

AMERICAN JOURNAL OF ARCHAEOLOGY

THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

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Empire in the Everyday: A Preliminary Report on the 2008–2011 Excavations at Tsaghkahovit, Armenia

LORI KHATCHADOURIAN

Abstract

Between 2008 and 2011, the joint American-Armenian project for the Archaeology and Geography of Ancient Transcaucasian Societies (Project ArAGATS) conducted archaeological excavations at the Iron Age settlement of Tsaghkahovit in central-western Armenia. This work built on research begun in 2005 to closely examine the materiality of social and political life in a rural settlement of the Achaemenid Persian empire (ca. 550–330 B.C.E.). Intensive investigations at Tsaghkahovit have revealed the remains of a community clearly enmeshed in select socio-political institutions of the empire yet one also committed to reproducing and revising the contours of everyday life on the Armenian highlands on its own terms. The site thus invites consideration of the quotidian material and spatial practices of imperial subjects who both sustained and attenuated the viability of Achaemenid sovereignty in the Armenian satrapy. This article reports on recent excavations and offers preliminary interpretations of the findings.*

INTRODUCTION

The archaeology of the Achaemenid Persian empire has undergone an awakening in recent decades, both

within and beyond the imperial heartland of south-western Iran.¹ Long-term research underway at the site of Tsaghkahovit in central Armenia takes its place in this wider effort to come to terms with the material dimensions of Persian imperialism, by all accounts a quite novel approach to “world” dominion.² Indeed, the South Caucasus as a whole occupies a prominent place in this revival. In recent decades, investigations in Georgia, Azerbaijan, and Armenia have begun to shed light, most especially, on the spatial instruments of Achaemenid hegemony in the empire’s northern highlands. With their stone-hewn column bases and associated monumental buildings that iconically conjure the imperial centers in distant Fars, sites such as Gumbati (in Georgia), Sari Tepe and Qarajamirli (in Azerbaijan), and Beniamin (in Armenia) have attracted particular attention. They suggest the work of privileged actors with direct knowledge of Achaemenid spatial practices and the imperial aesthetic.³ At Ere-buni (in Armenia) and Altuntepe (in Turkey), long taken to be political hubs of the Armenian satrapy on account of their hypostyle halls, revived excavations are

*Several institutions and individuals made this study possible. The 2010 and 2011 investigations were funded by a Collaborative Research Grant from the National Endowment for the Humanities (NEH). Any views, findings, conclusions, or recommendations expressed in this publication do not necessarily represent those of the NEH. Particular thanks are due to Ruben Badalyan and Adam T. Smith, who provided invaluable input throughout the research process. I am especially grateful to Badalyan for securing the excavation permit and to Smith for producing figs. 2 and 3 and supplying supplementary financial assistance in 2008 through the Adolph and Marion Lichtstern Fund of the University of Chicago’s Department of Anthropology. I also appreciate the support of the Institute of Archaeology and Ethnography of the National Academy of Sciences of Armenia, particularly institute director Pavel Avetisyan, conservators Lilit Manukyan and Arevik Ayyazyan, artist Narine Mkhitarian, and photographer Vram Hakobyan. The efforts of many Project ArAGATS team members, including Catherine Kearns, Lilit Ter-Minasyan, Elizabeth Fagan, Jacob Nabel, Hasmik Sargsyan, and Maureen Marshall, are likewise much appreciated. Belinda Monahan and Roman Hovsepyan conducted the faunal and archaeo-

botanical analyses reported in the appendices, for which I am most grateful. Hovsepyan also created table 2. Ian Lindsay kindly shared the Iron III data from his investigations of Late Bronze Age Tsaghkahovit. Thanks are also due to Olivia Nash for assisting with fig. 4. I am grateful to the anonymous reviewers for the *AJA*, to Director of Publishing Madeleine Donachie and Editor-in-Chief Sheila Dillon for bringing this article to press, and to Assistant Editor Katrina Swartz. Lastly, this work would not have been possible without the tireless efforts of field crews and friends from Tsaghkahovit and Aparan. Figures are my own unless otherwise noted.

¹For recent overviews of Achaemenid archaeology in both heartland and provinces, see Briant and Boucharlat 2005; Henkelman 2012; Khatchadourian 2012; Potts 2013.

²On the Achaemenids as imperial innovators, see, e.g., Root 1979, 2000; Lincoln 2007, 2012; Pollock 2006.

³Furtwängler 1995; Furtwängler and Knauss 1996, 1997; Gagošidze 1996; Furtwängler and Lordkipanidze 2000; Gagošidze and Kipiani 2000; Knauss 2000, 2001, 2005, 2006; Knauss et al. 2007, 2010, 2013; Babaev et al. 2009; Neuser and Furtwängler 2011. On iconicity, replication, built space, and imperial provinces, see also Coben 2006.

challenging prevailing chronologies and necessitating careful reevaluation of the Achaemenid-era occupations.⁴ Meanwhile, the Iron Age settlement history of relatively unexplored areas is now coming into view.⁵ This energized phase in the archaeology of Achaemenid Caucasia and neighboring lands builds on decades of sporadic or untargeted investigations at various settlements and cemeteries across the region that have provided the basis for the period's material-culture sequences.⁶ But as would be expected in the absence of sustained, intensive, and systematic research, the existing sequences are rudimentary. Ongoing research at Tsaghkahovit is helping redress this state of affairs.

Even as the research at Tsaghkahovit works to define the material culture repertoires and basic subsistence strategies of an underexplored era, its broader commitment is to detail the materiality of local and imperial relations of power and the conditions of subjection and regulated autonomy that lie at the heart of any imperial project. In this way, the investigations at Tsaghkahovit chart an unexplored interpretive path in the archaeology of the Achaemenid empire—one that disavows the neat and monolithic understanding of power that lurks beneath the seemingly innocuous intent to detect the empire's "impact" on satrapal communities.⁷ In its place, sustained focus on a single rural settlement serves to bring forward the social and material entanglements in the everyday that reproduce or dilute the efficacy of rule.

Such a concern for the politics of everyday life within empire must come to terms, in the first instance, with the persistent vulnerabilities of imperial sovereignty, which recent theorizations of empire have brought into view.⁸ We now understand that, for all their capacity to dominate and exploit, agents of empire also clear spaces for autonomous action as part of their inescapable dependency on the subjugated, creating forms of sovereignty that are always layered,

always aspirational rather than attained. These spaces for autonomous action within expansive macropolities are best viewed "less as a temporary concession to particular challenges of administering empire and more as a general premise of rule."⁹ Yet the social and geographic arenas located beyond the tightly regulated zones of empire nevertheless become part and parcel of imperial projects, not residing somehow outside them. Herein lies the fundamental contradiction at the heart of all empires—some of the very efforts intended to sustain them (e.g., "partial sovereignty,"¹⁰ "decentralized despotism,"¹¹ the co-opting or "civilizing" of local elites who turn to "mimicry"¹²) can plant the seeds of their own unraveling by cultivating alternative social and political affinities.¹³ For the archaeology of empire, there are significant implications when the layered texture of imperial sovereignty is brought to the fore. Such an archaeology must attend not only to those material practices of production and consumption among the subjugated that palpably result from the forces of domination. Also demanding our attention are the everyday spatial and material routines that potentially shore up social or political logics alternative to, or outside of, the dominant order of things.

Recent histories of the Achaemenid empire often appeal to the empowering view that the considerable autonomy enjoyed by the provinces was a deliberate strategy of governance and not the mere consequence of the frailty of its rule.¹⁴ In fact, political theory suggests that it would always have been both. The satrapy of Armenia certainly seems to have enjoyed considerable autonomy, governed as it was by satraps who eschewed (or were unable to implement) strongly centralizing institutions. While there is some evidence for prominent central places, what is perhaps more notable is the virtual absence of a material assemblage of governance—seals and sealings, coins, inscribed tablets, and the like.¹⁵ After nearly a century of scientific

⁴ Tirats'yan 1960; Oganessian 1961; Summers 1993; Ter-Martirosov 2001, 2005; Karaosmanoglu et al. 2005, 2007; Stronach et al. 2009, 2010; Deschamps et al. 2011; Stronach 2011; Karaosmanoglu and Korucu 2012; Khatchadourian 2013.

⁵ Ristvet et al. 2012.

⁶ Bill 2003; Karapetyan 2003.

⁷ The concern to identify the "impact" of the empire on the satrapies is deeply entrenched in ways too diffuse and numerous to cite, but some examples include Briant and Bouchard 2005; Deleman 2007; Nieling and Rehm 2010. Impact provides an inadequate conceptual framework for approaching imperial provinces. It is predicated on an antiquated understanding of imperialism as a unidirectional force that inexorably emanates outward from an imperial core. Equally troubling is the tendency, at least in the study of Old World

empires, to assume that the best proxy for imperial impact is the diffusion of canonical artistic styles of a dominant group.

⁸ Cooper and Stoler 1997; Stoler et al. 2007; Benton 2010.

⁹ Benton 2010, 297.

¹⁰ Stoler 2006.

¹¹ Mamdani 1996.

¹² Bhabha 1997.

¹³ Stoler and Cooper 1997.

¹⁴ Briant 2002; Allen 2005.

¹⁵ One Achaemenid-style cylinder seal is known from near the site of Horom, located ca. 28 km west of Tsaghkahovit as the crow flies (Kohl and Kroll 1999). One Elamite inscription was found at the site of Armavir, but its dating has been the subject of debate (Diakonov and Jankowska 1990; Koch 1993; Vallat 1995, 1997).

archaeological research in Armenia,¹⁶ such absences cannot be explained solely by the prevailing inattention to the archaeology of the mid first millennium B.C.E. And yet the collective weight of historical sources, both Persian imperial and Greek, leaves little doubt that the region remained a constituent, tribute-paying part of the Achaemenid empire for more than two centuries.¹⁷ We are left to suppose a decentralized political landscape constituted through local leaders whose authority derived from their communities and who were granted considerable latitude in determining how tribute obligations were to be met. In other words, it would seem that the everyday making of the Achaemenid empire in the Armenian satrapy occurred in towns and villages like Tsaghkashovit, to which we now turn.

OVERVIEW OF PREVIOUS RESEARCH

The investigations at Tsaghkashovit are part of a broader effort underway since 1998 to detail long-term transformations in regional occupation of the Tsaghkashovit Plain through a program of systematic survey and excavation organized under the auspices of the Project for the Archaeology and Geography of Ancient Transcaucasian Societies (Project ArAGATS). The Tsaghkashovit Plain is a small, high-elevation plateau bounded on the south by Mount Aragats (4,090 masl), on the northeast by the slopes of the Pambak Range, and on the west by Mount Kolgat (2,474 masl) (fig. 1). Regional survey conducted in 1998 and 2000 under the direction of Smith and Badalyan identified 10 Late Bronze Age fortresses (ca. 1500–1150 B.C.E.) built along the lofty summits surrounding the plain, at least six (and possibly eight) of which were reoccupied during the first millennium B.C.E. (ca. 600–300 B.C.E.) after a long period of abandonment.¹⁸

During the intervening centuries on the Armenian highlands, when the Tsaghkashovit Plain was largely uninhabited, the kingdom of Urartu built a multifaceted imperial apparatus that was firmly rooted in monumental fortresses, institutionalizing the earlier Late Bronze Age political tradition within a coordinated strategy of imperial rule.¹⁹ It is in this context that the return of settled life to the Tsaghkashovit Plain in

the first millennium B.C.E. is particularly striking—a reoccupation that coincides roughly with the collapse of Urartu during the second half of the seventh century B.C.E.²⁰ When communities returned to the plain during the Iron Age, they gravitated with unmistakable regularity to the dilapidated remains of the abandoned Late Bronze Age fortresses (see fig. 1). The firm predisposition to settle amid the ruins of these fortresses signals the traces of enduring preexisting highland traditions that preserved certain spatial practices as essential to the putting down of new roots.

Nestled within undulating terrain on a spur of Mount Aragats, Tsaghkashovit is one of the largest and best-preserved fortress sites with both Late Bronze Age and Middle to Late Iron Age occupations.²¹ In 1998, it became the focus of intensive on-site survey and mapping, which revealed a settlement of approximately 40 ha that included the fortified volcanic outcrop (2,183 masl), built structures in the surrounding foothills, and a dense array of burial clusters along the eastern limits of the site (fig. 2).²² Excavations across Tsaghkashovit have testified to a substantial reoccupation in most areas during the Iron III period (see periodization discussion below). The remains from the Iron III citadel suggest a nondomestic area, given the paucity of consumption vessels relative to other areas of the site, and hint at a greater emphasis on production and storage.²³ Investigations directed by Lindsay between 2003 and 2011 in the area southeast of the citadel (trenches marked “SLT” on fig. 2) have also revealed Iron III occupation within and above rooms first built during the Late Bronze Age.²⁴

Targeted research into the Iron III period in Tsaghkashovit’s history began in 2005 with test trenches in the complex located to the south of the citadel (Precinct A), an appropriate location for sustained investigation given the visible architectural traces of a compact nucleation of rooms (fig. 3). This exploratory work in Rooms C, E, and L and in the large, unroofed spaces denoted as Courtyards J and K revealed a well-preserved structure of 0.54 ha, whose primary phase of occupation coincided with the period of Achaemenid Persian rule. Large-scale investigations were launched in 2006.²⁵ Unearthed in that year were two rooms in

¹⁶ Smith 2005; Lindsay and Smith 2006; Khatchadourian 2008a.

¹⁷ For a detailed discussion of the historical evidence on Armenia and the Achaemenids, see Khatchadourian (2008b) and the bibliography therein.

¹⁸ Smith et al. 2009.

¹⁹ Zimansky 1985, 1995a, 1998; Smith 2003, 2012.

²⁰ Kroll 1984; Zimansky 1995b; Steele 2007.

²¹ There is also an elusive Early Bronze Age settlement phase, judging by a few surface finds and a single radiocarbon

date from deep in the stratigraphic column of one operation.

²² Avetisyan et al. 2000; Smith et al. 2004; Badalyan et al. 2008. Thus far, all the excavated cromlech burials date to the Late Bronze Age. An Iron Age cemetery has yet to be identified.

²³ Khatchadourian 2008b, 291–302.

²⁴ Lindsay 2006; Badalyan et al. 2008; Smith et al. (forthcoming).

²⁵ Badalyan et al. 2008; Khatchadourian 2008b, 2008c.

