4-2012

On the Edge of Empire: 2008 and 2009 Excavations at Oğlanqala, Azerbaijan

Lauren Ristvet  
*University of Pennsylvania*, lristvet@sas.upenn.edu

Hilary Gopnik

Veli Bakhshaliyev

Hannah Lau

Safar Ashurov

*See next page for additional authors*

---

Follow this and additional works at: [http://repository.upenn.edu/anthro_papers](http://repository.upenn.edu/anthro_papers)

Part of the [Archaeological Anthropology Commons](http://repository.upenn.edu/anthro_papers)

---

**Recommended Citation**


---

This paper is posted at ScholarlyCommons. [http://repository.upenn.edu/anthro_papers/30](http://repository.upenn.edu/anthro_papers/30)
For more information, please contact repository@pobox.upenn.edu.
On the Edge of Empire: 2008 and 2009 Excavations at Oğlanqala, Azerbaijan

Abstract
The nature of political complexity in the Caucasus has emerged as a significant research question in Near Eastern archaeology. Until recently, archaeological developments in Azerbaijan have been left out of this discussion. Two seasons of survey and excavation undertaken by the Azerbaijan National Academy of Sciences and the University of Pennsylvania at the Iron Age site of Oğlanqala in the Naxçıvan Autonomous Republic of Azerbaijan have begun to clarify the local origins of an Iron Age polity and its relationship to major Near Eastern empires, including Urartu, Achaemenid Persia, and Parthia. Situated in the northern half of the fertile Şərur Plain, Oğlanqala was in a position to control a pass through the Dərəlayaç Mountains as well as the agricultural land of the plain. Indeed, in the Iron Age, the Şərur Plain was a complex landscape dominated by Oğlanqala but including at least six other fortresses and many cemeteries. The 2008 survey revealed that Oğlanqala was founded in the Early Iron Age and has extensive Middle and Late Iron Age material. Excavations in 2008 and 2009 in the citadel and domestic buildings uncovered architectural and ceramic differences from contemporaneous Urartian, Achaemenid, and classical sites, while also revealing evidence for interaction among them.

Disciplines
Anthropology | Archaeological Anthropology | Social and Behavioral Sciences

Author(s)
Lauren Ristvet, Hilary Gopnik, Veli Bakhshaliyev, Hannah Lau, Safar Ashurov, and Robert Bryant

This journal article is available at ScholarlyCommons: http://repository.upenn.edu/anthro_papers/30
FIELD REPORT

On the Edge of Empire: 2008 and 2009 Excavations at Oğlanqala, Azerbaijan

LAUREN RISTVET, HILARY GOPNIK, VELI BAKHSHALIYEV, HANNAH LAU, SAFAR ASHUROV, AND ROBERT BRYANT

Abstract

The nature of political complexity in the Caucasus has emerged as a significant research question in Near Eastern archaeology. Until recently, archaeological developments in Azerbaijan have been left out of this discussion. Two seasons of survey and excavation undertaken by the Azerbaijan National Academy of Sciences and the University of Pennsylvania at the Iron Age site of Oğlanqala in the Naxçıvan Autonomous Republic of Azerbaijan have begun to clarify the local origins of an Iron Age polity and its relationship to major Near Eastern empires, including Urartu, Achaemenid Persia, and Parthia. Situated in the northern half of the fertile Şərur Plain, Oğlanqala was in a position to control a pass through the Dərəbəy Mountain as well as the agricultural land of the plain. Indeed, in the Iron Age, the Şərur Plain was a complex landscape dominated by Oğlanqala but including at least six other fortresses and many cemeteries. The 2008 survey revealed that Oğlanqala was founded in the Early Iron Age and has extensive Middle and Late Iron Age material. Excavations in 2008 and 2009 in the citadel and domestic buildings uncovered architectural and ceramic differences from contemporaneous Urartian, Achaemenid, and classical sites, while also revealing evidence for interaction among them. *

* We are grateful to the Azerbaijan National Academy of Sciences for its support, particularly to the director of the Naxçıvan branch, Ismail Hacıyev, and to Maysa Ragimova in Baku. We would also like to thank the chairman of the Supreme Assembly of Naxçıvan, Vasiţ Talibov, who has provided encouragement and support to this joint project, as well as numerous friends in Şərur and Oğlanqala. For this report, Gopnik analyzed the ceramics and the excavation in the southeast houses; Lau analyzed the faunal remains; Bryant reported on site survey techniques; and Ristvet, Bakshaliyev, and Ashurov were responsible for everything else. Staff in 2008: Ristvet, Bakshaliyev, and Ashurov, directors; Gopnik, associate director and ceramicist; Bryant, topographer; Tiffany Earley, archaeobotanist; and Athena Smith, Nikki Beard, Emily Mammadov, and Orxan Aliyev, archaeologists. Staff in 2009: Ristvet, Bakshaliyev, and Ashurov, directors; Gopnik, associate director and ceramicist; Bryant, topographer; Lau, zooarchaeologist; Earley, archaeobotanist; Jennifer Swerida, registrar; Amber Weekes, bioarchaeologist; and Adam Maskevich, Alex Headman, Reilley Jensen, Elvin Aliyev, and Zaur İzmaylov, archaeologists. Bradley Parker and Kathleen Nicoll also participated in a survey that year. Work in 2008 and 2009 was funded by the National Science Foundation (Grant BCS-0836388) and the University of Pennsylvania. We thank Stefan Kroll, Paul Zimansky, David Stronach, Katherine Moore, Katherine Brunson, and the anonymous reviewers for the A/ for their advice on issues discussed herein. All figures are by the authors.

INTRODUCTION

During the last decade, the Caucasus region—particularly the three nations of the southern Caucasus (Azerbaijan, Georgia, and Armenia) and the Russian Republic of Dagestan—has become the locus for a new series of investigations on early complex societies in the highlands of western Asia.1 This research provides an important counterpoint and complement to the paradigmatic development of urbanism and political complexity in Mesopotamia, western Iran, and Syria. Polities and non-state actors located on the highland northern frontier of the ancient Near East, including the Caucasus, often provided the most effective challenge to Near Eastern states and empires. Analyzing their different sociopolitical practices and spatial organization can challenge widespread ideas about the rise of the state and ancient imperialism in the Near East and beyond. Considering the highland perspective can help us move beyond simplistic neoevolutionary models of archaic states to a consideration of the...
roles of resistance, cultural exchange, and hybridization in the creation of political identity.

The joint American-Azerbaijani Naxçıvan Archaeological Project aims to investigate the long-term history of the Şərrur Plain of Azerbaijan’s Naxçıvan Autonomous Republic. Despite nearly a century of Soviet and Azerbaijani archaeological research, this area has often been absent from accounts of the archaeology of the Caucasus, let alone the Near East. It is essentially terra incognita for Near Eastern archaeologists. Following an extensive archaeological survey of Şərrur in 2006 and soundings at two Early Bronze Age (Kura-Araxes) sites, our excavations and research in 2008 and 2009 at Oğlanqalə, the major Iron Age center in the region (fig. 1), focused on the origins, operation, and collapse of a series of polities in this plain during the first millennium B.C.E. and their relationship to empires including Urartu, Achaemenid Persia, and Arsacid Persia.

More specifically, through survey and excavations we have investigated three interrelated topics associated with local dynamics and external empires (table 1). First, we have begun to analyze the relationship between resistance and state formation in the early first millennium B.C.E. Oğlanqalə was probably situated just beyond the borders of Urartu, and its foundation and the emergence of a landscape of fortresses in the early ninth century are probably related to Urartian military incursions into Naxçıvan. From the ninth to seventh centuries B.C.E., Urartu was one of the most powerful states in the Near East. Perhaps Assyria’s most bitter rival, Urartu controlled the highlands from eastern Turkey to northwestern Iran. Urartian material culture, including architecture, pottery, and iconography—which is conservative in nature and identical across much of eastern Anatolia, northwestern Iran, and Armenia—has been interpreted as a state assemblage related to Urartu’s control of an archipelago of fortresses. Evidence from Oğlanqalə and other peripheral fortress sites has begun to challenge this view of Urartian uniformity by revealing a more complex political landscape, one that included competing small states. Our work in the Şərrur Plain aims to analyze the construction of political power at this fortress in its local context.

Second, we have investigated the relationship between local elites and imperial practices in the Late Achaemenid empire. As the largest empire in western Asia until the rise of Islam, Achaemenid Persia controlled the territory from Sudan to Afghanistan for about 200 years. As much as a quarter of the world’s population lived in this empire at its height. Recently, more archaeological attention has been focused on the Achaemenid empire, although these layers tend to be neglected in most research designs. Moreover, most excavations and surveys have investigated Achaemenid satrapal centers, not the system of local centers that was incorporated into the empire. Although art historians have used stylistic analysis to compare column bases from Georgia and northwest Azerbaijan and to investigate Lydian-Persian hybridization at Sardis, the effects of Achaemenid imperialism on wider social, economic, and cultural practices in its provinces have only recently become a research focus. Oğlanqalə, as a local center, provides a locus for such an investigation. A major reconstruction at Oğlanqalə’s citadel took place sometime during the fourth century B.C.E. This building program thus began in the last days of the Achaemenid empire or immediately following its collapse, during the chaotic period after Alexander of Macedon’s death, when the Caucasus and Iranian Azerbaijan were being reorganized into a series of local kingdoms including Caucasian Albania, Media Atropatene, and Armenia. The project was left unfinished, probably a testimony to the unsettled sociopolitical conditions of the fourth century in the Caucasus. As a result, we have an opportunity to consider both indigenous and imperial influence in the construction of a local political center.

Third, we focus on the transformation of the site and the area during the last centuries before the common era. For more than half a millennium, Oğlanqalə has...
Fig. 1. Map of the Near East, 800 B.C.E.–1 C.E.: top, the approximate borders of Urartu, the Achaemenid empire, and Parthia, along with the sites outside the Caucasus mentioned in the text; bottom, detail of the Caucasus, showing the sites mentioned in the text.
was situated on the border of Media Atropatene. During this long period, the site was transformed from an administrative and perhaps religious center with no domestic habitation to a densely occupied, fortified town. This phase is one of the least explored and analyzed in the Caucasus and surrounding regions including eastern Turkey and Iranian Azerbaijan. Our research into this phase of Oğlanqala’s history investigates the construction of social memory—how the site’s later inhabitants incorporated the still-monumental ruins of their predecessors into daily life. Excavations at domestic buildings from this period also allow us to study frontier dynamics from a household perspective.

In addition to addressing these specific research foci, our excavations and surveys allow for consideration of long-term settlement dynamics in the Şərur Plain. Geomorphological, environmental, and settlement data provide a larger context for investigation of economic and ecological changes in the southern Caucasus. Studying changes in subsistence practices and settlement patterns offers different insights into local and imperial interaction than those obtained from architectural or art historical analysis. As a result, we can focus on how economic transformation and larger boundary formation processes affected the rise and collapse of local polities.

### The Şərur Plain

The Şərur Plain consists of 41,200 ha of irrigable and cultivable land, making it the largest and most fertile valley in Naxçıvan. Oğlanqala is perched on top of a 130 m high, 50 ha black limestone/marble hill (Qaratəpə) located near the northern edge of the triangular plain (fig. 2). As a result, the Iron Age fortress was in a position to control both the fertile plain and a mountain pass along the Arpaçay River to the north. It is likely that this river was part of a major ancient route connecting Lake Urmia with Lake Sevan. Oğlanqala is the largest fortress in a landscape that includes additional smaller fortresses, extensive cemeteries at the edge of the cultivation zone, and Iron Age sherd scatter in the irrigated plain, perhaps belonging to now-destroyed settlements.

