## **BOOK REVIEW**



## Phillip L. de Barros: La Métallurgie du Fer en Pays Bassar (Nord-Togo) Depuis 2400 Ans. Tome I: L'Âge du Fer Ancien (de 400 avant J.-C. à 130 après J.-C.)

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This volume by Philip L. de Barros is the result of more than three decades of research on ancient iron metallurgy in Bassar Country, a region in northern Togo well known for an abundance of metallurgical remains. The book includes 256 pages, richly illustrated with 57 figures and 18 tables and organized into four main sections and two appendices.

In the preface, de Barros explains how he came to do thesis research in Togo, where he discovered the great archaeological potential of Bassar Country. The first section presents an overview of the natural geography of this region with an emphasis on climate, ecology, hydrography, and topography. This latter is important because topographic relief allows the author to identify the sources of different ores. This is followed by a summary of archaeological research in Togo, and West Africa more broadly, on periods prior to the establishment of ancient metallurgy. Here, de Barros presents some sites from the past 50,000 years (Later Stone Age) which have yielded chipped stone

tools, polished axes, and, after 9400 calBC, ceramic assemblages with twisted and braided fiber roulettes. He then addresses the ongoing scientific debate about the origin and diffusion of African iron metallurgy. Based on a critical analysis of dates proposed by different archaeologists, de Barros concludes that additional data will be needed to confirm or refute claims about the origins of iron metallurgy in Africa.

The second section of the book addresses the question of early iron metallurgy in Togo at the site of Dekpassanware. After first presenting a history of research, de Barros proceeds to discuss the spatial organization of the site. High-quality maps and plans make it possible to distinguish artisanal areas from residential areas, as well as areas with high concentrations of metallurgical and/or ceramic remains. Radiocarbon and thermoluminescence dates from these different areas then help to establish a chronological framework of four phases: a Later Stone Age phase; a transitional phase between the Later Stone Age and the Iron Age; an Early Iron Age phase; and a Later Iron Age phase. The author then presents data from excavations in the different areas, including diverse material remains listed in tables and linked to the four chronological phases. Based on these observations, the author argues that the availability of local resources (e.g., clay, ores, water, fuel) shaped the spatial organization of the site, as well as relationships between the artisanal and residential areas.

The third section is devoted to ceramic typology and traditions in Bassar Country. Here, de Barros identifies

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four major ceramic series in an assemblage of more than 26,500 pottery sherds: the Bassar series; the Fine Mica (*Mica fin*) series; the Brilliant Mica (*Mica brillant*) series; and the Brown (*Brun*) series. For each series, the author discusses the paste composition, the vessel types and forms, the decorative motifs, and the finishing and firing methods. He also identifies the likely clay sources for each series based on comparison to geological formations across western and northern Togo. This rich description of ceramic attributes allows de Barros to examine close links between the environment, decorative motifs, and potters' social identities, as well as the chronology of sites across Bassar Country.

The fourth and final section of the book focuses on an Iron Age smelting site near the hill known locally as Bidjilib. Excavations of more than twenty units at this site uncovered a blast furnace and associated anthropogenic deposits. Based on an analysis of the slag, iron objects, and other artifacts, de Barros suggests that iron ores came to this location from Bidjilib hill, and that iron smelting activities in Bassar Country were sometimes accompanied by rituals.

Overall, the book is well written, demonstrating a comprehensive sense of the field and great rigor in data collection. We can salute the critical spirit of the author and the distance he takes from the chronological arguments proposed by other researchers. Nevertheless, there are some issues arising from the presentation of data. For example, the interpretations of tuyère dimensions and surface treatments from Dekpassanware and the BAS-273 site are questionable (pp. 169-170); differences between these sites could also be linked to different reduction methods, the size of the furnaces, and/or economic needs. In terms of volume organization, it would have been helpful to orient the chapters around sites with shared assemblage types—lithic tools, pottery sherds, or metallurgical remains—to better draw comparisons between them and draw social interpretations from these datasets. For example, a brief presentation of the furnace remains does not discuss their associated reduction techniques, which could be inferred from systems for ventilation and slag evacuation. Similarly, the discussion of ceramics focused more on sources of raw materials than on the social groups responsible for their production and use. Finally, some word choices are inappropriate to the technical vocabulary of metallurgy. On pages 73–78, the author uses the term "slag pit" (puit à scories) to designate the internal volume of the furnace base and "chimney" (cheminée) to designate the furnace wall built from clay. In the field of archaeometallurgy, the former is known as "the tank" (la cuve) and the latter is called "the furnace wall" (la paroi de four).

Beyond these minor criticisms, this book is a quality work of scientific research. The author is to be commended for his work to inventory, excavate, and date sites across Bassar Country—this is a significant contribution to the chronological framework for iron metallurgy in Togo and beyond.

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