Ayşe Gürsan-Salzmann, *The New Chronology of the Bronze Age Settlement of Tepe Hissar, Iran.* University Museum Monograph 142, University of Pennsylvania Museum, 2016 408 pages | 8 1/2 x 11 | 238 illus. ISBN 978-1-934536-83-4 | \$69.95 | £45.50)

The prehistoric site of Tepe Hissar (or "Tappeh Hesar") in the Damghan Plain of Northeastern Iran has attracted scholarly attention for almost a century, and remains the type-site for the 4th-3rd millennia BC of the entire region. This somewhat dubious honor exists despite the fact that less than 10% of Erich Schmidt's 1931-32 excavations at Hissar were ever published (see Schmidt 1933, 1937). Furthermore, the 1976 Restudy Project under Robert H Dyson, Jr., and Maurizio Tosi, which brought modern stratigraphic excavation techniques and radiocarbon dates to the site (see Dyson & Howard 1989), was never firmly correlated with Schmidt's data as originally intended. To fix this problem, Dyson invited Dr. Ayşe Gürsan-Salzmann, a former student of his, to begin working on the Schmidt material from Hissar as a post-doctoral scholar at the University of Pennsylvania Museum. The task proved to be far more monumental than expected, given the difficulties of working with archival excavations and Dr. Gürsan-Salzmann's primary role as ethnoarchaeologist for, and Assistant Director of, the Penn Museum's Gordion Project in central Turkey (see Gürsan-Salzmann 2005). What was supposed to take a few years became a Herculean labor.

I came to know Ayşe as a young graduate student at Penn working with Dyson and Prof. Vincent Pigott (the excavator in 1976 of the Main Mound with his wife Susan Howard) to analyze the metallurgical remains from Hissar collected by the 1976 team for my dissertation (Thornton 2009). At the time, Ayşe had recently returned to the Hissar project to finish correlating Schmidt's work on the Main Mound and North Flat with the 1976 Restudy Project's data (most especially with Howard's unfinished dissertation work on the stratified ceramic sequence). I began working with Ayşe in order to better understand the site; her ceramic database (Gürsan-Salzmann 2016: 9-10) proved invaluable in my reassessment of the stratigraphic sequence of the Main Mound first proposed by Howard (1989) and revised in my dissertation (Thornton 2009; see also Thornton et al. 2013). I state all this for background, but also for the sake of full disclosure: I worked (and continue to work) closely with Ayşe on the Hissar Project, and was invited by her to read and comment upon some of the chapters included in the resulting volume. However, the enormous amount of archival work, not to mention the data visualization and analysis, presented in The New Chronology of the Bronze Age Settlement of Tepe Hissar, Iran, are entirely her own.

Early in this book (p. 7), the reader is presented with the key objectives that drove Gürsan-Salzmann's reassessment of Tepe Hissar. They are:

1. To establish a ceramic chronology for Hissar using the 1976 sherds collected by Susan Howard;

- 2. To use this refined ceramic chronology to date Schmidt's burials on the Main Mound and North Flat (which comprise 45% of all excavated graves at the site [p. 226]);
- 3. To thereby reconstruct the mortuary behavior of the ancient peoples of Hissar; and
- 4. To understand Hissar's "sociocultural trajectory" and place the site within a broader regional and inter-regional context.

To accomplish these goals, the author starts with a detailed explanation of Schmidt's excavations in the early 1930s (Chapter 1) and the later re-study season in the 1970s (Chapter 2). Both chapters demonstrate the complexity of this tell site, in which the mound served as a place for the living and the dead, for domestic life and industrial production. Chapter 3 provides a typology of the ceramics collected by the 1970s team, and compares them to known types from the Schmidt collection. Chapter 4 takes these data and applies them to Schmidt's numerous burials from the Main Mound and North Flat, allowing us for the first time to place many of these burials (and their contents) in chronological and spatial context. Chapter 5 is an attempt to analyze these newly-available data by comparing burials by age, sex, and "wealth" to others of the same period and also diachronically at the site. The author then attempts to synthesize all these data in Chapter 6 in pursuit of the fourth objective outlined above – placing Hissar into a broader sociocultural framework.

There are many aspects of this volume that make it commendable to an audience interested in the late prehistory of Iran. For example, the author's love of Schmidt's photography is evident, and when they are accentuated by her annotations and superb curation, the volume brings the 1930s excavations to life again (see also Gürsan-Salzmann 2007). Her synthesis of all the previous excavations at Hissar and studies of its artifacts (Chapters 1–2) is both necessary and nicely apportioned. However, by far the most important aspect of this new book is that it makes available almost half of all the data produced by Schmidt in the 1930s. In particular, the annotated sections of Chapter 4 and the "Pottery Charts" of Appendix 1 will be incredibly beneficial for future scholars who wish to reconstruct Schmidt's contexts (although the use of Schmidt's outdated periodization in the Pottery Charts is likely to confuse the uninitiated reader; the author's "Groups" or my "Phases" would have been more helpful). Similarly, the pottery drawings organized by Phase in Chapter 3 provide the first detailed ceramic sequence for an excavated site in Northeastern Iran, which will benefit scholars working on other sites in the region. Last but not least, the chronological schema in Chapter 2 (Table 2.2; p. 69), which shows all the different terminologies used by various researchers in one chart, will be the key to unlocking the Hissar contexts for future scholars.