The Şərur Plain is located at an average of 700–900 masl. Precipitation averages 300 mm per annum, with significant interannual variation. Much of this precipitation falls as snow during the winter, limiting the area to a summer growing season and making rainfall farming impossible except in particularly wet years. Nonetheless, because of its relatively low elevation, the Şərur Plain and the surrounding steppe receive much less snowfall than the highlands. As a result, it has historically been an area of winter pasture. The plain is watered by the Araxes and the Arpaçay, two of

### Table 1. Oğlanqala Chronology Compared with the Chronologies of Surrounding Regions.

<table>
<thead>
<tr>
<th>Date</th>
<th>Oğlanqala</th>
<th>Azerbaijan</th>
<th>Hasanlu (Urmia)</th>
<th>Iran</th>
<th>Armenia</th>
<th>General Periodization</th>
<th>Historical Periodization</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200–800 B.C.E.</td>
<td>period V</td>
<td>Xocalı-Gadabaz period</td>
<td>periods V and IV</td>
<td>Iron I and II</td>
<td>Lchashen-Metsamor period</td>
<td>Early Iron Age</td>
<td>–</td>
</tr>
<tr>
<td>800–600 B.C.E.</td>
<td>period IV</td>
<td>Mançanan period</td>
<td>period IIIb</td>
<td>Iron III</td>
<td>Urartu period</td>
<td>Middle Iron Age</td>
<td>Urartu period</td>
</tr>
<tr>
<td>500–200 B.C.E.</td>
<td>period III</td>
<td>Late Achaemenid/Albania/Media Atropatene period</td>
<td>period IIIa</td>
<td>Iron IV</td>
<td>Yervandid-Orontid period</td>
<td>Late Iron Age</td>
<td>Achaemenid and Hellenistic (Armenia/Media Atropatene) periods</td>
</tr>
<tr>
<td>200 B.C.E.–100 C.E.</td>
<td>period II</td>
<td>Late Media Atropatene/Caucasian Albania/Arscacid period</td>
<td>period II</td>
<td>Parthian</td>
<td>Late Hellenistic period</td>
<td>Classical period</td>
<td>Parthia/Armenia/Media Atropatene period</td>
</tr>
<tr>
<td>1200–1920 C.E.</td>
<td>period I</td>
<td>Medieval-modern periods</td>
<td>period I</td>
<td>Medieval-modern periods</td>
<td>Medieval-modern periods</td>
<td>Medieval-modern periods</td>
<td>Medicaid-modern periods</td>
</tr>
</tbody>
</table>
the largest rivers in Naxçıvan. In addition, there are abundant and easily accessible groundwater resources because of the area’s karstic geology. Beyond the plain, to the east and the west, the low rolling hills of the steppe begin. Today, these areas are usually reserved for pasture, although in exceptional years they may be sown with cereal crops. To the north are the foothills of the Dərəzə Mountains. Within Naxçıvan, these hills rise to 1,300–1,500 masl; just over the Armenian border, they become part of the Lesser Caucasus.9

The agricultural and pastoral potential of this plain have encouraged intensive cultivation and high population density, obscuring much of the archaeological record of the plain. The district capital of Şərur is a sizable town today, and there are remains of a classical and medieval town there also.10 Villages and fields cover most of the valley. Given the fertility of this area, it is likely that numerous small villages or farms would have been present there beginning in the Chalcolithic period.11 Survey has documented several of these sites, although it is likely that many others have been destroyed by human activity.

Immediately beyond the plain, however, in the low-intensity landscape of the steppe, the remains of fortresses and cemeteries are numerous, composing an Iron Age landscape (fig. 3). The fortified settlements are most likely related to defense and administration; their relationship to one another can provide some insight into the political organization of this region. Four fortresses with material from the Middle and Late Iron Age, located immediately northeast of Oğlanqala, were surveyed in 2006 by the authors and again in 2009 by a team from the University of Utah.12 Each of these fortresses is situated at an elevation of 900–1,100 m and is located within sight of at least one other fortress. Perhaps connected with these fortresses are two stone walls built near the boundary of the steppe, which can each be traced for more than 1 km along the valley’s edge. Although it is difficult to date these features, which have no associated ceramics, their juxtaposition with two of the Iron Age fortresses may indicate an Iron Age date. Farther north, less than 1 km from the Armenian border, two other fortresses have been reported. Although it has not been possible to visit them, GIS analysis suggests that they would also have been invisible with the documented fortresses (see fig. 3).13

The fortresses nearest Oğlanqala range in size from 1.6–3.0 ha and may form a lower tier in a settlement

---

9 Kashkai and Aliev 1945; Geografi i Institut Azerbaidzhan-koi SSR 1968; Azizbekov 1973; Coene 2010.
10 Talibov 2008, 273, 443–44.
11 See the results of the first three years of excavation at the fifth–fourth millennium site of Ovçulartaşapı in Bakshaliyev et al. 2010a. For more information about earlier sites in the Şərur Plain, see Talibov 2008.
12 Parker et al. 2011; Ristvet et al. 2011.
13 This is based on line-of-sight and viewshed analyses conducted in ArcGIS. Elevation data for these analyses came from NASA’s SRTM (Shuttle Radar Topography Mission) and Ast-er GDEM (Global Digital Elevation Model) missions—which have 90 m and 30 m resolutions, respectively—and were supplemented with information on the height of each site.
hierarchy dominated by Oğlanqala. The 8 ha fortress of Şərdərkəla lies 15 km northwest of Oğlanqala, near the Turkish border; it is also visible from Oğlanqala. Survey has uncovered no evidence of an Iron Age citadel at the site; however, there is evidence of extensive mudbrick architecture, perhaps related to domestic dwellings, and standing stone fortifications. Şərdərkəla may well have been a second-tier site politically subordinate to Oğlanqala. Alternatively, it may have been a central place immediately outside Oğlanqala’s sphere of influence. Just south of the Araxes River, other fortresses have been documented in Iranian Azerbaijan, including Verahram, Sarandj Qal’eh, and Siah Qal’eh, although it is likely that they lie outside the limits of this polity.

In addition to this concentration of fortresses, the steppe alongside the valley is lined with extensive, albeit discontinuous, cemeteries. Limited excavation and the presence of several disturbed graves indicate that the cemeteries date between the Middle Bronze Age and Classical period. Elsewhere in the southern Caucasus, similar distributions of cemeteries have been interpreted as boundaries of discrete polities. Although none of these graves has been excavated, the surface material suggests fairly simple inhumations, perhaps belonging to agricultural or pastoral populations in the plain. In addition to the cemeteries, just 150 m north of Oğlanqala lies a kurgan. This burial tumulus has a diameter of 65 m and rises 2 m above the surrounding plain. The few sherds collected from the surface are typical of the Early Iron Age and are identical to the earliest material that has been collected from Oğlanqala itself. It is certainly possible that this is the locus of the burials of the elite who initially

---

14 Belli and Sevin 1999; Ashurov 2003.
16 Ashurov 2003. Other graves here were excavated in 2010 and 2011 as part of the Naxçıvan Archaeological Project and will be published elsewhere. Canal construction, road building, and illicit excavation have destroyed several of these graves, revealing archaeological material showing that they date from at least the early second millennium B.C.E. to the early years of the common era.
17 Smith 2003, 166. For the full data set, see Smith et al. 2009.
constructed the fortress. More intensive survey of the steppe and the foothills is planned for 2011 in tandem with continued excavations at Oğlanqala.

SITE SURVEY

Oğlanqala is the largest fortress in Şərur, and it is the only one situated on the plain rather than along the hills lining the Arpaçay River. Architecture and other cultural material cover all the level areas of Qaratapə and extend down the slope in places, even to the foot of the hill in the northwest. Iron Age ceramics can also be found over most of the hill, although their deposition beyond the built-up area probably results from slope wash. To capture and model the complexity of the site, we used a total station to create an accurate topographic map of Qaratapə and to record all the standing architecture on the hill in 2008. We then incorporated both sets of information into a GIS. The fortification walls at the site enclose an area of 12 ha, but the architectural survey documented an additional 2–5 ha of architectural features located outside these walls in other areas of the hill. The architecture at Oğlanqala incorporated the mountain’s topography in different ways. Bedrock ridges were integrated into its fortification system, and the architecture took advantage of the site’s steep northern side for defense.

Methodology

Mapping the summit, where most of the architecture was located, required a straightforward array of points. Surveying the slopes was more complex. To capture enough information to analyze energy-efficient paths and predict the location of entrances and gates, the project surveyor took points along the crest and base of all ridge lines, filling in the gaps between with a random sample of points. The architectural survey then recorded 647 different walls or architectural fragments, some of which clearly belonged to individual structures. Standing walls were recorded using three parallel sets of points—one at the base and two running along the top—allowing them to be modeled in three dimensions and resulting in a better understanding of the relationship between the topography and architecture. Distinctive masonry styles (dated through excavation elsewhere on the site) and the presence of overlapping walls and/or structures built along different alignments allowed us to date some of the structures. Middle Iron Age fortification walls (period IV), Late Iron Age–classical house walls (periods III and II), and medieval/modern rubble architecture (period I) were all recorded by total station and incorporated into a GIS. By comparing the standing architecture with high-resolution CORONA satellite imagery of this area from 1967, 1968, and 1971, we were also able to reconstruct areas of the fortification walls that had been robbed (fig. 4).18

Coincidently, we undertook systematic surface collection in 48 areas defined by topography and standing architecture. Within these areas, we collected all the material present within 5–10 circles, each measuring 1 m in diameter, that were distributed randomly throughout the larger area. Nondiagnostic pottery was discarded, while all other surface finds were kept and registered. We recorded 906 diagnostic sherds from the survey and four other small finds: a carnelian bead (OQ08-14), a blue stone bead (OQ08-15), and two iron nails or pins (OQ08-16 and OQ08-17). Four ceramic periods—Oğlanqala V (Early Iron Age), Oğlanqala IV (Middle Iron Age), Oğlanqala III/II (Late Iron Age to Classical period), and Oğlanqala I (Medieval period to modern period)—were recognized among the survey material, based on the 1988–1989 Soviet excavations at Oğlanqala and regional chronologies.19 Sherds that could not be subdivided based on period were coded as “Iron Age miscellaneous” or “miscellaneous.” They make up 31% (n=279) of the diagnostics collected during surface survey.

Period V (1200–800 B.C.E.)

Small quantities of period V (Early Iron Age) pottery, including 12 sherds of gray ware similar to those found on a burial mound northwest of the site, were found on top of the citadel (see fig. 4a). Similar ceramics are characteristic of the Xocalı–Gənda complex, which is widespread throughout Azerbaijan and well attested in Naxçıvan.20 They also have clear parallels with well-known Iron I and II assemblages in Iranian from the latter half of the first millennium B.C.E. is poorly understood in northwest Iran and the Caucasus, since few sites have been excavated and little material of this date has been published. Much of the material from this period excavated at Hasanlu, e.g., is assigned to either of the two periods (Muscarella 2006, 82–9).


19 A detailed discussion of Oğlanqala ceramic periods II–IV is presented below; period V was not found in excavation during the 2008–2009 season. Prior to excavation, we were unable to distinguish the subperiods of the Late Iron Age ceramic assemblage (Oğlanqala periods III and II). Pottery

18 CORONA images included in our analysis come from the following missions: DS1046–1056DF034 (18 March 1968); DS1115–1057DF074 and DS1115–1057DF075 (14 September 1971); DZB0042800025H019001 (12 May 1966).
Fig. 4. Site survey maps of Oğlanqala (with 5 m contours), showing sherd density and architecture related to each period: a, period V; b, period IV; c, periods III and II; d, period I.
were clearer traces of a town at the foot of the hill. It in the 1930s, when the area was first surveyed, there have probably erased most structures. It is notable that but intense irrigation and deep plowing in this area settlements around the site or from off-site activities, north and west of Oğlanqala may derive from scattered the period from ca. 800 to 600 B.C.E.22 It is possible that the extensive areas of houses in the fields may indicate that the function of the site was entirely administrative/religious during the period from ca. 800 to 600 B.C.E.

Middle Iron Age pottery, in contrast, was much more common—occurring in nearly every collection unit on the site, although it appeared in greater quantities in the north and west (see fig. 4b). We could securely date 167 sherds from the surface collection to this period. The larger fortification walls and the initial construction of the citadel probably date to this period; both sets of walls are built of similar, roughly worked cyclopean blocks cut from the limestone of the mountain. The lack of domestic architecture from this period in soundings in the south and southeastern areas of the site may indicate that the function of the site was entirely administrative/religious during the period from ca. 800 to 600 B.C.E.

Middle Iron Age sherd scatters found in the fields north and west of Oğlanqala may derive from scattered settlements around the site or from off-site activities, but intense irrigation and deep plowing in this area have probably erased most structures. It is notable that in the 1930s, when the area was first surveyed, there were clearer traces of a town at the foot of the hill. It is certainly possible that this is a lower town, like those surrounding fortresses at Bastam and Ayanis, although the scattered nature of the material may be more consistent with a landscape of dispersed farmsteads.23

Periods III (500–200 B.C.E.) and II (200 B.C.E.–100 C.E.)