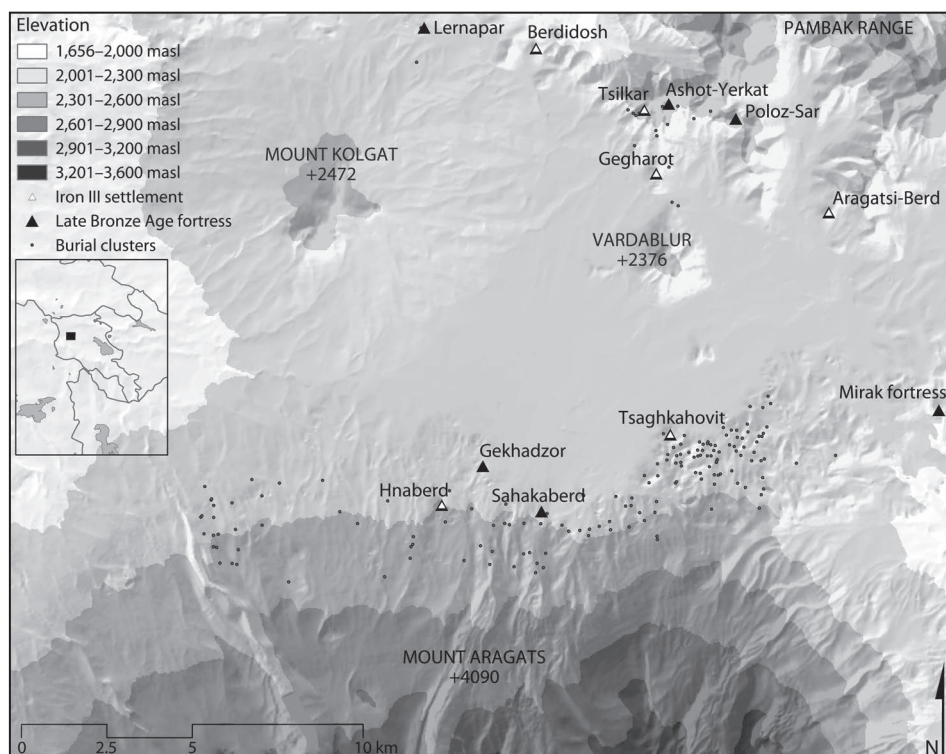


Fig. 1. Map of the Tsaghkahovit Plain.

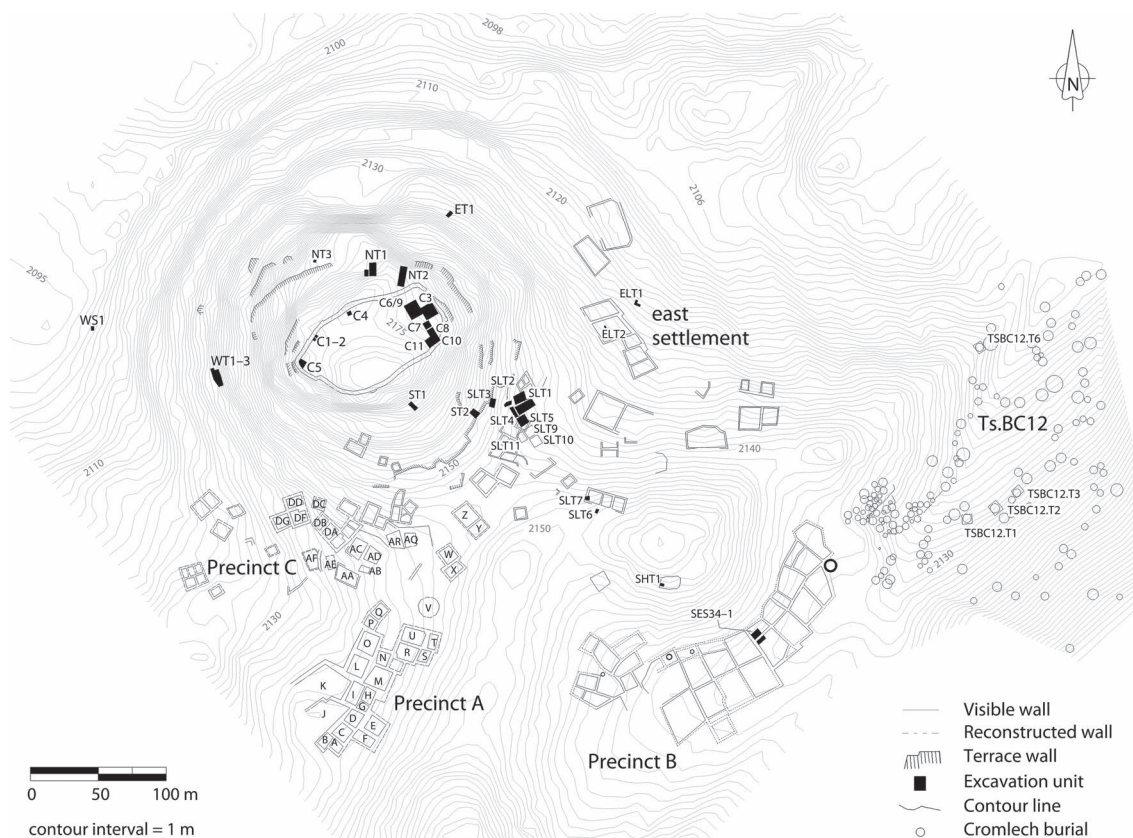


Fig. 2. Plan of Tsaghkahovit, showing fortresses and surrounding settlement (drawing by A.T. Smith).

their entirety (Rooms H and G) and substantial portions of two others (Rooms I and C). In addition, 20 small probes were excavated in the probable open-air Courtyard K. Those investigations exposed a complex of interconnected, semisubterranean rooms whose spatial regularity and integrated architectonics give the impression of purposeful planning. Material assemblages in this complex attested to such activities as the processing and ordinary consumption of food and drink. They also provide tantalizing traces of ritual and possibly cultic practices that linked privileged members of the Tsaghkavohit community to the imperial heartland.²⁶

OVERVIEW OF THE 2008–2011 SEASONS

The excavations of 2008, 2010, and 2011 aimed to expand on previous research by broadening exposures in Precinct A and initiating investigations into the cluster of structures at the lower reaches of the Tsaghkavohit outcrop's southern slope. Tentatively designated Precinct C, this area's architectural plan appears relatively haphazard judging by surface remains alone.²⁷ Following several seasons of concentrated efforts in Precinct A that have sought to elucidate the social significance of this impressive complex, the goal of the exploratory work conducted in Precinct C in 2010 and 2011 was to discern lines of social difference within the Iron III town.

Excavations of the settlement in 2008, 2010, and 2011 exposed a total area of 652 m². In Precinct A, three priorities guided the excavation strategy: (1) to complete the excavation of Room I, begun in 2006 (operation WSI2, measuring 88 m²)²⁸; (2) to branch out into the unexplored northeasterly area of the precinct (operation WSN, measuring 182 m²); and (3) to preserve the contiguity of exposure across the complex in order to gain a firmer understanding of traffic flows (operations WSD, WSM2, and WSM3, measuring 90 m², 90 m², and 19.95 m², respectively). Work in Precinct C in 2010 and 2011 targeted two adjacent rooms that appeared to be particularly well preserved on the basis of surface remains (operations WSAC, WSAC2, and WSAC3, measuring in total 157 m², and operation WSAD, measuring 25 m²). In sum, over the course of five seasons between 2005 and 2011, work at Tsaghka-

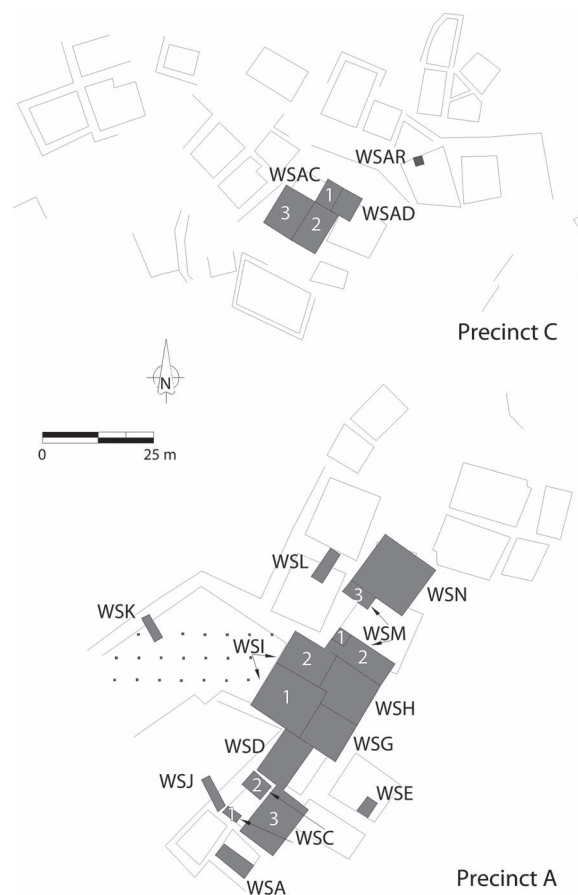


Fig. 3. Plan of Precincts A and C, showing excavation units (gray fill) and surface architecture (gray lines) (drawing by A.T. Smith). The WS prefix attached to the alphabetical room names stands for “West Settlement.” The numerals inside the excavation units refer to the complete operation names (e.g., WSAC1).

hovit's Iron III settlement has exposed all or part of 12 rooms, in addition to Courtyards J and K (see fig. 2).²⁹ In tandem with these excavations, in 2005 Project ArAGATS initiated the first program of faunal study to target the Iron III period in Armenia, and in 2008 it began archaeobotanical investigations. Taken together, this archaeobiological research, whose results are reported by Hovsepyan and Monahan in appendices

²⁶ Khatchadourian 2008b, 302–31.

²⁷ Precinct B is the cluster of rooms to the southeast of the citadel, on the eastern side of the north–south ridge. Insofar as preliminary ground penetrating radar (GPR) survey in the area between Precincts A and C has revealed subterranean rooms, the boundaries of the precincts are approximate and open to revision.

²⁸ The WS prefix to the alphabetical room names stands for “West Settlement” and denotes the settlement's location

in relation to the north–south ridge that separates precincts A and B.

²⁹ Rooms C, D, E, G, H, I, L, M, N, AC, AD, and AR. Courtyards J and K may in fact be one and the same courtyard given the ephemeral nature of the stone alignment that appears to divide them on the surface. Room A was partially excavated in 1998. The 2013 excavations of Rooms S, DA, and DB will be reported on elsewhere.

1 and 2, is shedding light on the broad contours of a mixed agropastoral economy.

STRATIGRAPHY, CHRONOLOGY, AND PERIODIZATION

The stratigraphy of the Iron III occupation at Tsaghkahovit is relatively straightforward, even though certain details of the site's phasing remain to be resolved. The rooms of the settlement, built against natural slopes and ridges, were substantially subterranean. That is, the extant walls, which are in most cases clearly visible from the surface, were not freestanding but instead lined the surrounding earth, functioning as retaining walls. The clay-packed Iron III preparatory surfaces beneath floors (rarely themselves isolated) are encountered on average 1.35 m below topsoil (at room centers). The thick deposit of silt overburden above the floors is customarily very rocky, suggesting one or more freestanding courses above the retaining walls. There are no discernible subsequent subsurface cultural deposits. In some areas of the settlement, scattered Bronze Age levels in the form of pits or other isolated features have been identified beneath the Iron III preparatory surfaces, but these are exceptional. If sustained Bronze Age settlement activity once existed in this area of the site, later inhabitants largely cleared its remains.

A more enigmatic aspect of the site's phasing is the evidence for door blockages at several access points (between Rooms D and G, Room I and Courtyard K, Rooms M and N, Rooms AC and AD) (figs. 4, 5). These closures do not appear to be associated with a substantially later occupation of the settlement, insofar as there are no discernible later floors, post-Iron III ceramics, or post-Iron III radiocarbon dates with which they could be correlated. It appears that some of the closures represent architectural reconfigurations made over the course of the complex's use during the mid first millennium B.C.E.³⁰ This much of the Iron III settlement's biography is clear: it was abandoned peaceably, without any trace of conflagration.

At present, the reconstruction of Tsaghkahovit's Iron Age chronology depends almost entirely on ceramic and other artifact typologies. Radiocarbon dating has thus far proven of limited utility because of the notorious Hallstatt plateau on the calibration curve, which produces, at 2σ , a 250- or 350-year determination range around the middle of the first millennium B.C.E. (table 1).³¹ All the analyzed charcoal consist-

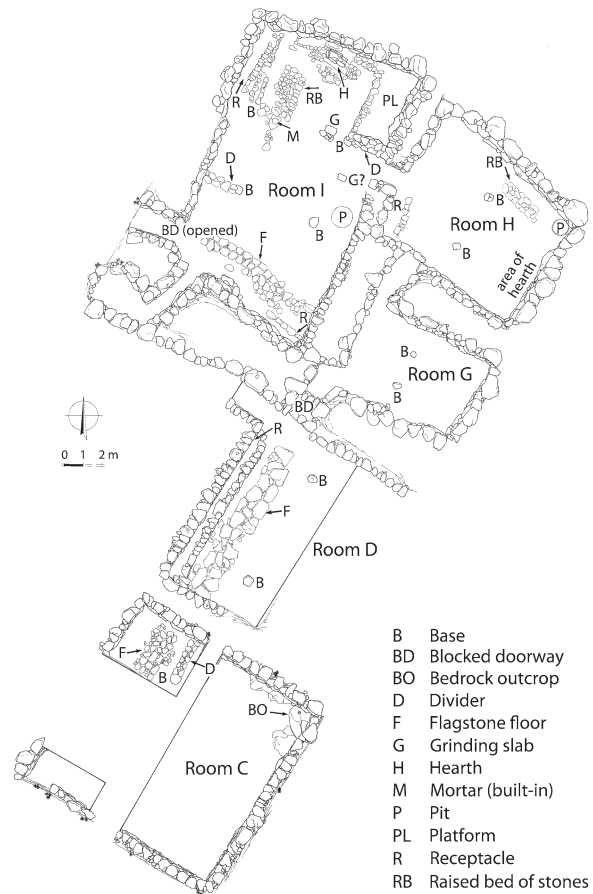


Fig. 4. Plan of Rooms C, D, G, H, and I (drawing by H. Sargisyan and L. Ter-Minasyan).

ed of scattered, small pieces collected from a range of contexts—preparatory surfaces beneath floors, floors, hearths, and indeterminate installations. Notably, samples that were clearly collected from floors (rather than subfloor preparatory surfaces) yielded calibrated dates with the highest probability range (at 1σ) extending into the fifth century B.C.E. (e.g., WSG.12, WSH.30). Recent ^{14}C wiggle-match dating of a wood sample from Room N, conducted by Sturt Manning and colleagues at the Cornell Tree-Ring Laboratory, is opening exciting possibilities for Bayesian modeling. The results of this analysis, which hold the promise to improve the resolution of the dates, will be reported elsewhere. For the time being, relative chronology based on ceramics and other key artifacts indicates that the settlement was in use during

³⁰ The exposure of additional doorways since 2006 and their comparison with previously exposed doors makes an early interpretation of these closures as the result of an abandonment practice now seems less likely (contra Khatchadourian 2008b, 232).

rian 2008b, 232).

