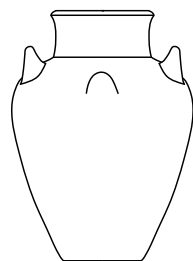


Göltepe Excavations

Tin Production at an Early Bronze Age Mining Town
in the Central Taurus Mountains, Turkey



PREHISTORY MONOGRAPHS 64

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Tin Production at an Early Bronze Age Mining Town
in the Central Taurus Mountains, Turkey

by

Kutlu Aslıhan Yener

with contributions by

Müge Bulu, Talisha Chaput, Mahmut G. Drahor, Alexandra Fletcher,
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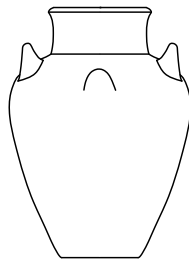
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A new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it.

Max Planck (1949, 33–34)



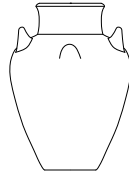
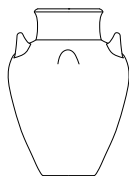


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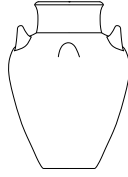
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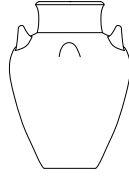
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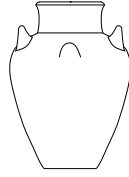
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Preface

The long span of time between the end of the field excavations at Göltepe in 1993 and this publication was unfortunate but unavoidable. Several other excavation and survey commitments took precedence, including the Amuq Valley Regional Projects, Tell Kurdu, and Alalakh, all of which intervened to delay the publication of this unique, special-function site. Each university and research institution in which the author worked required attention to specific research agendas and had differing support structures. Accordingly, the various arms of the archaeometallurgy research project began in Boğaziçi University in Istanbul, Turkey. A series of fellowships at the Smithsonian Institution followed, and finally positions at the Oriental Institute of the University of Chicago and Koç University in Istanbul. Given that working in some of these institutions required cross-Atlantic moves, time was lost in the processing of the archaeological finds. Regardless, an impressive amount of articles and books from these investigations have been published in a timely manner, making public the analytical aspects of the finds from both the Kestel tin mine and the Göltepe miners' village. Nevertheless, the specifics of Göltepe's Early Bronze Age (EBA) archaeology remained largely unknown until this publication.

Further slowing the publication of this excavation was the enormous expenditure of effort required to address the adverse reactions by some scholars to finding a tin resource in Turkey. While most paradigm-changing discoveries are met with skeptics, the magnitude of opposing opinions resulted in time taken from publishing the archaeological finds and contexts for the production technologies. This book addresses this need and also updates the implications of two decades of archaeometallurgical research by other scholars.

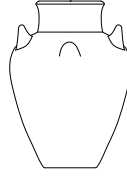
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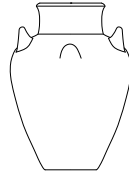
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List of Abbreviations

| | | | |
|----------|---|---------------|---|
| ARIT | American Research Institute in Turkey | LC | Late Chalcolithic |
| B | bone (cataloged) | m | meter(s) |
| BA | Bronze Age | M | metal object (cataloged) |
| BT | profile trench (backhoe) | m asl | meter(s) above sea level |
| C | clay object (cataloged) | max. | maximum |
| cal. | calibrated | MBA | Middle Bronze Age |
| cm | centimeter(s) | MC | Middle Chalcolithic |
| dia. | diameter | mm | millimeter(s) |
| EB | Early Bronze | μ | micron(s) |
| EBA | Early Bronze Age | μm | micrometer(s) |
| EDS | energy dispersive spectrometry | MRN | Main Registration Number |
| FCN | Fine Context Number | MTA | Maden Tetkik ve Arama Genel Müdürlüğü (General Directorate of Mineral Research and Exploration) |
| g | gram(s) | NAA | neutron activation analysis |
| ha | hectare(s) | ND | no date |
| HMS | Historical Metallurgy Society | NISP | number of identified specimens |
| ht. | height | NIST | National Institute of Standards and Technology |
| ICP-MS | inductively coupled plasma mass spectrometry | no. | number |
| kg | kilogram(s) | NW | northwest |
| km | kilometer(s) | P | pottery (cataloged) |
| L | liter(s) | ppm | parts per million |
| L | lithic object (cataloged) | | |
| L. | length | | |

| | | | |
|-----------|--|------------|------------------------------|
| S | stone object (cataloged) | VES | vertical electrical sounding |
| SL | slag (cataloged) | w. | width |
| SP | ore (cataloged) | wt. | weight |
| SEM | scanning electron microscopy | XRD | X-ray diffraction |
| SEM-EDA | scanning electron microscopy- energy dispersive analysis | XRF | X-ray fluorescence |
| SPT | stratigraphic profile trench | $\Omega.m$ | ohms per meter |
| T | test pit | | |
| th. | thickness | | |
| TÜBİTAK | Türkiye Bilimsel ve Teknolojik Araştırma Kurumu (Scientific and Technological Research Council of Turkey) | | |