Late Iron Age to classical material was similarly common across the entire site (see fig. 4c). We could securely date 281 sherds to periods III and II. Many of them are painted forms resembling Western Triangle Ware, usually dated to the fifth to second centuries B.C.E.24 It is possible that the extensive areas of houses recognized in the south and southwest all fall within this date range, given the almost complete lack of earlier material in this area. Some of the additional fortification walls built along the western side of the site also probably date to these periods. They are built with small, irregular stones, and their masonry resembles that of the walls of this date excavated at the citadel and in the southern area of the site. Overall, the function and layout of the site appears to have shifted dramatically after ca. 300 B.C.E. No clear administrative buildings were constructed on the site, and surface materials probably relate to fortified residential areas, which were built with simple stone walls and without the monumentality present in the earlier periods.

Period I (1200–1920 C.E.)

The final occupation recognized in survey probably dates to between the 13th and early 20th centuries C.E. Initially, the green and yellow glazed pottery and high-fired pottery were all assumed to date to the 13th century C.E. Although this identification is likely for certain glazed sherds that have good parallels with Ilkhanid material at Xaraba-Gilan in Naxçıvan and at Hasanlu in Iranian Azerbaijan,25 excavation at the citadel has revealed that it is impossible for much of the rest of the material. The association of these ceramics with bullets, dated coins, and other modern debris within excavated contexts makes it clear that they date to the last two centuries. The survey recovered 151 sherds of this modern material on the site; they were almost always associated with circular constructions built with stones robbed from the Iron Age architecture. Most of these structures—presumably temporary shelters or military installations—had collapsed, leaving dense concentrations of stones. These structures can be identified across the highest part of the site, the north and central quadrants, but few of them were found in the south and southeastern districts of the site. During the Soviet period, a quarry was located in the southern part of Qaratapa; its operation destroyed or obscured earlier evidence of occupation there. Immediately south of the quarry, on the lowest part of the site, is the village mosque. Nondiagnostic sherds collected around the mosque attest to a long period of use of this area, although its modern condition made collection there difficult.

Stratigraphy and Architecture

Two excavation seasons (June–August 2008 and June–August 2009) were conducted at Oğlanqala to

---

21 For the definitive account of Early Iron Age I and II pottery in Iran, see Young 1965. For similar material from the Muş Plain of eastern Turkey, see French and Summers 1994; Sagona 1999.
22 Alekperov 1937, 255 n. 1.
23 A cursory walking survey of the fields north and east of Oğlanqala was performed in 2009 under the direction of K. Nicoll and B. Parker of the University of Utah. A more intensive survey of this area is planned for summer 2012.
24 Levine 1987; Dyson 1999a, 1999b.
establish the settlement sequence of the site and to reveal a large horizontal exposure of architecture dating to the Middle and Late Iron Age in both administrative and residential areas. Although Qələnqala was first surveyed and described in the early 1930s by a team headed by Alekperov from the National Academy of Sciences, it was not excavated until 1988–1989, when Bakhshaliyev opened a 300 m² sounding in the site’s citadel.26 Work at the site was then suspended until the present Azerbaijani-American excavations began in 2008.

The extensive architectural remains visible on the site’s surface and previous surface collection contributed to our decision to locate our trenches in two different areas of the site: the citadel and the southeastern plateau (fig. 5). The relatively flat topography of the site in these areas facilitated excavation. Based on surface sherd scatter, we expected extensive Late Iron Age to classical occupation in all areas, with Middle Iron Age occupation limited to the administrative area of the citadel. We hypothesized that excavation in Late Iron Age contexts at Qələnqala would yield information about Achaemenid imperialism and local relations in what is today Naxçivan, since earlier excavations had indicated that it was probably a low-level Persian administrative center and since surface survey seemed to indicate extensive settlement.27 In contrast, we expected that excavations of Middle Iron Age contexts would yield information about local administration prior to the area’s incorporation into an empire.

The 2008–2009 excavations exposed an area of 1,300 m² of Middle and Late Iron Age occupation at the citadel (periods III and IV). Contrary to expectations, excavation in a 150 m² area in the southeast revealed domestic architecture dated to the last few centuries B.C.E. (period II) just below the surface, as did a sounding in the southwest of the site with no clear period III remains.28 The results of the excavation have allowed us to establish a site chronology (see table 1), which is based on 14C dates (table 2) and stratigraphy, as well as associated pottery.

**The Citadel**

In 2008 and 2009, an area of 1,300 m² (13 trenches each measuring 10 x 10 m) was excavated within the southern half of the Middle and Late Iron Age citadel, adjacent to the 300 m² sounding from the 1988–1989 Soviet excavations. In addition, the Soviet excavation area was cleaned and the remaining sections were drawn, allowing us to connect the new campaign with the old. The citadel at Qələnqala is situated in the north, on the highest part of the site, and it is defined by a series of enclosure walls separating this area from districts to the south (fig. 6). The area slopes to the south and west so that the surface elevation in the northeast corner of unit CB052 was 1,000 masl prior to excavation,29 while the southwest corner of unit CD050 was 994.57 masl, a difference of 5.43 m. Much of this slope is caused by natural differences in the height of the bedrock. Fortification walls enclose an area of 1.2 ha, which appears to define the central administrative district. Surface remains and satellite imagery indicate that this area is probably composed of two discrete buildings. The main palace to the north occupies 4,000 m² in an area that had been terraced prior to citadel construction. The area to the south may once have contained another monumental building constructed of the same cyclopean blocks as the southern wall of the main palace. Extensive remains of standing architecture indicate that it was well fortified, although the presence of bedrock at quite high elevations may suggest that it served as another fortified outdoor space, perhaps a large courtyard. Both seasons of excavations focused on exposing the southern half of the northern palace area.

**Period IV.** The palace was first constructed during period IV. Ceramic and 14C samples from the bedrock in the western part of the palace (see table 2 [AA85515]) and from a period IV surface immediately above the bedrock adjacent to Wall E (AA87525) indicate that the fortress was probably built during the eighth or seventh century B.C.E. and that its construction was coincident with that of Urartian fortresses at Erêbuni, Argishtihinili, and Horom in the Yerevan and Shirak Plains.30 The extensive period III remodeling of this area meant that we recovered no living surfaces or mudbrick superstructure and that none of the material we found was in situ. Period IV wall foundations were made of local limestone/marble, probably quarried from Qaratap itself. The original walls of the for-

---

26 Alekperov 1937, 249–51. For summaries in English, see Hughes et al. 1939, 173. For the 1988–1989 excavations, see Bakhshaliyev 1994.
28 Operation C was a 2.5 x 2.5 m sounding in the southwest part of the site, immediately north of the site’s southern tower. Excavations revealed 1 m of occupation levels—probably belonging to a period II house, like those uncovered in the
tress were built of large, roughly worked blocks. These blocks were approximately square or rectangular and varied in size from 35 x 45 cm to 105 x 97 cm (fig. 7). Locating the interior faces of these walls was difficult because of the period III reconstruction, but the palace walls range from 2.0–2.4 m thick. Several of these walls were formed of stone blocks filled with a rubble core. The wall foundations followed the bedrock, creating a sloping surface that respected the natural contours of the hill. In most cases, a concrete-like shale and clay mixture was laid atop the bedrock to level it before the foundation stones were put in place. In some places, the clay was mixed with smaller stones to provide a level surface for the foundation. The same shale and clay mixture was used to level the bedrock next to the wall foundations and in places where the height of the bedrock changed suddenly (fig. 8). This surface was found at several different elevations (from 998.18 masl in unit CC052 to 994.13 masl in unit CB050), following the general slope of the hill.

A large courtyard dominated the excavated remains of the period IV palace (fig. 9). There are four clear
Table 2. Periods II–IV Radiocarbon Dates.

<table>
<thead>
<tr>
<th>Lab Codea</th>
<th>Material</th>
<th>Unit, Sample No.</th>
<th>Provenience</th>
<th>Date (b.p.)b</th>
<th>+/- (Years)</th>
<th>1-Sigma Calibrated Date</th>
<th>2-Sigma Calibrated Date</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA85509</td>
<td>charcoal</td>
<td>C, SS38</td>
<td>hearth associated with period II living surface in operation C</td>
<td>2050</td>
<td>37</td>
<td>111 B.C.E.–2 C.E.</td>
<td>171 B.C.E.–25 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA85510</td>
<td>seeds</td>
<td>C, SS42</td>
<td>ash layer from possible interior of fortification wall</td>
<td>2071</td>
<td>37</td>
<td>161–44 B.C.E.</td>
<td>193 B.C.E.–4 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA85511</td>
<td>charcoal</td>
<td>A, SS48</td>
<td>large period II hearth in operation 8, lot 84</td>
<td>1968</td>
<td>44</td>
<td>37 B.C.E.–75 C.E.</td>
<td>87 B.C.E.–129 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA87526</td>
<td>charcoal</td>
<td>CC051, SS100</td>
<td>large period II hearth</td>
<td>2043</td>
<td>37</td>
<td>107 B.C.E.–4 C.E.</td>
<td>168 B.C.E.–49 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA87519</td>
<td>charcoal</td>
<td>CC052, SS6</td>
<td>period II pit</td>
<td>2041</td>
<td>37</td>
<td>105 B.C.E.–5 C.E.</td>
<td>166 B.C.E.–50 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA87520</td>
<td>charcoal</td>
<td>CC051, SS13</td>
<td>period II pit</td>
<td>2036</td>
<td>38</td>
<td>94 B.C.E.–19 C.E.</td>
<td>166 B.C.E.–53 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA87521</td>
<td>charcoal</td>
<td>DB050, SS12</td>
<td>interior plaster floor of Structure 2</td>
<td>2093</td>
<td>38</td>
<td>167–55 B.C.E.</td>
<td>339–1 B.C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA87522</td>
<td>charcoal</td>
<td>DB051, SS18</td>
<td>small hearth lying on exterior surface associated with Structure 2</td>
<td>2031</td>
<td>37</td>
<td>91 B.C.E.–23 C.E.</td>
<td>163 B.C.E.–55 C.E.</td>
<td>II</td>
</tr>
<tr>
<td>AA85512</td>
<td>charcoal</td>
<td>D, SS20</td>
<td>lot associated with construction of Wall B and inscribed sherd</td>
<td>2292</td>
<td>38</td>
<td>401–258 B.C.E.</td>
<td>407–209 B.C.E.</td>
<td>III</td>
</tr>
<tr>
<td>AA85513</td>
<td>charcoal</td>
<td>D, SS23</td>
<td>deep sounding in citadel, below Wall B</td>
<td>2314</td>
<td>39</td>
<td>409–262 B.C.E.</td>
<td>508–210 B.C.E.</td>
<td>III</td>
</tr>
<tr>
<td>AA85514</td>
<td>charcoal</td>
<td>D, SS29</td>
<td>deep sounding in citadel, below Wall B</td>
<td>2238</td>
<td>44</td>
<td>383–210 B.C.E.</td>
<td>392–203 B.C.E.</td>
<td>III</td>
</tr>
<tr>
<td>AA87523</td>
<td>charcoal</td>
<td>CC050, L158</td>
<td>period III surface, associated with construction of Wall B</td>
<td>2266</td>
<td>36</td>
<td>393–234 B.C.E.</td>
<td>399–207 B.C.E.</td>
<td>III</td>
</tr>
<tr>
<td>AA87524</td>
<td>charcoal</td>
<td>CC052, SS100</td>
<td>ashy lens beneath column base (CB10)</td>
<td>2270</td>
<td>38</td>
<td>395–234 B.C.E.</td>
<td>401–206 B.C.E.</td>
<td>III</td>
</tr>
<tr>
<td>AA85515</td>
<td>charcoal</td>
<td>D, SS34</td>
<td>bedrock at citadel</td>
<td>2583</td>
<td>38</td>
<td>807–672 B.C.E.</td>
<td>822–552 B.C.E.</td>
<td>IV</td>
</tr>
<tr>
<td>AA87525</td>
<td>charcoal</td>
<td>CC052, SS17</td>
<td>period IV clay surface above bedrock, associated with Wall E</td>
<td>2465</td>
<td>37</td>
<td>753–513 B.C.E.</td>
<td>761–414 B.C.E.</td>
<td>IV</td>
</tr>
</tbody>
</table>

a University of Arizona, Tucson.

b Uncalibrated.
rooms, each of which is rather large: Room 1 (the courtyard) and Rooms 6, 7, and 9 (the eastern wing) (fig. 10). It is possible that the massive reconstruction effort during period III has destroyed other walls, but at present there is no evidence for this. The period IV courtyard seems to be nearly a perfect square—33 x 34 m, or 1,122 m². It is surrounded on at least three sides by walls built of the same roughly worked cyclopean blocks. We have not recovered the western wall of the courtyard, which lies outside the limits of excavation, but it seems likely that it is a continuation of the main period IV western wall, which is visible on the surface farther to the north. This would make the courtyard approximately the same size as the courtyard surrounding the temple at Altintepe, although we have no evidence for a temple at Oğlanqala.31 To the east, the courtyard opens onto a long, narrow passageway subdivided into Room 6 (3.5 x 12.0 m) and Room 7, whose northern wall was not located. It must be noted, however, that bedrock in this area is quite

---

Fig. 7. Northern wall of the citadel, period IV.

