle Mekong and Chao Phraya Rivers. Two of the six chapters provide specialized summaries of copper mining and smelting in Southeast Asia (Vincent C. Pigott), and lead isotope characterization and provenance of copper-base artifacts from Ban Chiang and Don Klang (T. O. Pryce). The remaining chapters synthesize all available evidence to provide an updated socioeconomic model of prehistoric metallurgy in mainland Southeast Asia.

The evidence reveals a regionally distinctive configuration for ancient metallurgy as an integrative activity that knits together a stable regional exchange system that endured for hundreds of years. By comparing sites in the region, White and Hamilton identify differences in the presence and prevalence of metal production-related artifacts and differences in smelting procedures, suggesting that different sites may have had distinctly different communities of practice, while at the same time sharing common underlying cultural and technological metallurgical traditions. The analysis suggests that metal was widely dispersed within communities and not controlled by social or political elites.

<sup>1</sup>Cf. Penny Van Esterik, “Genealogies of Nurture: Of Pots and Professors,” *Journal of the Burma Research Society* 15, no. 1 (2011): 21–42.

Southeast Asia had a sophisticated metal tradition by 2000 BCE, a thousand years before previously suspected, distributed in egalitarian villages rather than urban centers. Metal appears in the region unevenly and in small quantities in so-called Neolithic contexts, at different points in time. This confirms that the European three age system does not fit Southeast Asia, nor do attempts to link technology directly to social developments such as warfare, rice agriculture, classes, trade, or centralized states, based on the false assumption that the production of bronze led to weapons, war, specialization, powerful elites and civilization. As Ban Chiang demonstrates, metal use does not always lead to state level complexity. Prehistoric Thailand was not a class-based, warrior-focused Bronze Age society. The inhabitants of Ban Chiang appear more interested in fertility than interpersonal violence.

These are not coffee table books, nor are they an easy read for a general audience. They are definitive reference works for those interested in the prehistory of Southeast Asia or archaeometallurgy. For other readers, the volumes provide brilliant theoretically sophisticated insights into the relation between technology and social change, and the development of social complexity and class, while proposing a new way to look at the development of states. They challenge colonial notions of Southeast Asia as a cultural backwater receiving the benefits of civilization from elsewhere (India, China, Europe); at the same time, they present new ways to think about the attributes of civilization itself.

Ban Chiang is about much more than metal; it hints about aesthetic priorities. The metal itself reveals that its makers were more interested in shape, shine and color than hardness, qualities ideal for ornaments not weapons or even tools. In addition, the late-period red-on-buff painted pottery (which White calls idiosyncratic and flamboyant) reveals an aesthetic sensibility unrelated to function. Further analysis of burial ritual may shed light on these and other aesthetic preferences. Although examining this aesthetic creativity will entail more than materialist science-based analysis, it provides another way of framing civilization. No examination of social complexity can ignore aesthetics. At Ban Chiang, we see hints of people who go beyond practicality to a place of creative imagination—a place where decorative crafts matter and infant burials are gifted with personal ornaments. Analysis of these activities will provide additional insights into Ban Chiang society, including suggesting how complex information could be transmitted across communities and generations.

To an old-fashioned four-field anthropologist like me, these volumes reinforce the importance of reconnecting the subfields of anthropology. Archaeology alone is not enough to make sense of Ban Chiang and to answer the big questions about social change in Southeast Asia and indeed the world. Physical anthropology, linguistics, and cultural anthropology all have important contributions to make, as well as the technical specialties associated with archaeometallurgy. For example, models of early population movements in Southeast Asia rely on historical linguistics, population genetics, and archaeological evidence to explain the spread of people and their subsistence crops (root, millet, and rice) in the region. Based on prehistoric and protohistoric evidence from Thailand, we might question the wisdom of looking for or assuming the existence of packages of uniform material/cultural complexes that could be labeled chronologically as Neolithic or Bronze Age, or linguistically as Austronesian or Tai.

It is extraordinary how much information can be gleaned from a single artifact class, carefully excavated and fully analyzed. Nevertheless, the monographs fuel a desire to see the picture that would emerge from an integrated analysis of metal *and* ceramics *and* burials *and* subsistence patterns. For example, it will be important to know how the community of practice and the social network of potters relate to that of metalworkers, or whether burial practice and rituals are more localized than technological processes.

To have Ban Chiang take its rightful place in world prehistory, the authors might consider publishing an inexpensive, accessible paperback for use in classrooms, a book devoid of literature reviews and technical analyses, but rich in evidence and interpretation that integrates information on ceramics, metals, ecology and burial information from the site. They could use more subtle nuanced terms such as pre-metal, bronze period, and iron period, as refinements of the three age system familiar to the public, without belaboring the theoretical basis for the labels. Popular discourse embraces terms like Stone Age, Bronze Age, and Iron Age, as they evoke memories of student simplifications of world prehistory. These typologies persist as first steps, heuristics that oversimplify the processes of social change, but they may have a place in bringing the work of archaeologists to bear on popular understandings of our prehistoric past. Meanwhile, specialists will have these groundbreaking definitive monographs to study for years to come.

PENNY VAN ESTERIK  
 York University, Toronto  
[esterik@yorku.ca](mailto:esterik@yorku.ca)

*Indonesia: History, Heritage, Culture.* By KATHLEEN M. ADAMS. Ann Arbor, MI: Association for Asian Studies, 2019. 132 pp. ISBN: 9780924304897 (paper).  
 doi:10.1017/S0021911820001618

This book, the twentieth in the Association for Asian Studies' Resources for Teaching About Asia Series, "Key Issues in Asian Studies," is the first to focus on Indonesia. Its intent is to "convey some of Indonesia's historical and contemporary richness," as Kathleen M. Adams puts it, and to demonstrate the country's potential for playing strategic and economic roles in the region and beyond. Adams does so admirably, portraying the essential facts about the country with clarity and authority that makes this little book a pleasure to read.

Adams, a prominent Indonesian scholar with years of ethnographic fieldwork in Sulawesi and Alor to her credit, organizes her narrative from a historical perspective, beginning 1.5 billion years ago and bringing the reader to contemporary times and offering a prognosis of what the future might hold for the nation-state. In her introduction, Adams calls attention to three currents that run through her seven short chapters, the first of which is envisioning Indonesia as a nation of continuities and discontinuities. Here, she dwells upon such influential elements of the natural environment as water and the monsoons and shows the ways in which they exert their respective influences on human activity. The second current considers the idea of Indonesia not as a "natural" self-evident entity, but as a cultural concept derived from European perceptions during the time of Dutch colonization and only in the 1920s becoming assimilated into indigenous usage with its acceptance by independent-minded Indonesians. The third current traces the various ways in which the nation builders brought the many and diverse ethnicities and *adats* in the archipelago together.

Each chapter begins with an image from which Adams develops the themes of that chapter. A picture of one of the celebrated bronze kettle drums, once ubiquitous trading items throughout the region and currently prized heirlooms among certain ethnic groups, sets the scene for chapter 1. In this chapter, Adams describes the earliest prehistory and explains how the first human populations established themselves on the islands. The following chapter continues the story from 500 CE with an account of how Indian