³¹ The handful of Bronze Age dates in table 1 are generally from contexts where they would be expected on stratigraphic grounds.



Fig. 5. Plan of Rooms AC and AD (drawing by H. Sargsyan and L. Ter-Minasyan).

the second half of the sixth through the early fourth century B.C.E. The well-known ceramic forms of the Urartian era are not represented at the site. But judging by the raw radiocarbon data, it is likely that Iron Age Tsaghkahovit was founded at some point in the short interval between the collapse of Urartu during the second half of the seventh century B.C.E. and Armenia's incorporation into the Achaemenid empire ca. 540 B.C.E. It is to the key artifacts that I now turn, providing a basic description of the finds for the purpose of chronological control and then returning to their wider significance.

A preliminary typology of the ceramics recovered at Tsaghkahovit between 1998 and 2006 has been published elsewhere and will be expanded once the analysis of the 2008–2011 corpus is complete.³² Singled out here is a limited collection of diagnostic sherds that positively establish an Achaemenid-era occupation of the site. Notably, none belongs to the pottery style known

as Triangle Ware, a distinctive painted-ceramic horizon occurring in the northern highlands that has been the focus of debate within discussions of Achaemenid-era ceramics.³³ The absence of Triangle Ware from Tsaghkahovit thus helps delimit the range of that tradition, just as the presence of other diagnostic styles occasions a reconsideration of its presumed salience.

Most striking among the new discoveries are fragments of two red burnished amphoras with leaping quadrupeds rendered in relief on the handles (one handle also serves as a spout) (fig. 6). The two specimens were found together in WSI2. In the case of figure 6a, the animal's hind limb is extended, and its forelimb, barely discernible at the top of the handle, is flexed. The beast's body is oriented toward the vessel, and its head, which is not preserved, would have projected above the rim. There is a slight relief band at the break between the neck and the shoulder. The other vessel bears relief decoration on its spout (see

³² Khatchadourian 2008b, 461–523.

³³ Dyson 1999a, 1999b; Kroll 2000; Sevin 2002; Erdem and

Batmaz 2008; Summers and Burney 2012.

Table 1. Radiocarbon Dates from the Tsaghkahovit Iron III Settlement.^a

Sample ID	Lab No.	¹⁴ C Age (BP)	Probability Distribution 95.4% (B.C.E.)
SLT13.13.C14.01	AA-95619	2353 ± 39	728–364
WSG.12.C14.05	AA-72367	2438 ± 34	753–407
WSH.30.C14.02	AA-72369	2442 ± 34	754–408
SLT1.33.C14.01	AA-56988	2453 ± 3P	756–412
WSH.18.C14.03	AA-72370	2455 ± 34	756–413
WSG.12.C14.04	AA-72366	2460 ± 34	758–416
SLT6.5.C14.01	AA-66875	2483 ± 42	781–430
WSN.07.C14.02	AA-92845	2488 ± 36	787–434
WSE.03.C14.03	AA-66882	2491 ± 56	790–430
WSC2.10.C14.01.R2	AA-66880	2494 ± 40	791–433
SLT13.19.C14.02	AA-95621	2495 ± 39	791–435
WSN.93.C14.02	AA-96526	2513 ± 42	798–509
WSH.18.C14.01	AA-72368	2517 ± 34	794–540
WSI2.22.C14.04	AA-92841	2518 ± 36	795–540
WSI.20.C14.01	AA-72372	2522 ± 34	796–540
WSAC.29.C14.02	AA-92842	2522 ± 36	796–540
WSAC2.23.C14.03	AA-96522	2531 ± 37	800–541
WSN.55.C14.01	AA-96525	2531 ± 37	800–541
WSH.40.C14.01	AA-72371	2542 ± 42	804–540
WSAC3.21.C14.01	AA-96523	2547 ± 59	817–435
WSN.64.C14.01	AA-96527	2552 ± 37	806–543
WSAC2.24.C14.02	AA-96521	2554 ± 37	806–544
WSAD.32.C14.01	AA-92846	2920 ± 36	1221–1009
WSAC.30.C14.02	AA-92843	2949 ± 48	1368–1009
WSL.07.C14.02	AA-66884	3100 ± 38	1445–1262
WSN.65.C14.02	AA-96524	3132 ± 38	1497–1297
WSL.13.C14.01	AA-66883	3134 ± 37	1498–1299
WSI2.20.C14.01	AA-92839	3186 ± 37	1531–1394
WSC2.13.C14.03	AA-66881	3193 ± 38	1600–1396
WSL.20.C14.01	AA-66885	3269 ± 47	1657–1438
WSAD.31.C14.01	AA-92840	4370 ± 180	3619–2500

^a Calibrated calendar age from OxCal 4.2 (Bronk Ramsey 2009) employing IntCal13 (Reimer et al. 2013) with default setting (curve resolution five years).

fig. 6b), which would have extended perpendicular to the vessel. It appears that the beast, whose neck is partially preserved, faces outward from the amphora as though rising up from it. These vessels, discussed

at length elsewhere,³⁴ are similar in form and concept to numerous provenanced and unprovenanced metal amphoras with animal handles and handle/spouts dated to the Achaemenid period.³⁵ The Tsaghkahovit

³⁴ Khatchadourian (forthcoming).

³⁵ For examples with known provenance, see the silver amphora and gold goblet from the Filippovka burials in the southern Urals (Treister 2010; Treister and Yablonsky 2012)

and the silver and gold plate amphora from the Kukova burial in Bulgaria (Gergova 2010). For examples with unknown provenance, see Amandry 1959; Curtis and Tallis 2005, fig. 127.

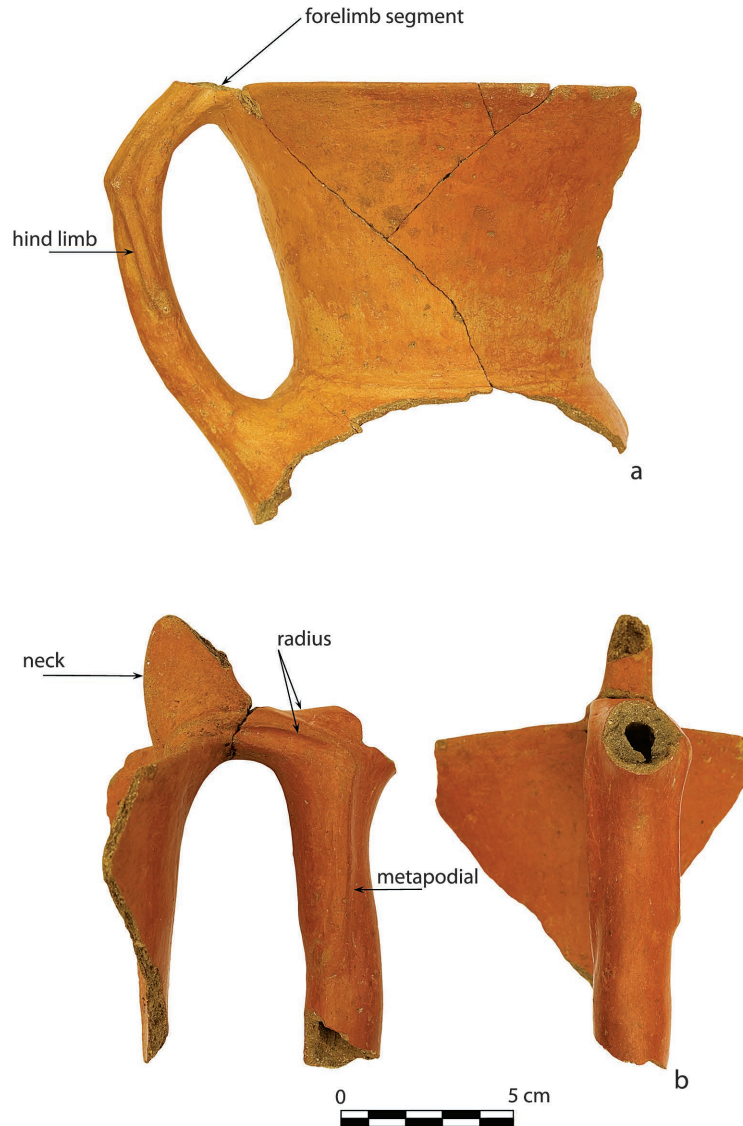


Fig. 6. Fragments of two red burnished vessels with leaping quadrupeds rendered in relief: *a*, zoomorphic handled amphora (WSI2.07.C.02); *b*, zoomorphic spouted amphora (WSI2.07.C.03). The vessels were restored by A. Ayvazyan (V. Hakobyan).

ceramic variants differ in their material composition and the highly minimal anatomical elaboration of the animals, although minimalism is also encountered on some unprovenanced metal examples.³⁶ There can be little doubt that the potters who made these vessels had the metal variants in mind. Quite remarkably, the most securely dated objects of comparison for these vessels are the zoomorphic-handled amphoras that the Armenian and Lydian delegates carry on the

Apadana relief at Persepolis (fig. 7). To my knowledge, the zoomorphic amphoras from Tsaghkahovit are without ceramic parallels.

The 2008–2011 excavations added to the existing corpus of vessels with distinctive elaboration on the body, including vertical fluting and circumferential petals or grooves. For example, a sherd from WSAD (fig. 8a), with thin walls, a slightly concave base, and black polished surface treatment, finds its closest

³⁶ Amandry 1959, fig. 23.1; Historisches Museum der Pfalz 2006, 242.



Fig. 7. Close-up of the relief on the east stairway of the Apadana at Persepolis, showing the amphoras carried by the Armenian delegate (*left*) and Lydian delegate (*right*) (courtesy the Oriental Institute of the University of Chicago).

comparanda in metal amphoras with similar vertical fluting, as well as in representations thereof on the Apadana (see fig. 7, right). At least two ceramic parallels from Iran, specifically Susa and Tal-i Ghazir (Khuzistan), are also known.³⁷ Three vessels with petals or grooves on the shoulder or body are highly characteristic of Achaemenid cultural production.³⁸ In two cases, the decorative elements are placed on black polished bowls (figs. 9a, b; 10k), as is typical for Achaemenid metal bowls, while in one instance, petals appear (uncharacteristically) on the shoulder of a red polished restricted vessel with horizontal fluting on the neck (see fig. 9c). The vessels of figures 9a and 9c lack the refinement of the other examples discussed thus far, having thicker walls and petals or grooves rendered with apparent imprecision (the petals and grooves are nonuniform in size and defined not only through pressure applied on the interior but also through incisions made by a linear tool on the exterior). The vessel of figure 9c also has vertical



Fig. 8. Black and red burnished vessels: *a*, black fluted vessel (WSAD.14.C.04) (C. Kearns); *b*, red protome (WSAC.17.C.01).

³⁷ Carter 1994, fig. 14.14.

³⁸ Curtis and Tallis 2005, 100–4, fig. 97.



Fig. 9. Black and red burnished and polished vessels: *a*, black burnished vessel with vertical grooves (WSAC2.23.C.01); *b*, black polished bowl with petals (WSI2.11.C.01); *c*, red burnished jar or amphora with petals on shoulder and horizontal fluting on neck (WSAC2.27.C.01); *d*, red polished jar or amphora (WSAC3.30.C.01) (V. Hakobyan).

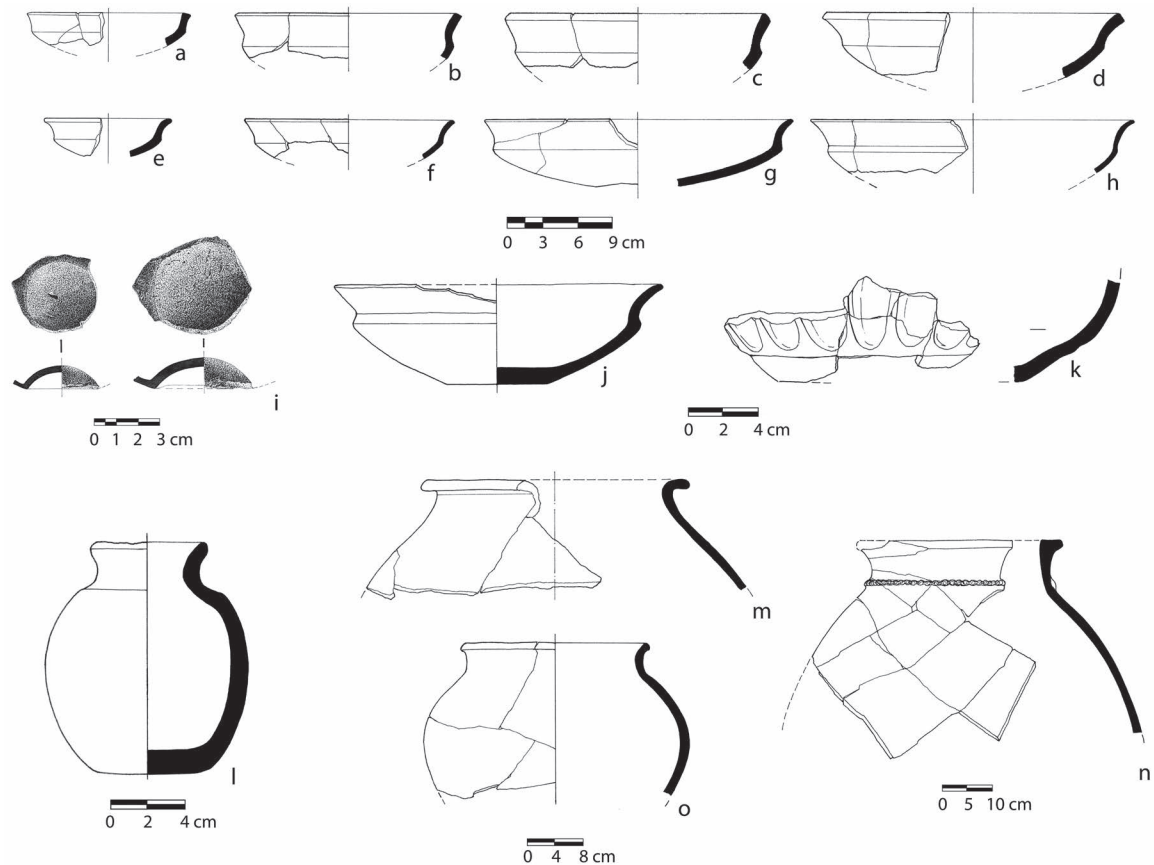


Fig. 10. Pottery profiles of bowls, jugs, and storage vessels. The vessels illustrated in parts *a–h* were restored by L. Manukian; those illustrated in parts *j–n* were restored by A. Ayvazyan (*a–i*, drawing by H. Sargsyan; *j–o*, drawing by N. Mkhitarian).

fluting at spaced intervals on the body (preserved in nonjoining fragments) that was clearly created hastily through a slightly oblique, upward stroke of a finger against the interior of the vessel.