Fig. 8. Unit CC052, north section.
high, in places higher than the surviving courses of the two walls, which made reconstruction of the plan difficult. Farther east, the long Room 9 (20 x 5 m) seems to form the eastern limit of the building. A 2 x 4 m buttress was excavated just outside the room’s southeast corner, the only such buttress found in this building. A possible circular tower was also noted in the citadel’s southwestern exterior corner, but the steep slope of the hill to the southwest and ensuing heavy disturbance means that this feature may be the result of erosion. Regular buttressing is typical of Urartian palaces, but, with the exception of this feature, it seems to be absent from the Oğlanqala Citadel. Circular towers are not otherwise reported from this period.

Period III. During period III, a major reconstruction project was begun in the palace, which appears to have been abandoned before it could be finished. No true living surfaces or floors dating to this period were found; rather, the excavated architecture uncovered would have served as the stone foundation for the palace. The debris found in and around the architectural remains is related to this construction phase rather than any subsequent time in the life history of the building. The significant disturbance created by this building project and subsequent erosion makes it difficult to say whether this construction phase followed a previous phase of period III occupation at the citadel or represented the first and only occupation of this period.

The architectural plan of the southern portion of the period III palace is fairly complete, despite being unfinished (fig. 11). The period III architects followed the general plan of the earlier building, retaining the citadel’s main period IV outer walls but altering many of the internal walls. This served to create several smaller rooms out of the large period IV spaces, forming the southern (Rooms 2–5) and eastern (Rooms 6–10) suites.

In most cases, the period IV internal walls were leveled to their stone foundations and covered with stone or mudbrick fill to enable the construction of period III walls. At least one period IV wall, Wall E, the eastern limit of the courtyard, was retained, and well-cut ashlar blocks (45 x 24 x 24 cm) were placed...
on top of it. Unlike most of the architecture at the site, these walls were made of imported limestone, which had been carefully worked and smoothed. New stone foundations were laid for the western and southern walls of this building. The wall foundations were made of irregularly shaped stones, generally about 35 x 35 x 35 cm, which had been minimally worked. The foundations themselves are 2.0–2.5 m in width and have suffered seriously from erosion. The period III foundations reinforced the remaining walls from period IV, creating a massive casemate wall for this courtyard. The southern casemate wall contained long, narrow spaces (Rooms 2–5), which ranged from 5.2 x 3.0 m in size (Room 4) to 7 x 3 m (Room 2). The interior faces of these walls were often unclear, and medium and small stones were used as fill. More dividing walls also altered spatial circulation patterns within the two sets of eastern rooms (Rooms 6–10). The three rooms on the west are all roughly 9 x 4 m, while the long southeastern room is 5.30 x 16.16 m. The limits of the other rooms lie outside the area of excavation.

During period III, Room 1 was reduced in size. There is some evidence that architects planned to convert this courtyard into a columned hall. Roughly rectangular, it measured approximately 27 x 23 m and resembled, on a slightly smaller scale, the Achaemenid-period columned halls at Erebusi (29 x 33 m) and Altintepe (44.0 x 25.3 m). Strewn across the north-west half of Room 1 were the remains of large stone columns (fig. 12). Altogether, 29 column elements were uncovered in the excavations in the Oğlanqala Citadel, including several from the 1988–1989 exca-

33 See figs. in Khatchadourian 2008b, 401–8. For Altintepe, see Özgüc 1969; Summers 1993. For Achaemenid-period levels at Erebusi, see Kanetsyan 2001; Ter-Martirossov 2001.
These include two bases (fig. 13), one capital, one torus, five plinths (or preworked square blocks), and 20 drums. The diameters of the column drums ranged between 65 and 85 cm. Many of them had circles etched into the surface, which generally measured 75 cm in diameter. The original height of these drums seems to have been between 50 and 65 cm. The two bell-shaped bases (CB23 and CB24) had diameters of approximately 70 cm, with heights of 50 cm. The column bases are similar in size to those found at excavations in Qaracмирли and Sari Tapa, Azerbaijan; Gumbati, Georgia; and Benjamin, Armenia.

Another partially completed column element was found that consisted of a torus and perhaps a partially carved lower column drum (CB8). This torus may have been intended to lie directly on one of the square plinths that were found nearby or may have been part of a bell-shaped base. The piece is clearly unfinished, so it is also possible that the torus was intended as a separate element and that the rest of the block would have been carved away before the column was put together. The torus of this piece had a diameter of 105 cm, while the column drum attached to it had a diameter similar to the other drums (ca. 70 cm). The stone plinths were 134 x 135 cm, slightly smaller than the plinths known from Gate R at Pasargadae and much larger than any of the other architectural elements.

None of these architectural elements was finished. The drums still had lifting bosses attached, and chisel marks were visible on most of the pieces. None of the elements had been smoothed, polished, or otherwise decorated. The Oğlanqala bell-shaped bases roughly resemble the typical Achaemenid shape, although without the characteristic fluting it is difficult to say more. Indeed, because of their unfinished state, there are no clear parallels to the column elements from elsewhere.

Fig. 11. Oğlanqala Citadel, period III.

---

35 Stronach and Gopnik 2009.
ther Achaemenid or later sites in the Caucasus or the greater Near East. Other undecorated column bases were found on survey at Tappeh Pahnu, a possible caravanserai site in Fars Province, Iran, where they are associated with both Achaemenid and post-Achaemenid pottery.36 These bases, however, are in a more finished state than the Öğlanqala examples, as they have been shaped and smoothed. It is even more difficult to find parallels for the column drums. Complete stone columns from the fourth century are only known from the Achaemenid capitals. Although many Achaemenid administrative sites, including several in the Caucasus, had columned halls, we assume that the columns were probably made of wood or mudbrick and that only the base was made of stone, as no stone column drums have been recovered. Full stone columns might thus seem more likely in a post-Achaemenid context, but there are few published examples from the fourth or third centuries B.C.E. in the Caucasus. Our unfinished torus may resemble slightly similar pieces from Nahanvand, Iran, and Ai Khanoum, Afghanistan.37 It seems unlikely that any of these columns were ever erected; the excavated elements were in different phases of the finishing process and probably came from a workshop set up during the reconstruction ef-

36 Potts et al. 2006; Potts 2008.
37 Guillaume 1983, fig. 8; Rahbar and Alibaigi 2009, fig. 7. There are also column bases from Hellenistic Qabala and Artashat, although these appear to be quite different from the Öğlanqala examples (Khachatrian 1981, fig. 28; Babaev 2001, figs. 5, 6).
The evidence from the columns indicates that this project was abandoned before it could be completed. The walls of this phase were not finished, and a mudbrick superstructure was probably never added to the stone foundations, although it is also possible that such a superstructure was present but had eroded away. The period III builders seem to have dug down to the original period IV bedrock/concrete surface and then constructed a clay platform, leveling out the bedrock across the square. No plaster or concrete floor dating to this construction period was ever laid on top of this platform. Instead, we recovered a discontinuous, ashy surface that ran immediately below many of the column elements at an elevation ranging from 998.56 to 996.02 masl, sloping to the southwest.

A radiocarbon sample (AA87524) from this surface indicates a probable fourth–third century B.C.E. date for this construction project (see table 2) and is consistent with dates from a deep sounding in the west of the courtyard below Wall B (AA87523, AA85512, AA85513, AA85514). South of the column bases, a cache of 16 iron arrowheads was found associated with this ashy surface (fig. 14 [OQ09-283, 287–301]).

The 14C dates, the parallels for the columns, and the pottery mean that the reconstruction project could coincide with either of two historical periods. First, it may date to the last 50 or so years of the Achaemenid empire, from 380–330 B.C.E., a period poorly documented archaeologically outside the Persian capitals. In this case, the abandonment of the project could result from the fall of Darius III or Alexander’s early death. Second, it may date to the period immediately after the fall of the empire, during the chaotic decades at the end of the fourth century and the reorganization of this territory into Media Atropatene. Given the many local features of the citadel at Oğlanqala, it may be most likely that the construction of this building differs from other Achaemenid sites—including other sites in the Caucasus, such as Qaracəmirl, Gumbatı, and Benjamin, which often look very much like sites in Persia itself. At Oğlanqala, certain symbols of authority—such as the massive columned hall—were adopted but rendered in a local style. The person who ordered its construction may have been a local strongman seeking to consolidate his rule over the Şərur Plain or perhaps a larger area. His ascendancy probably did not last long, and the building project, the site, and indeed the landscape of fortresses were abandoned. The strong influence of Achaemenid styles in the Caucasus after the fall of the empire has been clearly demonstrated, particularly through evidence from excavations in Colchis in western Georgia, such as those at Vani. It is possible that Oğlanqala represents a parallel case.

**Period II.** Thirty-one large, plaster-lined pits and hearths dating to period II were cut into the ruins of the period III palace. Four radiocarbon samples taken from different pits and hearths (AA85511, AA87526, AA87519, AA87520) all date to between ca. 100 B.C.E. and 1 B.C.E., confirming the near contemporaneity of their construction. These pits and hearths had diameters ranging from 50–200 cm and contained material resulting from multiple deposition events. Within the hearths, we found much wood charcoal (including pieces up to 10 cm in length) and ash, while the pits also usually contained multiple layers of ash. Large quantities of animal bones were deposited in some of these pits and were often associated with large sherd from serving vessels (bowls and trays) and cooking pots. Far fewer jar or pot sherds were found in these pits, and they tended to be much smaller, perhaps constituting stray fill. Other small finds found in and around these pits included a bone spatula (OQ08-7), bronze and iron objects (OQ09-148, OQ09-154, OQ09-246), and a whetstone (OQ09-243). The pits are not associated

---

38 Schottky 1989.
39 Knauß 2006.
with any built architecture and are substantially larger than any such installations found in association with the houses. The large quantities of animal bones could result from feasting, although their profile is not much different from other samples (see below). Three major aspects of feasting are generally preserved in the archaeological record: evidence of communal consumption of special foods or drinks, the spatial separation of a feasting area from other activities, and evidence for status symbols deployed in feasting.\(^4^3\) The large size of the hearths, the large quantities of animal bones there in comparison with other areas, the presence of well-made serving vessels, and their unusual setting in the still-imposing ruins of the palace provide evidence for the first two characteristics for large-scale feasting, while the high quality of the serving vessels may relate to the third. If they do relate to feasting, it is possible that such ceremonies in these ruins served to connect the site’s new inhabitants to their semimythical predecessors through the construction of social memory. Such events may have established the legitimacy of the new community’s rulers or emphasized communality in this fortified town. Similar attention to Middle Iron Age monuments in Hellenistic Armenia has been noted, perhaps indicating the importance accorded to memory in the southern Caucasus at this time.\(^4^2\)

**Period I.** Remains of late 19th- or early 20th-century C.E. occupation lay on and immediately below the modern surface within the standing walls of the Iron Age palace. This occupation level (I) consisted of circular structures made of one or two courses of stones robbed from the Iron Age walls, which probably served as foundations for tents, temporary shelters, or fortified gun emplacements. The walls of these circular structures ranged in width from 60 to 130 cm and were usually preserved to about 50 cm in height. The structure’s diameters ranged from 3 to 5 m. Five of these structures were still visible on the modern surface, while other walls dating to this period were found 10–20 cm below the surface. Floor elevations ranged between 997.95 and 999.067 masl. Associated with this simple architecture was substantial pitting. Some of these pits served as graves, although none of them contained a complete articulated skeleton. Additional pits may have been for storage, trash, or defense (e.g., foxholes). Large quantities of glass, Russian-made porcelain, fragments of simple storage jars, and assorted metal objects were found in and around these structures and pits. Bullets, bullet casings, and shell fragments were also common finds. Two coins, one found in 2009 and one in 1988, provide a terminus post quem of 1912 for these installations.