As should be expected of two scholars working closely on the same material, Dr. Gürsan-Salzmann and I hold many differing opinions on various issues related to the Hissar corpus. For example, the author emphasizes throughout this book the importance of vessel form and external characteristics (e.g., painted design; slip

color; surface burnishing) for establishing the ceramic sequence at Hissar. I, on the other hand, approach ceramics from a technological viewpoint and would have organized the vessels first on ware type (based on fabric and inclusions) before looking at vessel forms and external characteristics. While some might argue that my approach is more *de rigueur* in ceramic studies, I should note that my initial look at Howard's collection of sherds in the Penn Museum revealed at least 25 different ware types across all periods. Thus, for the sake of simplicity, it is highly likely that Ayşe had the right idea after all.

Another area of concern is in regards to the mortuary analysis in Chapter 5. It is not always clear from Schmidt's records whether his sexing of the burials is based on assessment of the skeletons, or (more likely) on the "gendered" goods found with the skeletons. There have been various studies of the skeletal material (e.g., Krogman 1940; Nowell 1978; Hemphill 1999; Sheth 2002; Afshar 2014), but none has attempted to reassess the sex and/or gender of the Hissar burials (vis-à-vis Schmidt's prescriptions). While such a study was far beyond the scope of this volume, Dr. Gürsan-Salzmann's very capable mortuary analysis (particularly pp. 252–256) must be treated with a slightly critical eye in regards to the sex/gender classification until these data can be checked through modern analysis of the available skeletons.

Overall, this book is a very important contribution to the scholarly community, and part of a larger push by the University of Pennsylvania Museum to get its archived Iranian excavations published and available for study (see, e.g., Danti 2013; de Schauensee 2011; Matney et al. forthcoming). Such volumes are immensely important for archaeologists working in Iran today, as modern excavation techniques preclude the large-scale horizontal exposure of sites so common in earlier decades. Much ink has been spilled in recent years comparing new excavation projects with Tepe Hissar by incredibly talented scholars (e.g., Helwing 2006; Mousavi 2008; Mahfroozi & Piller 2009) who unfortunately had to rely on Schmidt's earlier reports to pull analogies. Dr. Gürsan-Salzmann's dedication to the Schmidt collection will finally allow these other scholars to engage with the Hissar material in a more realistic manner.

While this volume ably demonstrates how much information can be gained by returning to unpublished excavations, I wish the author had done more to provide her opinion of what still needs to be done with the Tepe Hissar collection at the University of Pennsylvania Museum. For example, only Schmidt's excavations on the Main Mound and North Flat are included in this book. That leaves the Painted Pottery Flat, the South Hill, Treasure Hill, Red Hill, and The Twins still to be studied and published. Which areas of the site does she think would be most fruitful for future archival archaeologists? If archaeologists are ever able to return to Hissar, where should they focus their attention to clear up any lingering problems with the chronology or stratigraphy? Are there certain parts of the Hissar collection at the Penn Museum that are deserving of further study (e.g., DNA analysis of the skeletons; petrographic analysis of the ceramics; use-wear analysis of the lithics). While the

author undoubtedly felt uncomfortable making such proclamations, she has established herself with this volume as an authority on Tepe Hissar and Schmidt's excavations. The scholarly community owes Dr. Gürsan-Salzmann an enormous debt of gratitude for completing this work, and it is only a shame that we did not benefit more from her insight into which parts of the Schmidt Hissar collection would reap the most benefits.

Errata:

- **pp. 79–80** Building 1 (upper) is Phase D (not E–D) and Building 1 (lower) is E–D (not E) these are written correctly elsewhere in the volume (use Table 2.2 as reference)
- p. 81 Table 3.4 defines Phase D as Early Bronze Age, Phase B as Middle Bronze Age, and Phase A as Late Bronze Age. In reality, the EBA spans Phases D, D–C, C, and B, while the MBA comprises Phases B through A. There are no known Late Bronze Age layers at Tepe Hissar, although they exist at Tureng Tepe, Gohar Tepe, and other sites in northeastern Iran.
- **p. 144** The two burned rooms from the North Flat excavated by Dyson were Phase D–C Transitional, not Phase C (it is written correctly elsewhere in the volume)
- **p. 272, Fig 6.3** The black-on-red wares from Hissar are not "similar to Anau I black-on-red ceramic type dated ca. 4500–4200 BC" but are arguably derived from that style (see Dyson & Thornton 2009)
- p. 280 There are actually two C14 dates for the Burned Building, and they don't agree (see Appendix 4), although Dr. Gürsan-Salzmann's dating of this structure is probably correct

CHRISTOPHER P. THORNTON, Ph.D.
CONSULTING SCHOLAR, ASIAN SECTION
UNIVERSITY OF PENNSYLVANIA MUSEUM
and
SENIOR DIRECTOR, CULTURAL HERITAGE
NATIONAL GEOGRAPHIC SOCIETY
cthornto@ngs.org

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