Recent seasons of excavation also expanded the corpus of fragmentary red and black burnished theriomorphic handle adornments from the site, which belong to the same tradition as the amphoras with animal protomes from Iranian and post-Soviet Azerbaijan (see fig. 8b). With the Tsaghkahovit examples, the orientations of the theriomorphic fragments on the vessel are in some cases unclear, and the animals are highly stylized. Haerinck has dated the complete vessels of the type to the fifth through second centuries B.C.E.;³⁹ Abramova, the fifth through third centuries B.C.E.;⁴⁰ and Tirats'yan, the fifth through fourth centuries B.C.E.⁴¹ In light of the absence of evidence for

occupation at Tsaghkahovit after the fourth century B.C.E., the finds confirm a fifth-century date for the emergence of this formal style. Before leaving this category of amphoras behind, it is also worth noting a fragmentary red burnished amphora recovered on the floor of WSAC3 that is similar in form to the remarkable vessel with relief decoration from site 64 at Tang-i Bulaghi, near Pasargadae (see fig. 9d).⁴²

Last among the ceramic indicators of an Iron III occupation singled out here are the numerous red, brown, and black burnished carinated bowls, the most widespread bowl type at Tsaghkahovit (see fig. 10a–j) (which differs from the deeper so-called Achaemenid bowl type defined by Dusinberre).⁴³ The first such complete specimen was discovered in a niche within a disturbed Iron III burial chamber (see figs. 10j, 11); the tomb was embedded into the walls of a Late Bronze

³⁹ Haerinck 1978, 1980.

⁴⁰ Abramova 1969.

⁴¹ Tirats'yan 1964.

⁴² Asadi and Kaim 2009.

⁴³ Dusinberre 1999; Khatchadourian 2008b, 326.

Age structure to the southeast of the citadel. Two black burnished omphaloi likely belonging to similar carinated bowls have also been found (see fig. 10i).

A serpentine plate discovered in 2006 on the floor of Room G concludes this examination of key artifacts for the dating of the Iron Age occupation of Tsaghkahovit (fig. 12). The closest parallels for this plate exist among the abundant corpus of veined chert and serpentine plates discovered in the Treasury at Persepolis—indeed, the Tsaghkahovit plate is morphologically identical to some of those.⁴⁴ In all likelihood, it was imported to Armenia from the imperial heartland; petrographic, chemical, and mineralogical analyses point to a probable provenance in the Zagros Mountains. Serpentine deposits exist in Armenia, in the Shakhdag Mountains of the Sevan Range, and in the Zagros and Elbrus Ranges of Iran. But the specific mineralogical composition of the Tsaghkahovit plate (chrysotile with enstatite-pyroxene inclusions) points most probably to a Zagros origin.⁴⁵ It is possible to propose an approximate date for the serpentine vessel based on the dating of the vessels from the treasury. In all but one case, the serpentine plates from that building were not inscribed, but inscriptions on other stone plates from the same room as the serpentine plates point to a pattern of activity surrounding these objects during the reigns of Xerxes (486–465 B.C.E.) and Artaxerxes I (465–424/3 B.C.E.). In short, a fifth- or fourth-century date for the activity in Room G associated with this plate is most likely.⁴⁶

While occupation of the site in the era of Achaemenid rule rests on firm evidence, the date of its abandonment remains an open question. Decades of research at sites in Armenia belonging to the final centuries B.C.E., such as Armavir, Artashat, and Garni, have established a reasonably solid understanding of the ceramics of these centuries. These ceramic materials (along with other diagnostic artifact types of the late first millennium, such as coins, bullae, and swallow-tail clamped ashlar blocks) are not represented at Tsaghkahovit. Based on present artifactual evidence and radiocarbon dates, therefore, abandonment after the mid fourth century B.C.E. is improbable. Provisionally, then, the Iron Age Tsaghkahovit settlement can

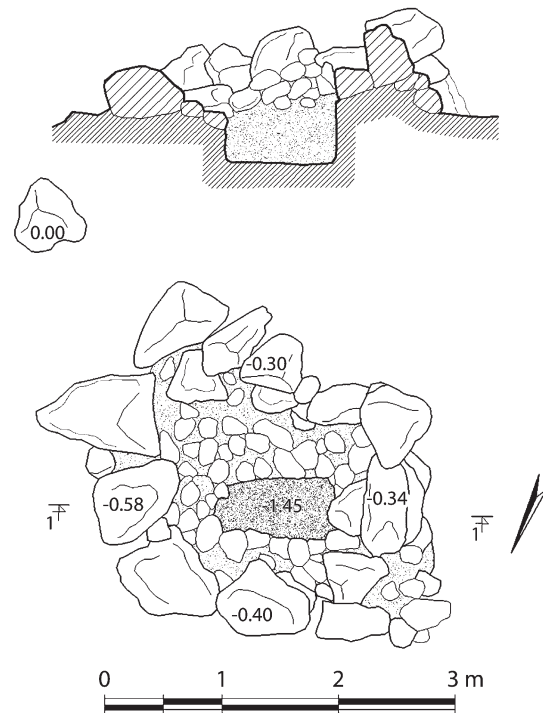


Fig. 11. Iron III burial within Late Bronze Age wall (operation SLT15, excavated by Ian Lindsay): *top*, section view; *bottom*, plan (drawing by L. Ter-Minasyan).

be dated to the Iron IIb–III periods, or roughly the late seventh through early fourth centuries B.C.E.⁴⁷

OPERATION SUMMARIES

What follows are brief summaries of each of the operations excavated in the 2008–2011 seasons in Precincts A and C. Generally speaking, in all cases the underground rooms of these complexes were built into a gentle grade, and retaining walls of roughly hewn, dry-stacked basaltic andesite boulders lined the edges of large dugouts. In most rooms, a whitish clay-plaster surface was preserved on lower courses, possibly a lime coating associated with the irregular limestone blocks occasionally encountered across the settlement.

⁴⁴ Schmidt 1957, 53–9, 89, pls. 24.3, 59.7.

⁴⁵ I am grateful to Arkady Karakhanyan of Armenia's Institute of Geological Sciences for these analyses.

⁴⁶ For further discussion of the significance of the serpentine plate, see Khatchadourian 2008b, 303–14.

⁴⁷ For a complete account of Project ArAGATS's system of periodization, see Smith et al. 2009. To a certain extent, the Iron III is an idiosyncratic periodization linked to Tsaghkahovit. By the archaeological conventions of Armenia, the

nomenclature of the three-age system falls away at the seventh century B.C.E., when historical periodization based on local dynastic or ethnogenetic reconstruction takes its place (i.e., the "Yervandid" period or the "Early Armenian" period) (Khatchadourian 2011). In recognition of the different temporalities that govern the pace of political history, as opposed to those of social and material culture change, we prefer to extend archaeological periodization into the middle of the first millennium B.C.E.

Precinct A: WSI2

The 2010–2011 excavations of operation WSI2 (11 x 8 m) adjoined the northeastern edge of an operation begun in 2006 (WSI), thus completing the exposure of this room. Room I is centrally located within the Precinct A complex (see fig. 3) and has two or three points of entry and egress: a doorway leading into Courtyard K along the northwest wall (which was thoroughly blocked with large stones during the main use life of the settlement), a passageway leading from the west corner into that same space (which was partially blocked with smaller stones that do not match the masonry of the complex),⁴⁸ and a doorway in the southeast wall leading to Room H (unblocked) (see fig. 4). The walls of the room were preserved to a height of between 1.10 and 1.36 m.

The numerous built features within Room I make this one of the most elaborate spaces uncovered in the settlement thus far. Most prominent was a hearth centered on the northeast wall of the room (fig. 13). The hearth consisted of a rectilinear construction (2.4 x 1.7 m) made out of neatly flattened stones (some of whose interior faces were coated in black soot) and friable fragments of extremely large and thick ceramic platters, clearly in secondary use.⁴⁹ Inside and behind the box was a matrix of firmly packed orange clay, in addition to an ashy gray deposit. Surrounding this lined rectilinear construction was a semicircular arrangement of stones, additional ceramic platter fragments, and a packed burnt-orange clay matrix. This deposit contained a high density of plant macroremains (table 2 [WSI2Δ20]). Along with the considerable number of cereal grains (ca. 100 units, 40% of which are identified as barley and wheat), Hovsepyan identified approximately 300 units of burnt nutlets of *Buglossoides arvensis* (see appx. 1), a resistant weed whose selective preservation indirectly indicates that the quantity of the cereal grains in the context was much higher than what has been preserved. Taken altogether, the feature likely represents a substantial cooking installation or locus of regular firing. Evidence of burning permeated the entire construction in the form of burn lenses and specks of charcoal. A friable clay tube found in the vicinity, possibly a flue

for forced ventilation, adds support to the interpretation that the feature was used for routine firing events.

To the east of the hearth was a raised rectangular marbleized-clay surface built 0.15 m above the floor and demarcated on two sides by stone alignments. Bounding this possible “platform” on its southern side was a stone feature (ht. 0.19 m) that terminated in a semicircular stone base or pillar support resting immediately on the floor. This feature matched a similar internal divider (also concluding in a base) that jutted out from the southwest wall (ht. 0.23 m) (see fig. 4).⁵⁰ Two additional pillar supports in the room aligned with these. Also in the eastern quadrant of WSI2 were two flat, rectangular stones embedded into the floor, which may have served as grinding slabs (a portable groundstone was found in association with one of them, while five other groundstones appeared across the floor of the room).

Several stone alignments articulated in various ways were clustered in the northwest sector of operation WSI2. None of their functions can be postulated with any certainty. Two merit brief attention because of their recurrence across the settlement. Running parallel to the northwest wall was a low stone alignment, two courses wide and two courses high, at a slight distance from the northwest wall, hereafter termed a “receptacle.” Also notable in this sector was a rectangular bed of closely packed irregular stones built to one course (similar to the stone beds in WSH and WSN, which are also situated to the left of a hearth).⁵¹ Finally, amid the intricate network of alignments in the north sector of the room was a deeply hollowed stone resembling a built-in mortar. In the southwestern side of Room I, a flagstone floor or pathway that aligns with the doorway terminates in a short receptacle.

Precinct A: WSN

Measuring approximately 14 x 13 m, Room N differs from other rooms in Precinct A on account of its atypically semicurvilinear corners, which may serve to accommodate the elevated natural bedrock surface in this area of the site and allow for the corridor that extends diagonally between Rooms M and O (see the discussion of WSM3 below) (fig. 14). Walls were

⁴⁸ The passageway was previously interpreted as an annex, but closer inspection of doorway blockages across the complex suggests that the closure at the western end of the “annex” may have been a considerably later construction and that this became the point of entry into Room I when the entrance in the northwest wall of the room was thoroughly blocked.

⁴⁹ In use they may have resembled the large tray supporting a domed stove at Büyükkaya, Boğazköy (Seeher 1995, figs.

12, 13), though the rims of the Tsaghkahovit platters curve upward.

⁵⁰ There are similar features in the northern quadrant of WSC2 (lgth. 2.15 m; ht. 0.23 m; wdth. 0.73 m) and in WSN (lgth. 2.40 m; ht. 0.50 m; wdth. 0.95 m).

⁵¹ The hearth in WSN is discussed in the next section. The hearth in WSH was a clay-packed installation, poorly preserved, whose general location is marked on fig. 4.



Fig. 12. Serpentine plate from Room G (WSG.12.L.01) (V. Hakobyan).



Fig. 13. Operation WSI2 looking east.

preserved to between three and five courses and ranged in height between 1.42 and 1.64 m. An unblocked doorway in the northern corner of the operation led to Room O (fig. 15), while a doorway in the southwestern wall was thoroughly shuttered, judging by an irregular bulge suggestive of a manipulation of the preexisting wall.

The internal built features in WSN clustered along much of the perimeter of the room. Atop a bedrock mass in the southern corner was a stone feature consisting of several alignments that formed multiple partially segmented areas. Most discernible among these was a rectilinear space (1.75 x 0.60 m) that contained concentrated charcoal and burnt-earth deposits

Table 2. Plants Identified in the Macrobotanical Samples from the 2008–2011 Excavations.