It seems likely that the modern material at the Oğlanqala Citadel results from successive, temporary occupations on this mountain. Qaratəpə continues to be an important source of pasture for sheep and goat herds from the neighboring villages. It is likely that in the 19th and early 20th century, this hill, which is in easy reach of the steppe, served as a camping place for nomadic pastoralists.\(^4^5^\) It may additionally have served as a place of refuge during the unrest in Naxçıvan during the summers of 1919 and 1920. Warfare continued on the Caucasus front during World War I long after it had ended in western Europe, devolving into a series of skirmishes fought by the fleetingly independent republics of the southern Caucasus—Armenia, Georgia, and Azerbaijan—with the diplomatic and military involvement of the Ottoman empire, France, Britain, Soviet Russia, and the United States. In June 1919, the Azerbaijani-speaking inhabitants of Naxçıvan revolted against Armenia, creating a short-lived independent republic out of this exclave with the help of the Azerbaijani army and Turkish officers. One year later, in the summer of 1920, Soviet tanks rolled into Naxçıvan and, on 28 July, declared it the Naxichevani Autonomous Soviet Socialist Republic, with close ties to Azerbaijan. Both years were chaotic for Naxçıvan, and villagers and fighters fled to the hills at different times. It is possible that some of them sought refuge there and that some of the human remains associated with this architecture date to this period of unrest.\(^4^4\)

**Southeast Houses**

A second area of excavation measuring 250 m\(^2\) was opened in 2009 in the southeast quadrant of the mound. Two 10 x 10 m trenches (units DA051 and DB051) and one 5 x 10 m trench (unit DB050) were excavated to reveal two well-defined structures (fig. 15). Two samples of charcoal, one lying on the floor of Structure 2 (AA87521) and the other on the exterior surface associated with the same structure (AA87522), were dated to between 167 B.C.E. and 18 C.E. at one standard deviation, and they are contemporaneous with the period II occupation of the citadel.

This excavation area is perched on the edge of the hill and slopes steeply to the south and east. The open-

---

\(^{41}\) Hayden 2001, 40–1, table 42.41; Helwing 2003, 66.
\(^{42}\) Khatchadourian 2007.
\(^{43}\) Petrushovsky 1949; Khazanov 1994; Coene 2010.
\(^{44}\) Remains of at least 18 individuals have been recovered from period I contexts at the citadel. See Weekes (2010) for a bioarchaeological analysis of them. For World War I in Şur and Naxçvan, see Yarrow 1920, 254; Hovannisian 1982, 62–70, 100–8.
ing elevation of the northwest corner of unit DA051 was 955.85 masl, while the elevation of the northeast corner was 953.89 masl, a difference of almost 2 m. Much of the upper deposit toward the eastern end of unit DA051 and the southern ends of units DB050 and DB051 had been washed down the hill, exposing only the lower levels of occupation. The sloping and erosion that made the area difficult to excavate were also factors in the original construction of the small buildings. The exterior structures were terraced, and the house in square DB050 appears to have been dug into the side of the hill on at least one side. Clearly,
like the excavators, the builders had to find multiple ways to deal with life on a hillside.

Close to the surface of unit DA051, single lines of stones that formed no recognizable architectural pattern may have served as water channels or terracing walls. In the northwest corner of unit DB050, a well-plastered platform or basin was found in addition to a wall stub (Wall B) and an associated hard-packed floor that extended for about 1 m to the east (fig. 16). All these features clearly lay above the ruins of Structures 1 and 2. Since they were so close to the surface, it was impossible to assign a date to them. The presence of modern artifacts on the surface suggests that they may have been associated either with the period I occupation on the citadel or with the modern use of the hill.

About 1 m below the surface in unit DA051 were some poorly built stone walls (Walls E–J), all only one or two courses high, which may have formed the foundations of Structure 1, a small two-room structure (see fig. 16). There was no floor or feature such as a hearth associated with it, suggesting it may have been an animal pen or an unroofed exterior enclosure perhaps associated with semisedentary occupation. To the northwest of the enclosure was a large concentration of striated charcoal and ash with a relatively large number of ceramic sherds. This seems to have been a large ash tip rather than an exterior living area. Two iron arrowheads (OQ10-29, OQ10-246) were found in this deposit. In the area outside this enclosure were some poorly defined hard-packed surfaces and a hearth. These exterior surfaces were probably contemporaneous with those found in unit DB051 outside Structure 2.

Structure 2, excavated in units DB050 and DA050, was the best-preserved building in this area (fig. 17). The recovered architecture consisted of three good walls of an apparently two-room house. The excavation area did not extend far enough west to recover the presumed western wall of the structure, and the southern wall had apparently mostly washed away down the slope of the hill, which fell sharply in this area. A number of stones about 6 m south of Wall C might mark the location of the southern wall of the building. The walls of the house were well made of lightly worked limestone of which three or four courses were preserved. The northernmost wall, Wall C, ran against the northern balk of the square so that its exact width was difficult to determine, but it was probably at least two stones wide, since the very beginning of a second row of stones could be detected in one area of the balk. It is likely that this wall was the northern limit of the house. Wall C met the eastern wall (Wall E) of the house in unit DB051. The substantial Wall E was three or four stones wide in most places and measured approximately 70 cm across. This wall was oddly constructed, stepping down some three or four courses (ca. 25 cm) on its western side, such that its eastern face was preserved to a height of approximately 70 cm and its western face was close to 1 m high. The construction was also uneven, with two very large stones forming most of the eastern face on its northern end and smaller stones placed beside them to the south. It would appear that this wall was designed to accommodate the slope of the hill. The house itself was dug into the side of the hill on its eastern side so that the interior floor was more or less level, although it was necessary to step up to reach the courtyard outside. Without further excavation, we cannot know how much this leveling was mirrored on the western side.

The house was divided into two rooms by a small, one-course-wide dividing wall (Wall A) that seems to have stopped about 3 m short of the eastern exterior wall, creating a broad passageway between the two rooms. The northern room thus created was very narrow at just more than 1 m wide and may have been used as a storage room.

The main room of the structure was clearly used for a variety of living activities. A hard-beaten earth floor could be traced throughout this large room. Two large, unlined hearths and one stone-lined hearth dotted the eastern portion of the room. Very few artifacts were left behind on the floor, but some bone fragments associated with the hearths and one almost complete caprid jawbone found on the floor in the middle of the room testify to some food processing activity in the house.

Most of the daily activities involved with food or material processing must have taken place in the exterior area to the east, in square DB051. In this open yard, some 30 cm higher than the floor of the house, several hard-packed surfaces were recovered, but none could be traced consistently across more than a few meters. Some ash and charcoal concentrations appear to have served as cooking or processing areas, but there were no well-defined hearths. A circle of stones lay on the topmost surface, and beneath the stones lay a concentration of large pottery sherds and some ash, again suggesting some kind of food or material processing.

The plan of these two houses is simpler than most of those recovered from contemporary Artashat and Qabala. Nonetheless, their regular orientation and surface finds of architecture suggest that they were...
Fig. 16. DB050 and DB051, north section.

Fig. 17. Structure 2 from west, Rooms 1 and 2.

part of a dense neighborhood. Analysis of micromorphological and microartifactual samples taken from the house floors, as well as further excavation, will allow us to address additional questions about domestic activities at period II Oğlanqala.

THE CERAMICS

The ceramics from Oğlanqala span all four periods of occupation, but, as with the architecture, it is often difficult to distinguish the remains of one period from those of another. Pottery from the Late Iron Age
through the Classical period in neighboring areas is marked by a great degree of continuity, and there are few stratified sites with published pottery to elucidate the transitions from period to period. To make things even more complex, individual styles, such as Triangle Ware, appear in different regions at different times.

At Oğlanqala, the extensive pit digging in the citadel area did an effective job of mixing the ceramics from all periods so that stratigraphy is of very little help in sorting out the pottery chronology. For instance, the distinct and easily recognizable period IV storage jar sherds, which have arrow-molded decoration and occasional cuneiform inscriptions, were found in almost every area and context. They were unfortunately never found in a context that could be securely dated to the period in which they were certainly made and used. These are very large, heavy pieces of pottery and could not have been washed down a slope; they must have been collected and used as part of the deliberate filling of the citadel area. Among the period II houses, one large period IV storage jar sherd was found lying on the floor of Structure 2, perhaps having been used as an opportunistic tool. Likewise, period IV Palace Ware was found only in later contexts, presumably because of accidental incorporation of these small sherds into erosion or fill. It is possible to tentatively identify a limited number of types with the period II occupation based on the relative frequency of their occurrence in the housing area or in operation C of the 2008 season, both of which were firmly dated to period II. However, it is more than likely that sherds from period III, which must have been scattered about the site when these houses were built, were also incorporated into the remains of these areas.

Period IV

There were no in situ deposits from period IV, but much of the pottery from the site has close parallels to other sites of this date.

Pithoi. The most recognizable period IV sherds come from very large storage jars or pithoi. Although we have some fairly massive sherds of these jars—with diameters of more than 1 m and vessel wall thickness of up to 20 cm—none has been found sunken into the ground as they must have been during use. The applied molded decoration of these jars took the distinctive form of a series of arrows or darts. On some sherds, most notably on two that were also inscribed with cuneiform signs (fig. 18), this molding was very well made with precise lines and sharp edges. On others, it was sloppier, and it spalled off easily. But so far, all 40 sherds with this molding bear the distinctive arrow motif that is without parallel at any other published site of this period, although molding of various other patterns is always found on Urartian pithoi, where it serves to hide the join between the rim and the body. As at Urartian sites of this period, four of the cuneiform inscriptions from the site were also impressed on sherds from these storage jars. The fragmentary signs found on the storage jars probably recorded vessel capacity. We can reconstruct numbers as well as the common signs “a-q[ar]” and “ru,” which likely came from the words aqarqi and terusi, two Urartian volume measurements. It is tempting to interpret the arrow motif as deliberately echoing the cuneiform wedges. If writing at Oğlanqala was indeed a borrowed expression of the prestige of neighboring elites, then perhaps the choice of this motif was intended to emphasize this claim to power.

In addition to the storage jars, three wares at Oğlanqala were found in Urartian contexts at other sites.

“Palace” Ware. Four sherds of an exquisitely polished, very fine, deep red ware were found in the 2008 season (fig. 19), and four were found in the 2009 excavations. The paucity of this ware is not surprising, since even at the core of Urartu, it occurs only rarely and generally only in imperial sites. Two Palace Ware sherds from two small bowls bore very finely worked fluted designs. This pattern also occurs on fine ware jars and bowls at Urartian sites.

Red-Polished Ware. Although it forms a small proportion of the entire assemblage, at least five bowls of classic red-polished Urartian ware were found in the citadel area. This ware has very fine temper but is distinguished by the highly burnished exterior dark red slip. It is hard-fired to the extent of making a distinctive metallic sound when dropped. Bowl forms in this ware at Oğlanqala are in the classic Urartian shape, with grooves below a simple rim (fig. 20[3,4]). Two thickened-rim jar sherds and one possible trefoil-rimmed pitcher were also found.

46 Kozbe et al. 2001, 92, fig. 11; pl. 8.13.
47 According to Payne’s (2005, 80–2) work on Urartian volume measurements, the aqarqi is equivalent to 240–250 liters, and the terusi is equal to 28–29 liters.
Dark Brown Mottled Ware. Brown-slipped ware is one of the most common wares at imperial Urartian sites. At Oğlanqala, this ware makes up only 7% of all sherds (57 of 863 total sherds), but of course much of our pottery is from other periods. Without a discrete cultural assemblage, it is difficult to know what these proportions represent. This ware is tempered with fine grit, although a distinct variant of the ware has large white grit inclusions. It is finished with a very dark brown slip that can vary from dark red to brown to black on a single pot. The mottled effect this creates is a distinctive aspect of the ware, which is always highly burnished. At Oğlanqala, dark brown ware is used primarily (in 65% of examples) for medium to large open bowls (see fig. 20[1, 2])—which have club rims or thickened rims and often have relatively thick vessel walls—as well as for thin-walled carinated bowls (see fig. 20[6, 10]). It is also used, although less frequently, for thickened-rim jars (fig. 21[3, 5]). A distinct variant with a lighter brown slip mottled with orange and an extremely well-burnished surface was preserved in the form of two jar handles, one of which was incised with a number, which has good parallels at Bastam and Çavuştepe (fig. 22). The other was found in the period II housing area; its presence in this context was presumably the result of erosion or reuse.