Room		D	N				AC				AD	I		M
Operations and loci		Totals	WSDΔ11, 13, 14, 15, 16, 20	WSNΔ63	WSNΔ64	WSNΔ7, 18, 36, 40, 48, 51, 55, 57, 71	WSACΔ6, 13, 17, 22, 27, 28	WSAC2Δ16, 19, 20, 23, 26	WSAC3Δ30	WSAC3Δ14, 23	WSADΔ17, 27, 30, 33	WSI2Δ20	WSI2Δ22, 23	WSM2Δ36, 41
Volume of processed sediments (liters)		543	44	6	6	138	77	62	24	24	48	45	51	18
Concentration of total carpological material (unit/liter)		7.9	1.7	81.3	15.2	14.7	4.7	2.7	5.8	3.8	1.6	11.5	4.0	1.6
Concentration of carpological material from cultivated plants (unit/liter)		4.1	1.3	17.8	9.7	9.7	2.4	1.5	3.0	1.4	0.7	3.4	1.3	1.1
Plant Taxa, Finds, and Preservation														
<i>Triticeae</i> gen. spp.	G, C	1,410	41	63	33	904	100	60	32	21	16	91	39	10
Barley to wheat ratio (%)		64	88	59	68	59	67	74	74	83	67	72	62	67
<i>Hordeum vulgare</i>	G, C	64	88	59	68	59	67	74	74	83	67	72	62	67
<i>Hordeum vulgare</i> (hulled)	G, C	432	15	25	16	219	53	20	16	6	11	30	15	6
<i>Hordeum vulgare</i> ssp. <i>vulgare</i> convar. <i>vulgare</i>	G, C	68	–	1	1	28	5	3	12	4	1	10	3	–
<i>Hordeum vulgare</i> (naked?)	G, C	4	–	–	–	2	–	–	–	–	–	2	–	–
Wheat to barley ratio (%)		3	–	–	–	2	–	–	–	–	–	1	–	–
<i>Triticum</i> spp.	G, C	178	–	13	4	107	15	6	5	2	–	13	10	3
<i>Triticum aestivum</i> / <i>turgidum</i>	G, C	37	–	–	–	19	9	–	3	–	2	3	1	–
<i>Triticum</i> cf. <i>aestivum</i>	G, C	19	1	–	1	15	–	1	–	–	1	–	–	–
<i>Triticum</i> cf. <i>turgidum</i> / <i>durum</i>	G, C	7	–	–	1	5	1	–	–	–	–	–	–	–
<i>Triticum dicoccum</i>	G, C	44	1	5	2	26	3	1	2	–	3	1	–	–
<i>Triticum dicoccum</i>	SF, C	2	–	–	–	2	–	–	–	–	–	–	–	–
Other cereals														
<i>Secale</i> sp.	G, C	1	–	–	–	1	–	–	–	–	–	–	–	–
<i>Panicum miliaceum</i>	NG, C	2	–	–	–	1	–	–	1	–	–	–	–	–
Pulses, cf. <i>Lens</i> sp.	S, C	1	–	–	–	1	–	–	–	–	–	–	–	–
Grape (<i>Vitis vinifera</i>)	P, C	1	–	–	–	–	–	–	1	–	–	–	–	–
Weeds														
<i>Fabaceae</i> gen. sp., <i>Viceae</i> gen. sp.	S, C	2	–	1	–	–	–	–	–	1	–	–	–	–
<i>Galium</i> sp.	M, C	18	–	–	–	8	4	1	–	–	2	3	–	–
<i>Galium</i> cf. <i>spurius</i>	M, C	410	8	13	11	219	50	21	14	22	12	32	7	1
<i>Buglossoides arvensis</i>	E, S, MI	784	–	330	3	96	18	6	28	1	10	281	11	–
<i>Buglossoides arvensis</i>	E, S, MI	784	–	330	3	96	18	6	28	1	10	281	11	–

Table 2 (continued).

Room			D	N			AC				AD	I		M
Operations and loci			WSDΔ11, 13, 14, 15, 16, 20	WSNΔ63	WSNΔ64	WSNΔ7, 18, 36, 40, 48, 51, 55, 57, 71	WSACΔ6, 13, 17, 22, 27, 28	WSAC2Δ16, 19, 20, 23, 26	WSAC3Δ30	WSAC3Δ14, 23	WSADΔ17, 27, 30, 33	WSI2Δ20	WSI2Δ22, 23	WSM2Δ36, 41
Totals														
Weeds (continued)														
<i>Echium</i> sp.	E, MI	2	–	–	–	–	1	–	–	–	1	–	–	–
<i>Asperugo procumbens</i>	E, MI	1	–	–	–	–	1	–	–	–	–	–	–	–
cf. <i>Lappula</i> sp.	E, MI	1	–	1	–	–	–	–	–	–	–	–	–	–
<i>Poaceae</i> gen. sp.	S, C	154	1	6	3	109	14	3	1	4	–	10	3	–
cf. <i>Lolium</i> sp.	G, C	8	1	–	–	5	2	–	–	–	–	–	–	–
cf. <i>Bromus</i> sp.	G, C	1	–	–	–	–	–	1	–	–	–	–	–	–
<i>Hordeum</i> sp. (wild)	G, C	8	–	2	–	5	–	–	–	–	–	1	–	–
<i>Brassicaceae</i> gen. sp.	S, Mi	1	–	–	–	–	–	–	–	–	–	–	1	–
<i>Neslia</i> sp.	Ca, C	94	–	6	1	53	7	4	4	–	3	11	5	–
<i>Thlaspi</i> sp.	S, C/Mi	27	–	3	–	9	5	3	1	–	1	2	3	–
<i>Hyoscyamus</i> sp.	S, C	8	–	–	–	2	5	–	–	–	–	–	–	1
cf. <i>Viola</i> sp.	S, Mi	1	–	–	–	–	–	–	–	–	–	–	1	–
<i>Lamiaceae</i> gen. sp., longer	S, Mi	3	–	–	–	–	–	–	2	–	–	1	–	–
<i>Apiaceae</i> gen. sp., smaller	M, C	2	–	–	–	–	–	–	1	–	–	1	–	–
<i>Caryophylliaceae</i> gen. sp.	S, Mi	9	–	–	–	2	3	–	–	–	1	3	–	–
<i>Scleranthus</i> sp.	F, U	1	–	–	–	–	–	–	–	–	–	–	1	–
<i>Asteraceae</i> gen. sp.	S, U	4	–	–	–	3	–	–	–	–	–	–	1	–
<i>Malvaceae</i> gen. sp.	S, C	6	–	–	–	2	4	–	–	–	–	–	–	–
<i>Polygonaceae</i> gen. spp.	N, C	62	–	2	5	24	5	3	1	9	2	8	2	1
<i>Rumex</i> sp.	N, C	5	–	–	–	3	–	–	–	2	–	–	–	–
<i>Polygonum</i> sp.	N, C/Mi	37	–	–	1	20	7	4	–	–	1	3	1	–
<i>Polygonum aviculare</i>	N, U	49	–	–	2	–	–	–	–	–	–	–	46	1
<i>Polygonum</i> cf. <i>convolvulus</i>	N, C	10	–	–	–	4	1	–	1	2	–	2	–	–
<i>Chenopodium</i> sp.	S, C	18	–	6	–	–	3	1	2	2	1	2	1	–
<i>Cyperaceae</i> gen. sp.	N, C	62	–	–	–	16	7	–	1	2	–	2	33	1
cf. <i>Cuscuta</i> sp.	S, Mi	6	–	1	–	–	–	4	–	1	–	–	–	–
Unidentifiable herbaceous species		251	6	9	7	118	32	22	9	10	9	5	19	5
<i>Rosa</i> sp.	N, C	19	1	1	–	2	5	3	2	1	1	1	2	–
Total		4,273	75	488	91	2,032	360	167	139	90	78	519	205	29

C = charred; Ca = capsules; E = erems; F = fruit; G = grains; M = mericarps; Mi = mineralized; N = nutlets; NG = naked grains; P = pip; S = seed; SF = spikelet fork; U = uncharred

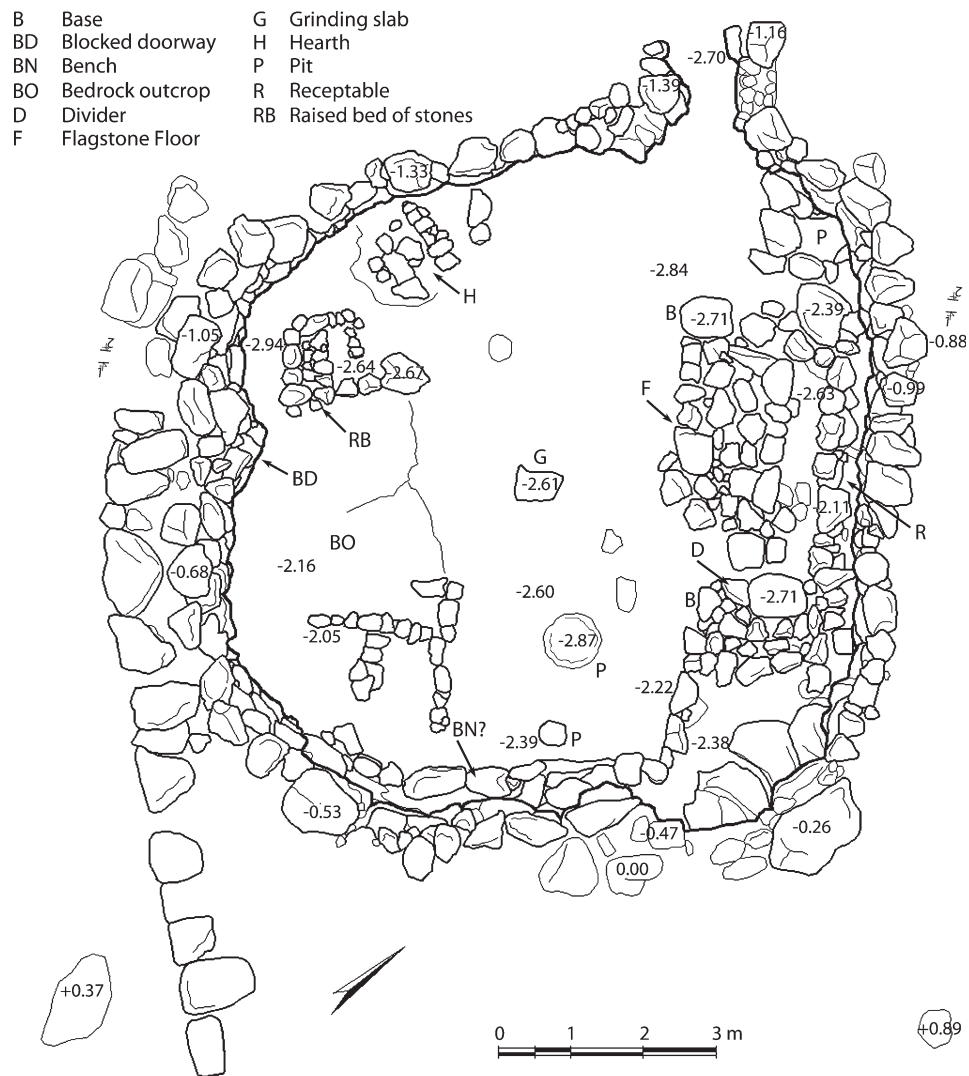


Fig. 14. Plan of Room N (drawing by L. Ter-Minasyan).

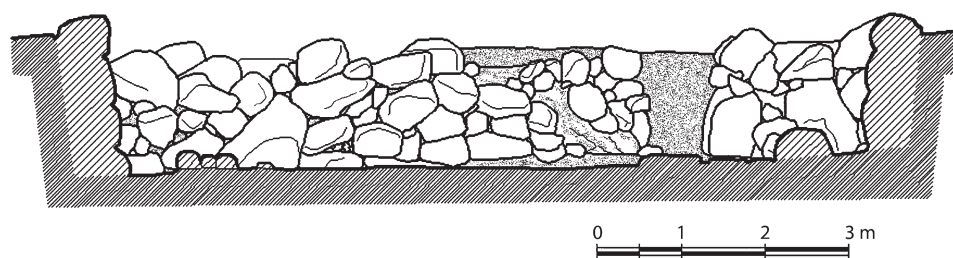


Fig. 15. Section of northwest wall of Room N, showing doorway to Room O (drawing by L. Ter-Minasyan).

attesting to controlled burning, although Hovsepyan's findings show that carpological remains were notably absent in this feature (see appx. 1; table 2 [WSNΔ40]). At the base of the southeastern wall of the room ran a low, linear alignment of flattened stones extending 5 m (ht. 0.66 m), possibly a bench. The eastern corner of the room was segmented off as a distinct area (2.5 x 2.5 m) where an activity requiring pumice stones may have occurred (it contained two pumice tools, which are otherwise rare). Adjacent to the above-mentioned feature to the north was a narrow basin-like space (2.40 x 0.95 m) abutted by another "internal divider" similar to those in WSI, WSI2, and WSC2, at whose terminus was a low, flat stone pillar base. Immediately parallel to the northeast wall of the room was another receptacle (ht. 0.66 m) similar to the one in WSI2. A sizeable flagstone floor also ran parallel to the northeast wall of the room, at whose northwest corner was another possible pillar support. In the northern corner of the room, a semicircular stone enclosure defined a small pit (0.68 x 0.52 m; diam. 0.17 m) filled with clay, burnt stones, and burnt earth. This feature was likely yet another site of controlled burning. According to Hovsepyan's analysis, it contained the highest density of cereal remains (barley and wheat) of all contexts sampled in this room (see appx. 1; table 2 [WSNΔ63]).

The two built features exposed in the west corner of Room N included a hearth or oven consisting of a central semirectangular stone pit filled with burnt earth, around which was a firmly packed clay surface delimited by flat stones on one side (fig. 16). The matrix inside the feature was particularly dense in cereal remains, specifically barley and wheat (see table 2 [WSNΔ64]). Embedded in the packed clay surrounding this feature were fragments of pottery, including the circular platter type also associated with the hearth of WSI2. Immediately beside this hearth was a rectangular bed of stones, smaller in scale than the one exposed in WSI2 but resembling the one from WSH (see fig. 14). Two nearly flat, quasitrapezoidal stones embedded within the floor of WSN recall those found on the floor of WSI2 and may likewise have served as grinding stations. Eight groundstones remained on the floor of the room, and several soil samples collected from across the floor, including a bedrock-carved pit with a storage vessel emplaced within, proved relatively rich in carpological remains.

WSN presented a difficult stratigraphic situation. Beneath the floor's preparatory clay deposit were various remains suggestive of heterogeneous depositional



Fig. 16. Hearth in Room N.

processes. In two areas located at opposite ends of the room, short spans of wall whose small-stoned masonry differed markedly from the Iron III walls were found under the level of the main walls of the room. One such context was correlated with a Late Bronze Age radiocarbon date (see table 1 [AA-96524]). But there were no discernible floors associated with these constructions, and the ceramic materials were limited and mixed in date (Late Bronze Age and Iron III). Elsewhere beneath the main floor were various pits that appeared to be natural formations, though in one case the internal face of the pit was smoothed, and a small concentration of bones was unearthed near the top. Faunal and osteological analyses suggest either human or pig remains.⁵² The area of the possible burial was rich in charcoal (see table 1 [AA-96526]). Other pits contained fragments of large storage jars (see fig. 10m–o). In one area, within the clay preparatory surface beneath the floor, was a single complete pomegranate-shaped jug (see fig. 10l). Its soil contents (<1 liter) contained two charred grains of barley and one charred grain fragment of unidentifiable cereal, leading Hovsepyan to conjecture that the vessel may have been used for the consumption of beer (see appx. 1).

Precinct A: WSD

Judging by surface architecture, Room D measured approximately 15 x 12 m, making it one of the larger rooms excavated to date. Operation WSD covered the northwestern half of the room (see fig. 4). The three fully or partially exposed walls of the operation were preserved to a height of between three and four stone courses, or between 1.45 and 1.60 m (fig. 17). A

⁵² B. Monahan, pers. comm. 2012; M. Marshall, pers. comm. 2012.



Fig. 17. Room D, looking southwest.

door leading to neighboring Room G was thoroughly blocked; another leading into Room C was possibly blocked, and a third leading into the presumed courtyard of space J was not blocked.

Built features uncovered in WSD included yet another receptacle, a stone alignment that ranged in height from one to two courses (ht. ca. 0.72 m) and ran parallel to the northwest wall. Adjacent to this stone feature was a long and linear flagstone floor made of impressively large and well-flattened slabs. Two stone bases were situated on either end of the room. Material densities in WSD were low compared with those in other rooms of Precinct A.

Precinct A: WSM2 and WSM3

Measuring approximately 15 x 13 m, the large scale of Room M is comparable to that of Room D, and thus exposures to date are likewise partial. The new operations in this room (WSM2, 15.0 x 6.0 m; WSM3, 3.0 x 6.7 m) expanded on a test trench dug in 2005 (WSM, 3.0 x 3.0 m). Because of the extraordinary quantity of fallen stones that needed to be painstakingly cleared from the upper wash levels of WSM2, the operation could not be completed in the time available (indeed, in most places foundational wall courses were not

fully exposed, but those that were sometimes reached more than 2 m in height). On the basis of the work completed to date, the room presents a similar situation to that encountered in other large rooms of the precinct (e.g., Rooms C and D): extremely well-made, straight walls with 90° corners, coupled with relatively low material densities compared with the smaller rooms of the precinct.

Operation WSM2 contained another receptacle running parallel to the northwest wall and continuing under the baulk. Adjacent to this feature was a flagstone floor (4.0 x 1.0 m) that likewise extended into the unexcavated portion of the room. A relatively slipshod, square, pitlike enclosure (2.0 x 2.0 m) to the northeast of the flagstone floor was likely built after the construction of the room, judging by its slightly elevated stratigraphic position vis-à-vis the floor of the room. This feature is without precedent at Tsaghkahovit.

It appears that Room M and neighboring Room H were not connected by a doorway. However, operation WSM3 (3.0 x 6.7 m), placed in the northern corner of the room, exposed a shuttered doorway leading into Room N, as well as a corridor that extended diagonally from the northern end of Room M to the southern

corner of Room O. This passageway (lgth. 5.6 m), whose presumed point of entry into Room O remains to be exposed, was boarded up at the WSM3 entrance with a relatively flimsy wall whose masonry does not correspond with the other blockages. It is thus presumed to be a much later construction.

Precinct C: WSAC, WSAC2, WSAC3

Limited exposures in Precinct C have uncovered structures virtually identical to those of Precinct A in terms of general architectural techniques. Excavations in 2010 and 2011 substantially exposed Room AC (WSAC, 5.0 x 4.0 m; WSAC2, 10.0 x 6.2 m; WSAC3, 10.0 x 7.5 m) (see fig. 5). The walls of the neatly rectilinear construction were preserved to between one and six courses and ranged between 1.45 and 2.18 m in height. The room had at least two access points. A doorway in the northeast wall of Room AC, though thoroughly shuttered, once provided access to the neighboring Room AD. Another doorway (unblocked) in the southwest wall led to a room whose walls are only ephemerally visible on the surface. The relationship between Room AC and the area northwest of it is unclear at present given that time constraints prohibited the completion of WSAC3's western and northern segments. In general, the northwest wall of Room AC appeared to be structurally unstable, and an irregular two-course stone divider near this wall, slightly elevated from the clay-packed floor surface, suggests a possible later use phase.

A receptacle ran along the southeast wall of the room (ht. 0.40 m), possibly blocking the shuttered doorway between Rooms AC and AD. Adjacent to the receptacle was a large paved stone floor that extended across much of Room AC. There was a slight, stepped rise in the elevation of the flagstone surface from the northwest to the southeast, perhaps to accommodate the natural slope. A large, elliptical stone in the middle of the floor may represent a pillar base or work surface. In the center of the room, the paved floor terminated with an arrangement of a single trapezoidal stone with smaller stones positioned around it, including a circular mortar. Hovsepyan's analysis of the silt and clay matrix surrounding this feature yielded particularly diverse and abundant botanical remains, including a variety of wheat and barley, broomcorn millet, nutlets of rose hips, and the first occurrence of cultivated grape at Iron III Tsaghkahovit (see appx. 1; table 2 [WSAC3A30]). The archaeobotanical evidence provides support for the interpretation of this feature as a grain-processing station. By contrast, samples collected from the hard-packed, charcoal-mottled clay floor in other parts of the room contained extremely few plant remains.

Precinct C: WSAD

To define the relationship between the two rooms, we placed operation WSAD (5 x 5 m) in the northern corner of Room AD, where there were hints of a doorway in the partition wall shared by the two rooms (see fig. 5). Excavations exposed the northeastern and northwestern walls of WSAD, which were preserved to a height of approximately 1.40 m. Covering much of the operation in the room interior was a flagstone floor that appeared to continue under the southwest baulk. In addition, a short and low stone alignment parallel to the northeast wall (not shown in fig. 5) may represent another receptacle similar to the ones uncovered in WSI, WSH, and WSL.

The operation contained evidence for stratified Bronze and Iron Age deposits. In particular, a flagstone floor situated beneath the main floor of the room was associated with a Late Bronze Age radiocarbon determination (see table 1 [AA-92846]). A more complicated situation existed in the west corner of the operation, in the area of the blocked doorway leading into WSAC. Beneath the stones of the blockage, at a depth of 0.20 m below the level of the main flagstone floor, was a soil matrix dense with charcoal, a sample of which produced a radiocarbon date that falls in the Early Bronze Age (see table 1 [AA-92840]). The sample was not far from a semicircular trilobed stone basin likewise situated below the level of the main flagstone floor. In general, the door blockage in WSAD is enigmatic. Lastly, in the northern segment of the operation, beneath the level of the stone floor, was a pit containing charcoal, bone, and ceramics (the few diagnostic sherds were mostly Late Bronze in date). In short, this area of the site appears to have fragmentary remains of Bronze Age activity beneath the Iron III deposits.

SMALL FINDS

The nonperishable objects left behind in the rooms of Tsaghkahovit in the aftermath of its evidently unhurried abandonment were predominately the utilitarian implements and refuse of a mixed agropastoral village. Stone tools forged out of such materials as basalt, pumice, and obsidian predominate. Their correlation with macrobotanical remains and hearths informs current understandings of functional variability within the settlement, such that rooms that have cooking installations, possible grinding stations, and diverse carpological remains also have the highest quantities of groundstones and other stone tools, while the smallest rooms with very few internal stone features (e.g., Room H) or no features at all (e.g., Room G) contain fewer stone tools both on their floors and in the operations as a whole. Preliminary analysis of

obsidian from the Iron III settlement points to an ad hoc industry of expedient tools made exclusively on flakes, which are mostly raw and sometimes partially retouched (exhausted cores and cores showing multipolar knapping have also been identified).⁵³ Bone tools are few and include a needle (fig. 18a), awls (see fig. 18b, c), and spindlewhorls (see fig. 18d, e). Bone adornments were limited to a pendant (see fig. 18f), pierced first phalanges, and a bone shaped into a cuboid frame (perhaps a piece of furniture inlay). Otherwise, bone working appears to have entailed a focus on antlers, some of which were perforated or incised (see fig. 18g). Other items of ornamentation included iron and bronze hoop earrings (one with faience pendant [fig. 19]) and scattered paste beads.

GOING UNDERGROUND: ARCHITECTURAL RECONSTRUCTION AND THE SOCIOPOLITICS OF SPACE

The subterranean interior spaces, activity areas, and material assemblages summarized above sustained a community that dwelled, on a day-to-day basis, underground. In this way, Tsaghkahovit directly recalls the kind of earth-sheltered village that the Greek general and historian Xenophon (*An.* 4.5.25) observed on his northward trek across the Armenian highland at the end of the fifth century B.C.E.: “The houses here were underground,” Xenophon wrote, “with a mouth like that of a well, but spacious below. And while entrances were tunneled down for the beasts of burden, the human inhabitants descended by a ladder.”⁵⁴ Until the discovery of Tsaghkahovit, Xenophon’s terse ethnographic observations on village architecture of the Armenian satrapy provided little more than historical embellishment to the accounts of 19th-century travelers such as Austen Henry Layard, who encountered similar dwellings on his journeys through Armenia, or those of modern ethnographers of highland vernacular architecture seeking to illustrate the longevity of the earth-sheltered building tradition.⁵⁵ But the ongoing investigations at the site have set Xenophon’s remarks in new light. We now understand that, among his disjointed remembrances from his journey through the highland, Xenophon singled out what may well have been a widespread spatial practice that structured the everyday making of social life on the highlands during the centuries of Achaemenid rule. In its day,

large-scale subterranean architecture may also have been a novel architectural solution; by all accounts, it would have been without precedent in the building traditions of the region during the mid first millennium B.C.E. It thus requires some explanation.

Earth-sheltered habitats exist worldwide, in numerous ecological zones.⁵⁶ In upland environments that are marked by severe fluctuations of climate and seismic risks, the protected and long-lasting edifices of semisubterranean housing can maintain relatively stable interior temperatures and provide hazard protection.⁵⁷ Underground living thus underscores the ways in which humans habituate to the challenges of extreme mountain zones. But energy savings and seismic-risk management alone cannot explain this building practice. Centuries of occupation on the Tsaghkahovit Plain during the Early and Late Bronze Ages entailed the very opposite of underground living; communities of these periods favored aboveground constructions on mountain perches rather than subterranean shelters. And there are virtually no known antecedents elsewhere on the highlands. Determinative weight in explaining this building practice thus cannot be placed on the environment.

At the risk of ethnographic upstreaming, traditional vernacular architecture of the Caucasus and Armenian highland can assist in the reconstruction and interpretation of the architectural practices at Tsaghkahovit. Semisubterranean housing was still in use on the Armenian highland during the 19th century—for instance, in the foothills and plains of Muş, Erzurum, and Sivas and across the South Caucasus. The relevant modern structures are called lantern, cone-roofed, or “head house” dwellings (*glkhatun* in Armenian, *kirlangiç kubbe* in Turkish, *darbazi* in Georgian, and *karadam* in Azerbaijani).⁵⁸ These square semisubterranean structures with retaining walls were often built into the side of a slope (as is the case at Tsaghkahovit), and their roofs were constructed with short wooden beams through a corbeling technique that concluded in a smoke hole at the top to provide light and ventilation. In some cases, pillars supported rafters that spanned the bottom courses of the vault. On the surface, only the polygonal dome would be visible, its sides covered with reeds or straw, plastered in clay, and then topped with earth or grass to provide further insulation.

⁵³ I am grateful to Jacques Chabot of the Université Laval for his preliminary research on the Tsaghkahovit obsidian, which forms one part of a broader effort to identify the function of expedient tools from Armenia on the basis of use wear.

⁵⁴ Translation by Brownson 1980.

⁵⁵ Marutyan 2001; Layard 2002, 14.

⁵⁶ Boyer and Grondzik 1987.

⁵⁷ Boyer and Grondzik 1987, 4.

⁵⁸ Lisitsyan 1955; C’ik’ovani 1967; Villa and Matossian 1982; Mat’evosyan 1985; Yakar 2000.

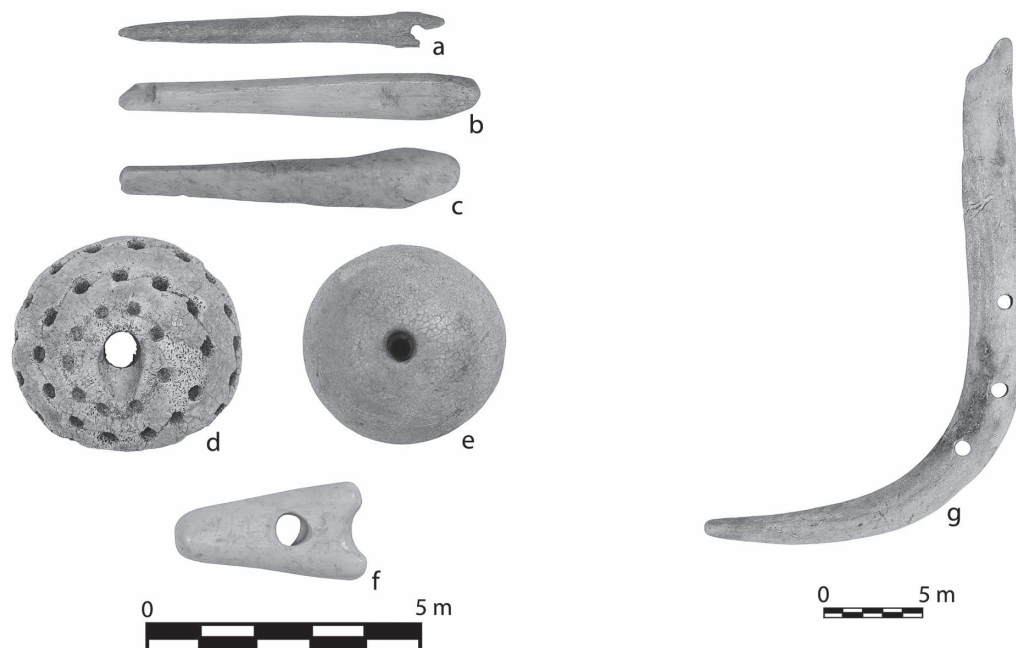


Fig. 18. Bone tools and adornments: *a*, bone needle (WSAC2.13.C.01); *b*, *c*, awls (WSH.30.B.01, WSN.07.B.01); *d*, *e*, spindlewhorls (WSAD.18.B.01, WSH.11.B.01); *f*, pendant (WSI2.11.B.01); *g*, worked antler (WSN.65.B.02) (V. Hakobyan).