Fig. 18. Cuneiform-inscribed sherds: clockwise from top left, OQ09-232, OQ08-03, OQ08-19, OQ09-254.

Fig. 19. Urartian Palace Ware from operation A.

1 Koçbe et al. 2001, 95.

In addition to these distinctive, clearly period IV wares, a large number of other sherds from Oğlanqala may date to this period. The pink-buff to tan-buff, white- or red-slipped, simple-rim bowls, for instance, can be found continuously from the Late Iron Age through the Parthian period in Iran. Unless the ware is very marked, it is almost impossible to date an individual sherd of this type. Similarly, jar forms such as plain flaring-rim jars and club-rim jars continued to be made in a variety of grit-tempered wares throughout this long period.

**Period III**

In spite of the extremely well-defined historical sequence of the Achaemenid empire and the relative abundance of sites of the period, it remains difficult to precisely isolate an Achaemenid ceramic assemblage. The capitals at Pasargadae and Persepolis are well known for their monumental architecture, but the lack of excavation of domestic contexts—where pottery dumps have accumulated and houses were abandoned with vessels still lying on the floors—has meant that there is little pottery to associate with these monumen-
At Pasargadae, post-Achaemenid occupation of the Tall-i Takht may well have left more sherds of that period than remain from its main occupation. It is not necessarily the case that imperial domination is reflected in pottery; often local traditions incorporated only a limited number of Achaemenid shapes. At Oğlanqala, there are few discrete loci that can be assigned to period III. The identification of forms with this period rests almost exclusively on stylistic criteria and comparison with other sites rather than on stratigraphy. Ceramics can be distinguished primarily by a number of forms in a grit-tempered pink-buff ware with a light red to pink-buff slip. This was the most common ware at Oğlanqala, and it continued into
period II, but certain forms can probably best be associated with the Achaemenid period.

Carinated Bowls. The carinated bowl, which is found in a relatively standard form from Godin Tepe in Iran to Sardis in Turkey, seems to be an example of an imperial form that was adopted into a local tradition, possibly because of its association with elite activities such as feasting—or to be more precise, drinking large quantities of wine. Of course, in the eighth and seventh centuries B.C.E., carinated bowls already had a long history in the Iron Age repertoire from Assyria to Media to Urartu, but Achaemenid domination seems to have caused this to spread even more widely and ubiquitously in a pink-buff, relatively fine burnished form.\(^{53}\) At Öğlanqala, we found six rims of this type in a relatively fine, pink-buff burnished ware, but the form continued into period III, and the date of these sherds remains unclear (see fig. 20[5, 7]).

Shallow Bowls (Outturned and Inturned Rims). A variety of shallow bowl forms characteristic of Achaemenid assemblages across the region occur at Öğlanqala, primarily in the citadel area and only rarely (three sherds) in the period II houses. These include out-turned-rim (see fig. 20[8]) and inturned-rim (see fig. 20[9]) bowl forms.\(^{54}\)

Upturned-Rim Bowls. In a similar—although often more highly polished—ware are 16 sherds of a very distinctive shallow bowl form with a sharply upturned rim (see fig. 20[16, 18]). This form is well attested in the Achaemenid assemblage at Tsaghkahovit in Armenia.\(^{55}\) The presence of five sherds of this type in the period II houses and in the 2008 period II sounding in operation C, however, suggests that at Öğlanqala these bowls continued to be made into period II, as is indeed confirmed by their presence on the Tall-i Takht at Pasargadae, at the Hellenistic cemetery at Artashat, and in other post-Achaemenid assemblages.\(^{56}\)

Grooved Ledge-Rim Bowls. A very distinctive bowl type without a good parallel at other sites is a ledge-rim bowl with a marked groove on the rim that seems to be designed to accommodate a lid (see fig. 20[11, 13]). Although the ware of this type is similar to the most common buff ware in which most bowls are made, this form is always given a bright red slip that seems to flake off easily. Indeed, the find of a lid in this identical ware would seem to confirm the suggestion that these bowls were designed to be covered (see fig. 20[12]). With the exception of one small sherd found in Area C, the 14 sherds of this form are found exclusively in the citadel area, suggesting that they may be pre-period II in date.

Jars with Applied Decoration. Excavations in the citadel area recovered a number of unusual and distinctive jar forms with molded decoration that may be dated to period III. These include a number of heavy jar rims with finger molding below a ledge rim (see fig. 21[2, 4]). Two of these jars have handles with molded ledges and bosses (see fig. 21[6, 7]), which are similar to a partial handle from Tsaghkahovit\(^{57}\) but also have parallels at later sites.\(^{58}\) One trefoil pitcher with a burnished molded jar handle also appears—which in a slightly different form—at Tsaghkahovit (see fig. 21[10]).\(^{59}\) Without parallel at any other published site is a jar in a dark brown to black ware with an applied rippled rim (see fig. 21[1]).

Handles and Spouts. An interesting and distinctive zoomorphic handle may also date to period III (see fig. 23[10]). This handle, made in a finely levigated clay, had an intense dark red slip that was highly burnished. The stylized horns of the animal are more reminiscent of the zoomorphic vessels from the Colchian culture of the Black Sea region than of the detailed zoomorphic vessels from post-Achaemenid Iranian sites such as Shahri Qumis.\(^{60}\) One trefoil spout (fig. 23[9]) from the citadel almost certainly also belongs to the period III occupation.

Triangle Ware. The vexed questions of the definition, distribution, and date of Triangle Ware once again become issues at Öğlanqala.\(^{61}\) This painted ware occurred across Iran and the Transcaucasus region during the Late Iron Age, but it has so far primarily been identified in surface collections or in single-period sites. The most readily identifiable element of this ware is the presence of ledge-rim bowls with painted ticks, hatching, arcs, and triangles on the flat surface of the rim. These bowls are so distinctive that they can readily be picked up in surface collections and immediately identified. At some sites, they are accompanied by flaring-rim carinated bowls with a variety of geometric motifs—including the hanging triangles after

---

\(^{53}\) Parker 1999, figs. 1.2, 1.3; Dusinberre 2003, 176–95; Gopnik and Rothman 2011, 330–36.

\(^{54}\) Summers 1993, fig. 5; Khatchadourian 2008b, 481–82; Gopnik and Rothman 2011, figs. 7.56–7.

\(^{55}\) Khatchadourian 2008b, 480.

\(^{56}\) Khatchadourian 2008b, 480.

\(^{57}\) Stronach 1978, fig. 109.16; Khachatryan 1981, pl. 14; Haerinck 1983, pl. 7.1; Parker 1999, fig. 2.10.

\(^{58}\) Levine (n.d.); Hansman and Stronach 1974, fig. 5.3; Narimanisvili 2000, fig. 1.4.

\(^{59}\) Khatchadourian 2008b, 503.

\(^{60}\) Hansman and Stronach 1970, figs. 13.1–5; Apakidze 2008, figs. 16.11, 16.21.

\(^{61}\) For discussions of the ware, see Dyson 1999a, 1999b; Kroll 2000.
which the ware was named—painted on the inside of the vessel below the rim and often ending just above the carination. At other sites, these two forms are accompanied by jars and bowls painted with a variety of hanging loops and swirls, which Stronach dubbed “festoon ware.” Variants of Triangle Ware have been found over a very wide area from Pasargadae in southwestern Iran to burials in Georgia. Dating this ware is still problematic, but the evidence from Jameh Shuran and Gimin Tepe suggests that it began in the

---

62 Dyson 1999a, 1999b.
63 Stronach 1974.
64 Stronach 1978, figs. 111.1–10; Narimanisvili 2000, figs. 3–6.
Late Achaemenid period. The presence of the ware on the surface of Hellenistic sites near Miyaneh, Iran, and at Ruyan Duyah, Iran (near Ardabil), as well as in well-dated fourth-century contexts in Georgia, indicates that it continued well into the Hellenistic/Parthian periods.

At Oğlanqala, the painted-rim bowls were found quite frequently on the surface of the site (see figs. 23[1–4], 24), but only a single very small sherd of this type was found in excavation (in the period II operation C of the 2008 season) (see fig. 23[5]). No painted-rim sherds were found in the citadel excavations or in the period II houses. However, the citadel excavations did recover three sherds from flaring-rim carinated bowls with interior painted geometric motifs in dark-red/brown paint. These sherds have strong parallels to the Hasanlu III assemblage (see fig. 23[6–8]); one of them (see fig. 23[7]) is from the same deposit in the operation D deep sounding as AA85512, which was dated to 407–209 B.C.E., placing it firmly in our period II. This distribution allows us to tentatively suggest that at Oğlanqala, at any rate, there may be a chronological distinction between the painted ledge rims and flaring-rim bowls with interior painting. It is possible that excavation at the site has not yet recovered the main occupation when the latter ware was in full use. Other body sherds found on the surface of the site seem to belong to the more elaborated polychrome version of Triangle Ware found in Jameh Shuran period I, Ruyan Duyah, and in Georgia (see fig. 25[11, 12]), but this ware has not yet been found in excavation contexts at Oğlanqala. Further excavation at Oğlanqala may help untangle the complexities of this long-lived painted tradition.

**Period II**

It should be possible to isolate the pottery of period II based on the material from the 2008 operation C sounding and the period II houses, but the preservation from these excavation units was very poor (the average preservation of sherds was 12% vs. 17% in the citadel) and certainly included material from the earlier periods of occupation, as evidenced by the period IV storage jar on the floor of the period II house. Most of the sherds from both these areas seem to have been derived from fill and erosion rather than primary depositional contexts. In the citadel area, when it was possible to isolate the large period II cooking pits, they were (not surprisingly) found to contain primarily cooking pots, which tend to be so similar through time that they are not very useful for identifying period-specific types. In addition, the continuity of forms and wares from period III to period II makes it difficult to isolate discrete assemblages without a stratified sequence. It is nonetheless possible to identify certain forms with the later part of occupation at Oğlanqala.

**Bowls.** A simple-rim bowl is perhaps the most undistinguished of pottery forms, yet it seems to be the hallmark of the period II assemblage at Oğlanqala. Found predominately in a pink-buff, medium-grit tempered ware, often with a red or orange slip (in ca. 60% of occurrences), this form is found in all areas of the site (see fig. 20[14, 15, 17, 19–21]). However, the simple-rim bowl makes up only about 15% of all bowl sherds in the citadel area and almost 40% of bowls in the period II houses. An almost complete example (see fig. 20[15]) was found in the huge period II feasting pit in the citadel area (OQ08, operation A, lot 84) that can be firmly assigned to period II by radiocarbon dating. The ring base of this vessel is not typical of bowls in Parthian-period sites in Iranian Azerbaijan, but it does occur at Pasargad-e and other western Iranian sites and is even more significant at the Late Hellenistic cemetery at Artashat.

**Folded-Rim Jars.** Although most slipped vessels at Oğlanqala are red to orange in color, some folded ridged jar rims are found with a buff to white slip on a medium-grit tempered fabric with visible dark grit inclusions (see fig. 21[8, 9]). With the exception of one sherd from a probable period II pit in the citadel, these very distinctive jars are found only in the period II houses or the period II 2008 operation C sounding. Two of these sherds from the housing area had a black bituminous substance clinging to the interior of the rim. A similar jar form with a light pink-buff slip was found only in the large period II feasting pit in the citadel area (OQ08, operation A, lot 84) (see fig. 21[11]). Folded-rim jars became common in the Late Achaemenid to post-Achaemenid periods in southwestern and western Iran and continued into the Parthian period.

**FAUNA**

Analysis of zooarchaeological remains can illuminate aspects of historical ecology, political economy, social organization, and ideological structure. Below is a summary of the results from a preliminary analysis of the zooarchaeological remains from the 2008 and 2009 seasons of excavation at Oğlanqala. While the
information and interpretations presented here are tentative, results from our initial research indicate lines of inquiry that may be particularly important to pursue in future seasons.

Methods of Recovery and Analysis

Faunal remains were recovered during excavation primarily through hand collection and thus suffer a bias toward larger zooarchaeological remains. However, excavators collected numerous intact rodent bones and small bones from larger taxa, such as sesamoid bones, which suggests that they were cognizant of the presence of small taxa and made an effort to fully recover all faunal material. Material from well-preserved contexts (e.g., pits, living surfaces) were wet-sieved, but the heavy fraction samples have yet to be analyzed. This report only surveys the mammalian faunal remains. A small number of avifaunal and ichthyofaunal remains have been recovered and identified. A complete survey of these remains will be possible following an analysis of the heavy fraction material.

Material was sampled for analysis based on a survey of all excavated lots from the 2008 and 2009 seasons. Priority was given to the deep soundings excavated in 2008 and to lots excavated in 2008 and 2009 that represented well-stratified, controlled primary and second-
ary contexts, with preference for those belonging to the Iron Age (Oğlanqala periods II–IV). A particular focus was given to the period II pits from the citadel. As a result of this strategy, material from all four periods (Oğlanqala periods I–IV) was analyzed, though in unequal proportions. The results presented here should be taken as an indication of trends that future analysis will confirm, debunk, or nuance. The ovicaprid remains from period II yielded the only sample size large enough to offer a preliminary assessment of the survivorship rates among the original population. Given the small number of identified remains presented for each of the other three discrete periods, age and sex classes have not yet been reconstructed at this time. The faunal assemblage from Oğlanqala examined thus far yields an overall number of identified specimens (NISP) to at least the taxonomical level of subfamily (in the case of ovicaprids) of 548. The faunal remains were analyzed by period to elucidate the different potential animal-management strategies employed during each period of occupation.

As is to be expected of a site with Oğlanqala’s location and temporal range, the faunal assemblage is dominated by the traditional suite of Near Eastern domesticates. Sheep, goats, and cattle predominate. Pigs, canids (c.f. Canis familiaris), and equids are present in smaller numbers. A small number of wild taxa (e.g., leporids, fox, and gazelles) and microfauna were also recovered.

**Period IV**

Period IV remains were derived from squares CD051 and CD052 at the Oğlanqala Citadel. As in the succeeding periods, ovicaprids were the most numerous group identified (table 3). When possible to differentiate among genera, sheep outnumber goats. Cattle remains make up the next most numerous identified taxa, followed by canid, leporid, and pig remains, each represented with one identified specimen.

**Period III**

The period III sample is derived from operation D and unit CC050. These lots represent a small, relatively fragmentary sample of remains with a NISP of 77 (table 4). Ovicaprids predominate, constituting a combined 57% of the NISP and a minimum number of individuals (MNI) of at least two sheep and one goat. Cattle again are the second-most represented category of taxa, followed by canid, leporid, and pig remains, each represented with one identified specimen.

**Period II**

Fauna from period II form the largest assemblage analyzed to date at Oğlanqala. Material from this period comes largely from two types of contexts—the domestic structures in the operation C sounding and the “Southeast Houses,” and a series of large pits located throughout the citadel. In aggregate, the assemblage from this period yields a NISP of 385 (table 5). The period II sample contains a more diverse range of identified taxa, although this is likely a product of its considerably larger sample size. As in previous periods, ovicaprids are the most numerous identified taxa, accounting for 76% of the overall assemblage. Sheep outnumber goats at a ratio of 1.6:1 when the distinction between genera can be made. Cattle make up the next most numerous taxa identified, followed by pigs, canids, leporids, and gazelle. The only equid and gazelle specimens thus far identified at the site date to this period. Additionally, while this report only summarizes the preliminary analysis of mammalian archaeofauna at Oğlanqala, it is notable that all avifauna identified to date come from the period II material derived from contexts associated with domestic structures. Preliminary analysis indicates that these specimens, nine in all, compare favorably in size and basic morphology with geese and chickens.

The differences between the period II material from the domestic structures and that from the 23 pits excavated from the citadel (significant at $\alpha=0.05$) are of

<table>
<thead>
<tr>
<th>Table 3. Period IV Fauna.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxa</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Bos taurus</td>
</tr>
<tr>
<td>Capra hircus</td>
</tr>
<tr>
<td>Lepus sp.</td>
</tr>
<tr>
<td>Ovis/Capra</td>
</tr>
<tr>
<td>Ovis aries</td>
</tr>
<tr>
<td>Sus scrofa</td>
</tr>
<tr>
<td>Vulpes vulpes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4. Period III Fauna.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxa</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Bos taurus</td>
</tr>
<tr>
<td>Canis sp.</td>
</tr>
<tr>
<td>Capra hircus</td>
</tr>
<tr>
<td>Lepus sp.</td>
</tr>
<tr>
<td>Ovis/Capra</td>
</tr>
<tr>
<td>Ovis aries</td>
</tr>
<tr>
<td>Sus scrofa</td>
</tr>
<tr>
<td>Vulpes vulpes</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>
particular interest given their potential implications for understanding the nature of the period II occupation at Oğlanqala (tables 6, 7). Both faunal samples are similar in terms of their most numerous taxa. Ovicaprids are again most abundant, and the ratio of sheep to goat is identical, with sheep outnumbering goats 1.2 to 1 in pits and 2.6 to 1 in domestic refuse. Cattle, the second-most numerous taxon for both samples, make up a slightly larger portion overall of the sample derived from the citadel pits by both NISP and weight. Finally, despite the smaller sample size and more fragmentary nature of the sample derived from domestic contexts, it is more diverse in lower-ranked taxa. The only equid, gazelle, or avifaunal material yet identified at Oğlanqala has come from these contexts. The diversity of the domestic material from period II may indicate more opportunistic exploitation of faunal resources, involving a wide array of wild and domestic fauna. In contrast, the abundance of more complete remains of ovicaprids and cattle may indicate that the period II pits represented the remains of consumption or production activities that differed from those represented elsewhere on the site.

The 23 pits from the citadel with faunal material (described above) require special consideration. Generally, these deposits are characterized by higher portions of complete elements and minimal evidence of scavenging and weathering. This suggests the pits were quickly sealed. One pit in particular, unit CC054, lot 84, represents a unique deposit. This lot comprises a large, oval, ashy deposit measuring almost 2 m in diameter and richly filled with faunal material. This lot was filled with whole and fragmentary bones weighing 1,267.1 g—approximately 7% of the faunal material from this period by weight, including indeterminate fragments. Fifty-four of these fragments could be identified to the level of subfamily or better. The taxa from this lot were less varied, consisting of only three identifiable groups. About 80% of the material represents sheep and goat remains. Where discernible to the level of genus, all the material came from sheep. Additionally, about 20% of the fragments (by count) were burned. This is indicative of processing and, given the context, supports a different interpretation than quotidian depositions of food refuse.72 What precisely this interpretation is, however, will require further excavation and analysis of faunal material from other contexts. More analysis of day-to-day refuse at the site will provide an empirical baseline against which patterns in fauna gleaned from the pits can be compared.

Table 5. Period II Fauna.

<table>
<thead>
<tr>
<th>Taxa</th>
<th>NISP</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bos taurus</td>
<td>75</td>
<td>19.47</td>
</tr>
<tr>
<td>Canis sp.</td>
<td>11</td>
<td>2.86</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>34</td>
<td>8.83</td>
</tr>
<tr>
<td>Equus sp.</td>
<td>1</td>
<td>0.26</td>
</tr>
<tr>
<td>Gazella sp.</td>
<td>1</td>
<td>0.26</td>
</tr>
<tr>
<td>Lepus sp.</td>
<td>1</td>
<td>0.26</td>
</tr>
<tr>
<td>Ovis/Capra</td>
<td>205</td>
<td>53.25</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>55</td>
<td>14.29</td>
</tr>
<tr>
<td>Sus scrofa</td>
<td>2</td>
<td>0.52</td>
</tr>
<tr>
<td>Total</td>
<td>385</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 6. Period II Fauna from Pits.

<table>
<thead>
<tr>
<th>Taxa</th>
<th>NISP</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bos taurus</td>
<td>49</td>
<td>21.40</td>
</tr>
<tr>
<td>Canis sp.</td>
<td>10</td>
<td>4.37</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>24</td>
<td>10.48</td>
</tr>
<tr>
<td>Lepus sp.</td>
<td>1</td>
<td>0.44</td>
</tr>
<tr>
<td>Ovis/Capra</td>
<td>129</td>
<td>50.65</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>29</td>
<td>12.66</td>
</tr>
<tr>
<td>Total</td>
<td>229</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 7. Period II Fauna from Other Contexts.

<table>
<thead>
<tr>
<th>Taxa</th>
<th>NISP</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bos taurus</td>
<td>26</td>
<td>16.67</td>
</tr>
<tr>
<td>Canis sp.</td>
<td>1</td>
<td>0.64</td>
</tr>
<tr>
<td>Capra hircus</td>
<td>10</td>
<td>6.41</td>
</tr>
<tr>
<td>Equus sp.</td>
<td>1</td>
<td>0.64</td>
</tr>
<tr>
<td>Gazella sp.</td>
<td>1</td>
<td>0.64</td>
</tr>
<tr>
<td>Ovis/Capra</td>
<td>89</td>
<td>57.05</td>
</tr>
<tr>
<td>Ovis aries</td>
<td>26</td>
<td>16.67</td>
</tr>
<tr>
<td>Sus scrofa</td>
<td>2</td>
<td>0.64</td>
</tr>
<tr>
<td>Total</td>
<td>156</td>
<td>100.00</td>
</tr>
</tbody>
</table>

72It is difficult, however, to rule out some confounding effects of taphonomic forces, which may be warranted based on the relatively large number of carpal and tarsal bones and phalanges recovered from this context, as well as the comparatively small number of long bone fragments.
to analyze age distribution of ovicaprids at their time of death. Age data was furnished by epiphyseal fusion (fig. 25, top) and mandibular tooth wear (see fig. 25, bottom). The epiphyseal fusion data suggests that inhabitants at Oğlanqala focused culling their sheep and goats around the 28- to 36-month age mark. This is indicated by the fact that elements that fuse during that interval were more frequently recovered unfused than fused. Age distributions gleaned from lower tooth wear suggest a culling strategy that focuses on even older animals. Approximately half of the ovicaprids were kept to 36 months of age, and by 72 months of age, 80% had been killed. Combined, these data suggest that inhabitants focused on killing animals about three to five years of age, which may in turn suggest an economic focus based on both primary and secondary product consumption. Unfortunately, the sample of elements that can be used to make the distinction between sexes was too small to construct a reliable distribution. Distribution data by sex would clarify the implications of this age-at-death distribution.

Worked bone was also recovered from the period II occupation, notably from a pit in unit CC052. Lot 23 represents another rich faunal deposit, a pit cut into earlier strata. In addition to the large volume of faunal remains, this pit includes five worked astragali of ovicaprids, which may have functioned as gaming pieces.

Period I

A small amount of material dating to the 19th–20th century occupation of Oğlanqala was analyzed (table 8). This material came from several lots in operations C and D. The preliminary analysis yielded a NISP only 20 of which could be identified to the level of subfamily or better. Of those remains, ovicaprids predominated, and, where discernible, the specimens appeared to come from sheep. The paucity of material thus far analyzed from this period precludes further interpretation.

A number of bone objects were recovered from period I contexts, including a cache of modified ovicaprid astragali, which, again, perhaps functioned as gaming pieces. Lot 8 in unit CD051 contained 11 astragali that were modified and polished so that the natural projections on their medial and lateral aspects were reduced and so that their surfaces appeared flat. Several astragali were perforated in the center of the proximal portion. One astragalus had a fragment of rock lodged inside a cavity in its distal end, perhaps to weight it. Modified astragali were also found in a period II pit in square CC052.

Discussion

While these data are the result of only preliminary analysis at Oğlanqala, they raise important questions, which we will pursue in subsequent zooarchaeological studies. Most significantly, future research should be aimed at assessing the different animal-management strategies employed during the four phases of occupation, with particular attention to the number of domestic vs. wild taxa appearing in assemblages associated with food refuse. This variation—both between the periods of occupation at Oğlanqala and between different subsamples within the same period—is of interest. Additional analysis will focus on the differences between periods III and IV, when the occupants of Oğlanqala may have been the recipients of provisions, and period II, where the nature of the occupation is less clear. Until larger samples from periods III and IV are analyzed, it is impossible to determine whether the variations noted here are artifacts of sample size or of actual variations in consumption patterns. However, this preliminary analysis suggests that during periods III and IV, when the site was an administrative center, the political economy was predicated on more formal provisioning than in the later period II, when varied consumptive practices may have included both wild and domestic taxa. An in-depth analysis of the microfauna—with a particular focus on the avifauna and, if present, ichthyofauna—will certainly nuance this interpretation. Given Oğlanqala’s proximity to riverine resources, the exploitation of fish may have been a significant factor in the political economy of the site.