Both casual and systematic ethnographic accounts of the earth-sheltered dwellings on the Armenian highland have emphasized less the environmental advantages of such habitats than the social and political factors that may account for this building practice. At the center of these discussions is the concern for security and concealment. In 1853, Layard wrote of such subterranean villages as follows:⁵⁹

[They] are still such as they were when Xenophon traversed Armenia. . . . The low hovels, mere holes in the hill-side . . . cannot be seen from any distance, and they are purposely built away from the road to escape the unwelcome visits of travelling government officers and marching troops. It is not uncommon for a traveller to receive the first intimation of his approach to a village by finding his horse's fore feet down a chimney, and himself taking his place unexpectedly in the family circle through the roof.

Informants in a study of vernacular architecture on the highland in the early 20th century also stressed a collective desire for underground refuge:⁶⁰

The homes of neighbors might adjoin, and there might be openings in the dividing walls between dwellings

through which people, food, and messages could pass. Thus a village might be a kind of labyrinthine, semiunderground warren in which people could hide themselves and their valuables.



Fig. 19. Iron earring with faience pendant (WSN.37.M.01) (V. Hakobyan).

⁵⁹Layard 2002, 14.

⁶⁰Villa and Matossian 1982, 29.

In this way, apart from providing defense against the severities of the environment, semiunderground habitats can afford a measure of community protection, particularly from outsiders unfamiliar with local building practices.

A collective concern for concealment may well have been one factor in the Iron III community's decision to establish subterranean dwellings. The day-to-day routine of going underground would have reproduced a sense of communal privacy from outside surveillance and thus reinforced the very need to preserve such seclusion. The general location of the settlement in the undulating terrain north of Mount Aragats would have hidden it from view of north-south passing traffic across the plain, while the houses (possibly dome-roofed) would have further camouflaged the community against east-west passersby. Such camouflage architecture literally embedded people in the landscape while allowing views onto the plain below through northwest-facing entrances. The evidence of a concern for concealment must be squared with the absence of enclosure walls around the settlement. At issue, perhaps, was less a defense of village security against known or imagined threats (the fortress could have provided refuge in times of danger) than a collective preference, in this era of recurrent political transformation, to remain "beneath the radar" of travelers, whether those in the service of one or another distant power (be it a rump Urartian polity, the enigmatic Medes, the Persians, the Scythians) or the brigands that thrive under conditions of sociopolitical collapse.

In this regard, it is worth recalling that the preceding centuries of Urartian rule were marked by a highly extractive economy and the draconian policies of population movement that brought people under the watchful orbit of the regime's fortresses. The memory of such times may have prompted people, now able to put down new roots in the aftermath of Urartu's collapse, to settle down in a landscape that was uninhabited during the preceding centuries. They may have chosen to adopt spatial practices that conjoined them with the natural world as a repudiation of, and protection against, the socially destructive technologies of the state. One such technology on the Armenian highland during preceding centuries was the hilltop fortress, with its monumental architecture and imposing defensive walls. Elsewhere I have suggested that, across the highland, the fortress institution was called into question during the centuries after Urartian rule. Although not entirely disavowed, it had lost its status

as the prime spatial location of power and was instead "curated" within the new entanglements of post-Urartian sociopolitical life.⁶¹ It is this ambiguity that is arguably on view at Tsaghkahovit. A novel architectural approach was thoroughly elaborated in the Iron III town, albeit in the immediate vicinity of a fortress associated with a (by then) primordial past. In its overall spatial logics, the articulation of the built and natural landscape at Tsaghkahovit preserved to some degree an established source of highland sovereignty while at the same time defining a new social order grounded in the protective embrace of the earth itself, the antithesis of the human contrivances behind the complex polity.

It is difficult to envision how careful choices such as these could have resulted from an imperial prerogative to dictate the terms of village life on the Armenian highlands. Instead, they are more plausibly viewed as the work of local leaders—akin to the village chief (*komarchos*) with whom Xenophon (*An.* 4.5.34) claims to have feasted in a village in Armenia—who cultivated the authority and legitimacy to define the contours of social order and to garner the community support necessary to implement it. On present evidence, Precinct A appears to have been the residence of just such a community figurehead and leading family. Apart from the scale and regularity of the structure, this interpretation is based on the mounting evidence that it constituted not an agglomeration of equivalent household units but, at least at first, a single and functionally differentiated complex whose users commanded considerable productive capacities as well as large herds.

Functional nonequivalency is supported by the fact that few rooms excavated to date in Precinct A are the same in their dimensions or internal features. Room I particularly distinguishes itself as the most prominent room within the complex. It is centrally located, affords direct access to the outdoor courtyard, and contains several features indicative of large-scale food processing and preparation, from multiple grinding stations to a distinctive large hearth. While the many other features in this room are functionally uncertain, they point to an area of intensive activity. Room N, with its multiple internal features (hearths, bench, flagstone floor, receptacle, and other segmented workstations), was also a bustling and productive space. But these two most elaborated rooms differ considerably in the specifics of their internal installations. Yet more variability is introduced with Rooms G and H, which were excavated in 2006.⁶² The former is a small, sparse,

⁶¹ Khatchadourian 2008b; Smith and Khatchadourian (forthcoming).

⁶² Khatchadourian 2008b.

and sacred space. The latter contains some internal features but fewer than Rooms I and N. These four unique and proximate rooms support the case for a single complex in which a variety of productive, consumptive, and ritual activities took place.

Along with this evidence for variability, the emerging pattern suggests that some rooms in the complex—namely, Rooms C, D, and M—are quite similar to one another; these are also the rooms that collectively hint at large-scale herd management in the precinct. Rooms C, D, and M are the largest rooms of the complex and contain the lowest densities of small finds and ceramics, the latter of which are predominately coarse wares. The rooms share in common elongated flagstone floors running northeast–southwest and associated receptacles (not pictured in the case of Room C) but no evidence for hearths or workstations. It is probable that the receptacles in these particular rooms functioned as troughs and that the rooms were primarily mangers. But they could also have doubled as sleeping quarters for humans. In the subterranean houses recorded by ethnographers of 20th-century Armenia, a room in the dwelling complex known as the *gomi oda*, or cattle shed, also served during winter months as lounging or sleeping quarters for humans who, separated from the animals by a partition, nevertheless benefited from their body heat.⁶³ It is noteworthy that the robust door closures were implemented specifically in the doors of these rooms (as between Rooms D and G, M and N). It appears that late in the life of the settlement, access to Room D was possible only from the outdoor courtyard (J). The reasons for the blockages associated with these large rooms can only be speculated. Seasonal variations may have occasioned efforts to maximize or reduce cohabitation with livestock. Alternatively, inheritance practices may have led to the parceling of a once large complex into segmented units, each containing its own stable. Finally, it is possible that changes in the organization of animal husbandry—an expansion in herd size or a change in herd-management structures—could have necessitated the stricter containment of livestock from the working quarters of the complex. In any case, the existence of at least three such large mangers within the complex suggests that those who inhabited Precinct A enjoyed considerable command over one of the most important resources of the community.

Until broader exposures are undertaken in Precinct C, conclusions concerning social differences between the two areas of the site must remain highly tentative.

It is notable that Room AC is comparable in scale to the larger rooms of Precinct A and shares some features in common with them (flagstone floor and receptacle). But it differs from these rooms in several respects, including the presence of a food-processing station in the center of the room and the broad extent of the flagstone floor, which covered much of the room's interior as opposed to only a segment adjacent to the receptacle. Moreover, the density and diversity of materials in Room AC were far greater than in the large rooms of Precinct A and included fine consumption vessels (e.g., figs. 8, 9c, d, 10k), cooking pots, and storage vessels (see fig. 10m, o). Finally, on the basis of surface mapping, Room AC does not appear to have belonged to a large complex. It is possible, then, that day-to-day activities that were otherwise segregated in the more privileged social space of Precinct A were combined in the tighter quarters of a two- or three-room house that included Room AC. Working and living in such close quarters, in clear view of a more spacious complex to the south, would have reproduced on a daily basis the social boundaries of the community. Most intriguingly, the emerging picture suggests that objects linked discernibly with imperial modes of consumption were distributed and not spatially concentrated within one precinct or another. There is little evidence that these objects and the associated modes of consumption worked to cleave and preserve lines of distinction within the community.

CONCLUSIONS: MATERIALITY, CONSUMPTION, AND EMPIRE

It remains to consider the sociopolitical significance of the unique corpus of consumption vessels that I reviewed above as chronological anchors.⁶⁴ These vessels clearly derived from Achaemenid metal forms yet were put to use in a remote mountain town of the empire, far removed from urban centers of its day, by subjects who otherwise eschewed many of the most distinctive material and spatial practices of the imperial heartland (e.g., ashlar masonry, torus column bases, porticoes and hypostyle halls, writing, sealing, coinage). Prevailing interpretation within the frame of Achaemenid archaeology would cast these objects as copies or imitations indicative of the affects of emulation that are the hallmark of effective imperial “impact.”⁶⁵ Applied to Tsaghkahovit, the analysis might go as follows: the ceramic vessels that find their closest parallels in the cultural production of the imperial elite would have enabled individuals or groups at Tsaghkahovit to

⁶³ Marutyan 2001, 95.

⁶⁴ Khatchadourian (forthcoming).

⁶⁵ See, e.g., Dusinberre 2003, 2013; Petrie et al. 2008.

retain or improve their social station by recreating the kinds of material entanglements and associated modes of commensal sociability first defined by the Persian court and aristocracy. Particularly with respect to the zoomorphic-handled amphoras—whose elaborate metal prototypes the Apadana relief at Persepolis associates with Armenia—it could be argued that people in Precinct A embraced a given material signature of their identity as subjects of the Achaemenid crown—a signature assigned by imperial design. The everyday (or perhaps more marked) use of such objects for communal drinking would have reproduced the empire's system of collective classification. Use of these and other imitations (as this line of reasoning would regard them) would have mediated relations between Tsaghkahovit and wider imperial networks and, in small measure, sustained social institutions of consumption that served as instruments of Achaemenid hegemony. It is in similar ways that I have interpreted evidence for ritual practice and feasting in Rooms G and H.⁶⁶

This may be a plausible reconstruction. But one trouble with what we might call the “emulation hypothesis” is that, as I argue at length elsewhere,⁶⁷ it rests on vulnerable theoretical claims on the relation between subjects and sovereign, and on the very ontology of things in themselves. The emulation hypothesis is a proposition about political life that assumes a well-oiled machinery of empire, ever producing deferential, acquiescent subjects who willfully submit to the conditions of their own subjection with the help of a world of well-behaved objects that work reliably in the service of the crown to reproduce the relations of macropolitical asymmetry. Yet both social and post-colonial thought have cautioned against such a straightforward reading of the sociology behind the emulative arts,⁶⁸ just as the recent “material turn” has disavowed a view on things as hopelessly beholden to the human intentions of their masters.⁶⁹ We now understand that mimesis is always flawed, often to disruptive effect on hegemonic power, and that practices of everyday consumption that appear on the surface to conform to the conventions of a given social order can in fact be inventive, manipulative, or even subversive. We now also recognize that the world of objects is active and efficacious in ways sometimes unintended by its original designers. To this extent, even so-called imitated objects can play a part in the tactics of consumption, to invoke de Certeau, working with their human

users to deflect or diffuse the dominant order without necessarily challenging it.

As one step toward rethinking how mutually dependent humans and things further or fragment imperial projects in the everyday, I cast the ceramic imitations from Tsaghkahovit as “proxies” tasked to act for other objects (in this case, royal metal tableware), just as human proxies are authorized to act on behalf of other persons.⁷⁰ Material proxies correspond to those for whom they act as simulacral substitutes and are thus bound up in the imperial institutions of value, practice, and ideology at an appreciable remove. It is this attenuation and the corresponding entanglement of proxies within the local social institutions of subalterns that give rise to the possibility for the tactical arts of “making do”⁷¹ and to what I call rogue or unruly proxies. Proxies may sometimes act in accordance with the objects that authorize them, as in the scenario I laid out above. But under certain circumstances they may also help their makers and users tinker with or evade expectations, producing material and social novelties that are fully intelligible only within the immediate spheres of their making and use.

In the underground havens of Tsaghkahovit, social hierarchies appear to have been modest. It is difficult to sustain an interpretation of the proxies that stops at a kind of earnest replication on the part of local groups aspiring to take a seat at the table, as it were, of the empire. Scope must also be allowed for an artisan-like inventiveness at work in both the manufacture (e.g., variously adapted renderings in clay of a refined form) and use (along with other ordinary tools of an agropastoral village) of these proxies. Such creativity surrounding the material markers of imperial distinction could have resulted from the tactical arts of users seeking to appropriate that which was given, to loosen the conventions of use, to take whatever meaning lay behind the metal vessels in the court context and bring it closer to the ordinary, closer to the everyday. The objects themselves may also have enabled or encouraged such play. The effect, inadvertently or not, would have been to dilute the efficacy of the social institutions for which the vessels were originally conceived.

Findings from future excavations at Tsaghkahovit will provide additional evidence to help arbitrate between these interpretive possibilities—between a community and an object order that facilitated a material logic of aspirational replication or one of appropriation,

⁶⁶ Khatchadourian 2008b; see also Dusinberre 2003, 2013.

⁶⁷ Khatchadourian (forthcoming).

⁶⁸ de Certeau 1984; Bhabha 1997.

⁶⁹ See, e.g., Latour 2005; Bennett 2010; Olsen 2010; Hod-

der 2012.

⁷⁰ For a fuller discussion of material proxies and empire, see Khatchadourian (forthcoming).

⁷¹ de Certeau 1984.

mutation, or even disaffected mimicry. In either case, the 2008–2011 excavations have brought into relief the entanglements that tied consumption to the reproduction of an imperial aesthetic and set the terms for everyday sociability through which community relations were maintained. These investigations have also opened a view onto the practices of seclusion and participation, community self-rule and subjection, that can coexist within the satrapal spaces of empire.

DEPARTMENT OF NEAR EASTERN STUDIES
CORNELL UNIVERSITY
ITHACA, NEW YORK 14853
LK323@CORNELL.EDU

Appendix 1: Archaeobotanical Investigations at Iron Age III Tsaghkahovit

ROMAN HOVSEPYAN

Augmenting a diet of sheep, goat, cattle, and other animal products was a range of cultivated grains (see table 2). Evidence for agricultural production at Tsaghkahovit is based on the analysis of 62 soil samples from the settlement (totaling 543 liters of processed sediment). The samples were collected from hearths, floors, pits, and other contexts and processed through flotation and wet sieving. A total of 4,340 archaeocarpological specimens were recovered. The carpological remains of 66 kinds of plants belonging to at least 32 taxa of higher plants were identified.

By way of general overview of the community's agricultural practices, the main cultigens present include bread wheat (*Triticum* cf. *aestivum*) and its common subspecies (*Triticum* cf. *aestivum* subsp. *vulgare*); macaroni wheat (*Triticum* cf. *durum*); emmer (*Triticum dicoccum*); and cultivated barley (*Hordeum vulgare*), part of which belongs to the hulled six-rowed variety (*Hordeum vulgare* subsp. *vulgare* convar. *vulgare*) (fig. 20). Judging by the samples examined to date, barley was the most intensively cultivated plant at Tsaghkahovit (as it was in the region during the Bronze Age) (see table 2). In addition, there are comparably rare occurrences in the sample of rye (*Secale* sp.), possibly lentil (cf. *Lens* sp.), broomcorn millet (*Panicum miliaceum*), and cultivated grape (*Vitis vinifera*). Insofar as climatic conditions at the altitude of the Tsaghka-

hovit Plain are not amenable to the growth of millet and grape, the presence of these cultigens attests to connections with lowland communities, perhaps in the Ararat Plain.

Particularly important contexts of archaeobotanical recovery merit brief mention. The abundance of burnt nutlets of *Buglossoides arvensis* in WSI2Δ20, a context already dense in plant macroremains, indirectly suggests that the quantity of cereal grains in this context was much higher, since *Buglossoides arvensis* is a resistant weed that is selectively preserved. Despite evidence for burning in the stone feature of WSNΔ40, there were scant plant remains in this context (only 17 charred grains from 12 liters of soil), so it probably was not linked to food preparation. This contrasts with another feature in this same room, WSNΔ63, which was comparatively dense in barley and wheat. The existence of two charred grains of barley and one charred grain fragment of an unidentifiable cereal in the pomegranate-shaped jug from this room (WSNΔ71) may indicate that it contained beer, but this is only speculation. Context WSACΔ30 was particularly rich in plant remains, containing a variety of wheat and barley, broomcorn millet, nutlets of rose hips, and the first occurrence of cultivated grape at Iron III Tsaghkahovit.

INSTITUTE OF ARCHAEOLOGY AND
ETHNOGRAPHY
NATIONAL ACADEMY OF SCIENCES OF ARMENIA
15 CHARENTS STREET
0025 YEREVAN
REPUBLIC OF ARMENIA
ROMAN.HOVSEPYAN@GMAIL.COM

Appendix 2: Zooarchaeological Investigations at Iron Age III Tsaghkahovit

BELINDA MONAHAN

Faunal analysis has thus far identified more than 14,000 specimens from cultural deposits in Precincts A and C (almost always screened through a ¼-in. mesh) (table 3; fig. 21).⁷² Sheep constitute the largest percentage of the number of identified specimens (NISP) identified to genus (48%), followed by cattle (39%). There are higher proportions of domesticated

⁷²For a review of preservation and recovery biases in the Iron III faunal sample, see Monahan's contribution in Khatchadourian 2008b, 530–34.

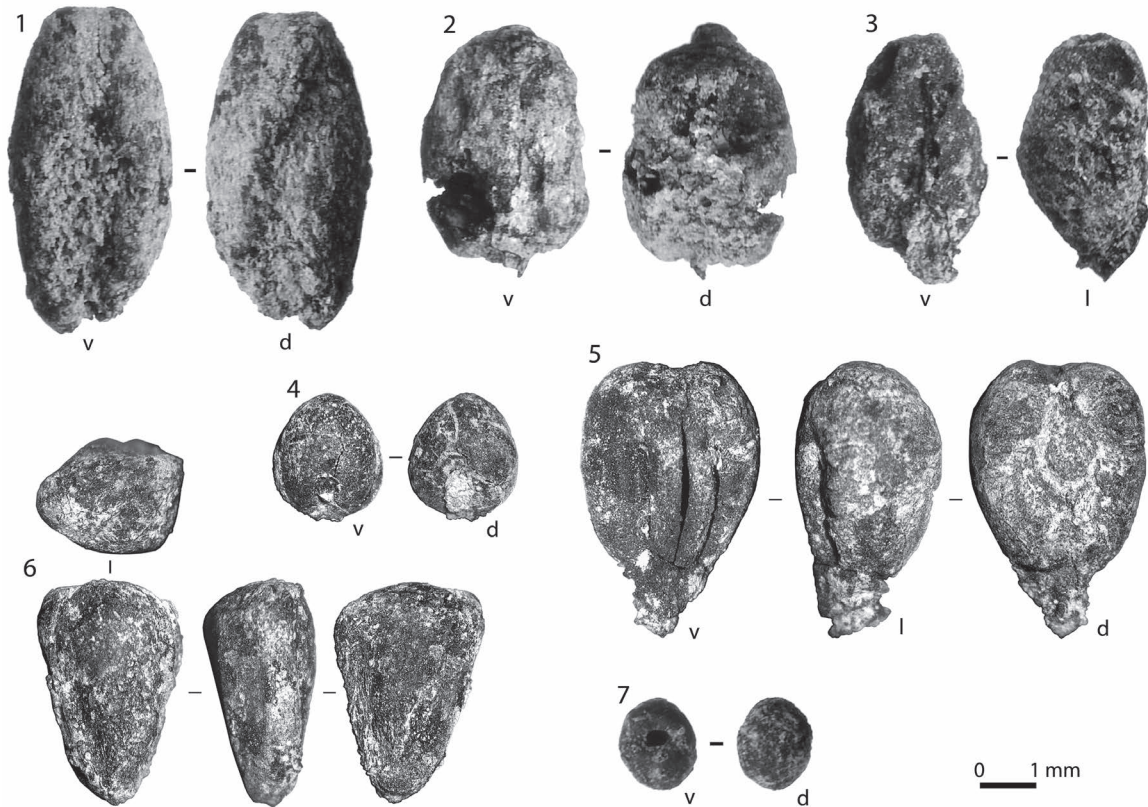


Fig. 20. Examples of archaeobotanical finds from Tsaghkahovit: 1, grain of cultivated hulled barley (*Hordeum vulgare*) (WSD.20); 2, grain of tetra- or hexaploid wheat (*Triticum aestivum/turgidum*) (WSD.14); 3, grain of emmer (*Triticum* cf. *dicoccum*) (WSD.14); 4, naked grain of broomcorn millet (*Panicum miliaceum*) (WSAC3.30); 5, pip of cultivated grape (*Vitis vinifera*) (WSAC3.30); 6, nutlets of rose hip (*Rosa* sp.) (WSAC3.30); 7, mericarp of *Galium* cf. *spurium* (WSD.20) (v = ventral side; d = dorsal side; l = lateral side) (R. Hovsepyan).

pig in the Iron III sample than in samples from earlier periods on the Tsaghkahovit Plain.⁷³ The third most represented taxon is *Equus*, of which the most common in the sample is the domesticated horse (*Equus caballus*) (1.53% of NISP identified to genus). Like pigs, equids are better represented in the Iron III sample from Tsaghkahovit than in all samples from Bronze Age occupations of the Tsaghkahovit Plain. It is worth noting that, according to Xenophon (*An.* 4.5.24, 34) and Strabo (11.14.9), the Armenian satrapy paid its tribute to the Achaemenid court in the form of horses. The very limited evidence for burning (0.72%, a single

astragalus) and butchery (0.72%, a single second phalanx) on the horse bones suggests that perhaps most of these animals were not consumed but raised for use as transportation.⁷⁴ Following *Equus*, there is a notable percentage of cervid bones (*Cervus* and *Dama*). More than 60% of these are antlers, one-third of which show evidence of being worked, whether into tools or other unidentifiable objects that are well distributed across the settlement.

Nonmammalian species, including birds and fish, are rare. However, in comparison with Bronze Age samples from the Tsaghkahovit Plain, there are a fair number

⁷³Smith et al. (forthcoming).

⁷⁴The sample is too small for body-part representation to be interpretable; what little evidence there is does not suggest the presence of meat-rich parts but quite the opposite. Survivorship is likewise difficult to interpret. The sample size is small. Grouping all the fusing elements together does not produce a sample size that is large enough to be statistically

significant. That said, 65% of these element are fused—i.e., the animals lived to physical maturity. This is very close to the proportion of cattle reaching physical maturity, a pattern that, in the case of cattle, may indicate a dependence on secondary products. But it is still a surprisingly low proportion for animals that do not appear to have been consumed.

Table 3. Results of Faunal Analysis from Iron III Deposits in Precincts A and C.

Taxa	Common Name	No. of Identified Specimens (NISP)	% Total NISP	% NISP Identified to Genus
Fish	–	6	0.04	–
Large bird	–	4	0.03	–
Medium bird	–	4	0.03	–
Phasianidae	–	1	0.01	–
Small bird	–	4	0.03	–
Indeterminate	–	5,935	42.20	–
Large mammal	–	2,476	17.60	–
Medium mammal	–	2,694	19.15	–
Small mammal	–	98	0.07	–
Large artiodactyl	–	6	0.04	–
Medium artiodactyl	–	2	0.01	–
Bovid	–	30	0.21	–
<i>Bos</i>	cattle	1,066	7.58	38.86
<i>Ovis</i>	sheep	134	0.95	4.89
<i>Capra</i>	goat	37	0.26	1.35
<i>Gazella</i>	gazelle	2	0.01	0.07
<i>Ovis/Capra</i>	–	1,156	8.22	42.14
<i>Ovis/Capra/Gazella</i>	–	7	0.05	–
Cervid	–	33	0.23	–
<i>Cervus</i>	red deer	29	0.21	1.06
<i>Dama</i>	fallow deer	1	0.01	0.04
<i>Equus</i>	–	89	0.63	3.24
<i>Equus caballus</i>	horse	42	0.30	1.53
<i>Equus hemionus</i>	onager	6	0.04	0.22
<i>Equus asinus</i>	ass	1	0.01	0.04
<i>Equus hemionus/asinus</i>	onager/ass	1	0.01	0.04
<i>Sus</i>	pig	152	1.08	5.54
Canids	–	4	0.03	–
Medium canid	–	1	0.01	–
Small canid	–	4	0.03	–
<i>Canis familiaris</i>	dog	8	0.06	0.29
<i>Canis lupus</i>	wolf	2	0.01	0.07
<i>Vulpes</i>	fox	5	0.04	0.18
<i>Meles</i>	badger	1	0.01	0.04
<i>Ursus</i>	bear	2	0.01	0.07
<i>Lepus</i>	hare	2	0.01	0.07
Rodentia	–	13	0.09	–
Microtus	vole	6	0.04	0.22
<i>Spermophilus</i>	souslik	1	0.01	0.04
Total	–	14,065	100.00	–

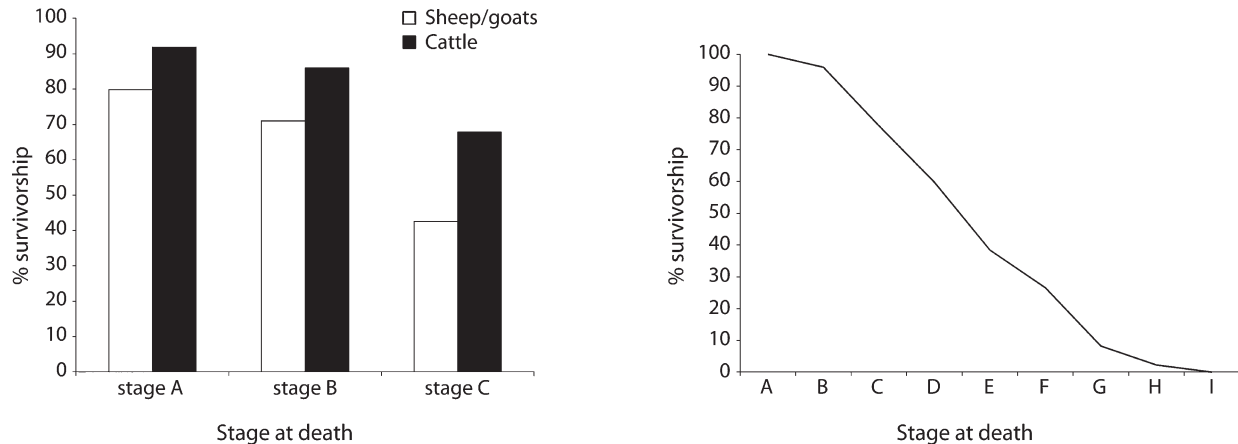


Fig. 21. Sheep/goat mortality profiles: *left*, survivorship based on epiphyseal fusion; *right*, cumulative kill-off based on tooth eruption and wear (drawing by B. Monahan).

of carnivores. While the percentages of dog (*Canis amiliaris*), wolf (*Canis lupus*), fox (*Vulpus*), marten (*Martes*), and bear (*Ursus*) are low, the presence of some of these species indicates that hunting practices extended beyond the probable exploitation of meat to pelts as well. In the faunal assemblage overall, the percentages of burning (0.62%) and butchery (2.85%) are low.

Survivorship patterns among both sheep/goats and cattle indicate an economy focused mainly on production for localized needs. Survivorship among sheep and goats declines with age. Rates of epiphyseal fusion show that by the time the animals reach adulthood only 40% of the herd remains alive (see fig. 21, left).⁷⁵ This pattern is virtually identical to the one seen in the cumulative survivorship curve based on tooth eruption and wear (see fig. 21, right). Survivorship among cattle, although higher, follows a similar pattern, declining with age; slightly less than 70% of the herd remains alive at full physical maturity. On the basis of this evidence, it appears that cattle production may have focused more heavily on secondary products, such as milk and traction, while sheep and goat production focused mainly on meat. Nevertheless, neither case provides clear evidence for specialized production or production for exchange.

7430 N. RIDGE BOULEVARD
CHICAGO, ILLINOIS 60645
BHEMONAHAN@YAHOO.COM

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⁷⁵ In fig. 21, stage A comprises the following elements: distal humerus, innominate, proximal radius, scapula, first phalanx, and second phalanx. For sheep and goats it represents roughly ages 6–13 months; for cattle, 10–24 months. Stage B comprises distal tibia and distal metapodials. For sheep and goats it represents roughly 15–24 months; for cattle, 24–32 months. Stage C comprises distal femur, proximal femur, proximal humerus, distal radius, proximal tibia, and proximal ulna. For sheep and goats it represents roughly 36–42 months; for cattle, 42–48 months (Silver 1969; Schmid 1972).

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