Another issue for future research is the apparent preferential exploitation of sheep over goats. People choose to herd sheep and goats in varying proportions based on economic goals, herd security, and environment, and such choices would certainly have been of great concern to the inhabitants of Oğlanqala in antiquity. At present, sheep seem to have been more abundant than goats in all four periods. When a more complete data set is available, this proportion will likely clarify aspects of both the political economy and historical ecology at Oğlanqala during the various phases of occupation.

Above all, the preliminary research explored here shows that zooarchaeological research will prove a fruitful avenue of inquiry at Oğlanqala. The detailed study of the faunal material will undoubtedly contribute to our understanding of the daily life of the people of Naxçıvan in antiquity, as well as their interaction with their environment and with the various forces that held political control over Oğlanqala.

73 Silver 1970; Reitz and Wing 2008.
75 Redding 1981.
CONCLUSION

Data retrieved from survey and excavations at Oğlanqala in 2008 and 2009 provide new evidence for the organization of a small Iron Age polity in an underexplored area of the southern Caucasus. These same data allow us to reconsider the nature of Iron Age societies in the highlands of western Asia. The strongly local character of the material from the entire first millennium B.C.E., coupled with historical and archaeological evidence for contact with or incorporation into large empires, provides a new perspective on imperialism and state formation.

Survey suggests that the earliest occupation on the site dates to the Early Iron Age. The nature of this occupation is unclear, but it is likely that the site was founded as a fortress similar to those known from other areas in the southern Caucasus during the Late Bronze Age and Early Iron Age. Our earliest evidence for construction at the citadel, however, dates to the Middle Iron Age and is coincident with the experience.
pansion of Urartu from its center near Lake Van to Iranian Azerbaijan and Armenia to the east and the Euphrates to the west. It is still uncertain whether Oglanqala was incorporated into Urartu, and, if so, when this may have happened. At Oglanqala, finds of cuneiform-inscribed pithos fragments on the citadel show local use of writing—not simply the importation of inscribed artifacts from elsewhere, as these jars would have been constructed in place. These inscribed storage jar sherds have good parallels from a number of Urartian sites, indicating influence. Yet characteristic Urartian architectural features—ashlar masonry, regular buttressing, wall footings, and staircases carved from the living rock—appear to be entirely absent from both the citadel and the standing fortifications at the site. Moreover, the alignment of the fortification walls is not starkly geometric like that of their Urartian counterparts but, like Early Iron Age examples, instead follows the natural topography of the hill. In both the north and the south, the fortification walls are marked with rounded towers that seem to be integral parts of the original construction and have no parallels at Urartian sites. During this period, the organization of space on the citadel—where there are probably at least three period IV administrative buildings—also differs from the excavated Urartian centers in the southern Caucasus, such as Erebeni, Argishtihinili, and Karmir Blur, which are all characterized by a large, single administrative building. Additionally, the small quantity of typical Urartian pottery identified from excavation contrasts with the situation in most Urartian administrative centers. Finally, there is only one legible Urartian rock inscription known from Naççvan, a campaign inscription of Išpuini and Menua. Although other inscriptions may await discovery, their paucity in this region and the absence of building inscriptions may suggest that the territory was never fully incorporated into Urartu. Given the large size of Oglanqala, whose period IV fortification walls enclosed at least 6 ha, making this administrative area comparable in size to regional and imperial Urartian capitals, the absence of such inscriptions is particularly revealing. Similar fortresses have been documented through survey elsewhere in Naççvan, including Çalxanqala, Qazancqala, and Qalaçiçq.

The best parallels for Naççvan are other areas located on Urartu’s frontier, where recent archaeological work has challenged reconstructions of Urartu based on excavations in its heartland of Lake Van, Lake Urmiya, and the Ararat Valley. Recent surveys in the area south of Lake Sevan—where historical sources locate the Etiuni, a coalition of tribes that fought Urartu during the ninth century B.C.E.—have revealed a number of local Early Iron Age fortresses, some of which were later converted into Urartian centers. Tsovinar Fortress, named the “City of the God of Teisheba” following Rusa I’s conquest, is an example of one of these. Like Oglanqala, the fortifications at Tsovinar were irregularly buttressed, and its walls were built of unworked stones. In terms of dimensions, construction techniques, and overall plan, Tsovinar differs from classic Urartian architecture and reflects instead the pre-Urartian traditions of the area. Similarly, excavations at Horom, a fortress on the Shirak Plain near Urartu’s northern frontiers, have revealed an unusual, very large outpost beyond the typical area of Urartian control. The Urartian fortress at Horom also combines local and Urartian features. Its fortifications, like Early Iron Age fortifications, follow the natural terrain of the hill, although they include typical Urartian buttresses. Additionally, only 1% of the ceramic assemblage was typically Urartian. Survey during the 1970s in East Azerbaijan Province in Iran also established the presence of several fortifications with little Urartian pottery or architecture, probably the centers of small polities along Urartu’s borders. In these three areas on the northern and eastern borders of Urartu, we thus have evidence for considerable independence. These sites contrast clearly with those known from Lake Van, the Ararat Plain, and the area west of Lake Urmiya, all of which bear a clear Urartian stamp.

The lack of these typically Urartian features is significant because, unlike many polities, Urartu had a

---

71 Smith 1998.
73 Hmayakan et al. 1996; Salvini 1998. Another very badly eroded cliff inscription is located in the exclave at Fashat Evi (Bakshaliyev and Marro 2009, 58).
74 Standing fortifications at Oglanqala are characterized by several different masonry styles, not all of which have yet been dated securely through excavation. The most conservative estimate, 6 ha, assumes the area enclosed by fortification walls of cyclopean stone blocks and excludes what seem to be fortified “suburbs” on flat areas to the north and west. If we include the latter areas, our estimate more than doubles. In contrast, Smith (1999, 57) estimates the size of Argishtihinili, the largest fortress in the Ararat Plain during the Imperial period, at 4.2 ha, and Horom, the largest fortress in the Shirak Plain, at 3.59 ha.
75 Bakshaliyev 2004, 155–57.
76 Biscione et al. 2002.
77 Sananyan 2002.
79 Smith 1999.
80 Kroll 1984.
clear material imprint. Zimansky calls this the Urartian state assemblage, a combination of architectural characteristics, pottery, inscriptions, and luxury goods such as metalwork and ivory. As the term suggests, this material is indicative of the presence of the Urartian state, not of a single unified ethnic group spread across an area normally defined precisely by its ethnic diversity. The uniformity of the fortresses—which are best understood as imperial centers that were founded ex novo and did not survive the empire’s fall—was one way Urartu created and maintained “political unity under a ruling ethos”.

Whether or not Oğlanqala was ever officially incorporated into Urartu, the monumental remains of this site and its associated landscape challenge most reconstructions of this empire. If Oğlanqala was never subordinated to Urartu but continued to exist as the capital of a small polity based on the Şrur Plain into the eighth or even early seventh century B.C.E., then we will have to envision the political landscape of the Iron Age Caucasus as a collection of separate polities rather than as a uniform staging ground for an imperial power. In this case, Oğlanqala may have been a stronghold of a group such as the Etiuni or perhaps another tribal confederation. Urartian aggression may have spurred secondary state formation, leading to the formation of coalitions based on resistance. Such a situation is hardly unusual, of course; one could suggest Assyria during the ninth and eighth centuries as a parallel, where, despite its military dominance, several independent kingdoms continued to exist along its borders. The great variety of diplomatic relations that Assyria employed with such kingdoms has been the subject of much recent research. Like Oğlanqala, which can be seen as part of a long tradition of fortress construction in the Caucasus, many of these kingdoms relied on Late Bronze Age political traditions adapted from the vanished Hittite empire. It is certainly possible that this fortress was conquered by Urartu and briefly incorporated into its empire; however, we have as yet no evidence for this. In that case, the preponderance of local features at Oğlanqala indicates that Urartu’s integration policies along its borders were more fluid than usually believed, as the evidence from Horom and Tsovinar already indicates. An explanation for the lack of clear Urartian administrative control here could be found in the presence of Scythian material from the Şrur Plain, which was recognized during survey in the 1990s. It is possible that the combination of a local political center and Scythian incursions made this area difficult to hold.

The Late Iron Age remains from the citadel at Oğlanqala provide new data for imperial–local interaction in the Caucasus, as well as for the nature of the Achaemenid empire. Recent excavations in southeast Georgia and northwest Azerbaijan have focused on the imperial nature of Achaemenid sites in the Caucasus by emphasizing the Persian elements of administrative sites. The unique columns at Oğlanqala, which seem to mix local and imperial features, and the diverse pottery assemblage, which combines certain Achaemenid forms (e.g., carinated bowls) with local forms, highlight the hybrid nature of the Achaemenid empire. The reconstruction of the Oğlanqala Citadel translated imperial architectural styles into a local idiom. The results of our excavations provide further evidence that the Achaemenid empire accommodated local diversity while providing a strong model of government that persisted after its fall.

Perhaps most surprising is the evidence for a transformation in the nature of the site during the last few centuries B.C.E., when increased warfare probably led to the resettlement of the site as a fortified town rather than an administrative center. The results of the site survey and excavations of houses in the southeastern area of the site indicate that this was a sizable settlement. Excavations of both simple and elite private houses at Oğlanqala promise to add more information about domestic activities in this frontier area. This is particularly important since, with the exception of excavations at the ancient capitals of Armenia and Albania—Artashat and Qaba, respectively—there has been little archaeological research on settlements of this period in the Caucasus, particularly smaller sites like Oğlanqala. In a recent article, Potts suggested that Olane, a sizable fortification mentioned in Strabo (11.14.6), might be the ancient name for Oğlanqala during this period. Our discoveries of an extensive occupation at the site from ca. 100 B.C.E. to 1 C.E. could support this identification, although there is no further evidence for it.

Future research in Naxçıvan will focus on elucidating the earliest period at Oğlanqala (period V) to examine the diversity of local political patterns.

---

88 Zimansky 1995a, 111.
89 Diakanov 1984; Smith 2005; Bakhshaliyev et al. 2010b.
90 For new excavations at Zincirli that consider local and imperial dynamics, see Schloen and Fink 2009; Casana and Herrmann 2010. For Tayinat, see Harrison 2009.
91 Novruzlu and Bakhshaliyev 1993, 107, fig. 11.3. A general recent account of Scythians in the southern Caucasus is Mehner (2008), although she does not include the Naxçıvan material.
92 Supra n. 45.
93 Potts 2002, 130–32.
We also plan to expand excavations to other sites in Şərur, including small fortresses, possible habitation sites, and cemeteries. This will allow us to delineate how intersite relations changed over the course of the Iron Age and to provide a fuller view of the origins and development of political complexity in this area of the southern Caucasus.

LAUREN RISTVET
UNIVERSITY MUSEUM OF ARCHAEOLOGY AND ANTHROPOLOGY
UNIVERSITY OF PENNSYLVANIA
PHILADELPHIA, PENNSYLVANIA 19104
LRISTVET@SAS.UPENN.EDU

HILARY GOPNIK
ANCIENT MEDITERRANEAN STUDIES
EMORY UNIVERSITY
ATLANTA, GEORGIA 30322
HGOPNIK@EMORY.EDU

VELI BAKHSHALIYEV
INSTITUTE OF HISTORY, ARCHAEOLOGY AND ETHNOGRAPHY
AZERBAIJAN NATIONAL ACADEMY OF SCIENCES, NAXÇİVAN
370000 NAXÇİVAN
AZERBAIJAN
VELIBAHSHALIYEV@MAIL.RU

HANNAH LAU
COTSEN INSTITUTE OF ARCHAEOLOGY
UNIVERSITY OF CALIFORNIA, LOS ANGELES
LOS ANGELES, CALIFORNIA 90095
HANNAH.LAU@UCLA.EDU

SAFAR ASHurov
INSTITUTE OF ARCHAEOLOGY AND ETHNOGRAPHY
AZERBAIJAN NATIONAL ACADEMY OF SCIENCES, BAKU
370143 BAKU
AZERBAIJAN
SAFAR@BOX.AZ

ROBERT BRYANT
1848 FLAT SHOALS ROAD SE
ATLANTA, GEORGIA 30316
ROBCBRYANT@GMAIL.COM

Works Cited

and Social Landscapes. Newcastle: Cambridge Scholars.
for Western Iran, 1500–500 BC.” *Iran* 3:53–85.