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Exploring the Southeast Frontier of the Urartian Kingdom. The Qara Zia-eddin-Survey: An Archaeological Prospection of Anaqizly Tappeh

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Abstract: The Qara Zia-eddin plain is considered a prime example of land use in Southeastern Urartu in the Khoy region of West Azerbaijan. Since 2016, archaeological investigations have been carried out in the Bastam hinterland through the Iranian-Austrian cooperation with the aim of investigating the interaction of settlements with local hilltop fortresses and the use of landscape use in the time of the Urartian Kingdom. The starting point of the project work was in the south of the Qara Zia-eddin plain, with the special focus on the range of hills near the village of Chors. The Urartian fortified settlement of Anaqizly Tappeh was explored using both geomagnetic and archaeological surveys.

Keywords: Urartu, NW-Iran, Bastam, landscape archaeology, geomagnetic prospection, Iron Age III.

Introduction

The fertile plains along the coastal regions west of Lake Urmia were an integrated part of the Urartian kingdom since its earliest political formation in the last quarter of the 9th century B.C.E (Salvini 2009). More recent evaluation of Neo-Assyrian cuneiform inscriptions about this region by Fuchs (2004) corroborates the suspicion expressed by Kroll

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(1984: 129) that this region may even have belonged to the homeland of the Urartian dynasty (Kroll 2011). So far, however, there is little archaeological evidence to support this assumption. If so, this would undoubtedly represent a revolutionary aspect in our understanding of the origin and character of the Urartian kingdom, especially when compared to the urban culture of Hasanlu IVc/b (Danti 2013: 16-23, Kroll 2013), commonly associated with Mana. The lack of information can be traced back to the early days of archaeological research on Urartu. Since its beginnings, research was in fact mainly based on the Urartian cuneiform scripts (Kuntner & Heinsch 2021).

Although this approach is essential for the contextualization of archaeological sources as well as for the reconstruction of political history, this process led to a rather unfavorable interpretation, which mainly led to the limitation of the perspective of politico-military and economic aspects. This is best understood in the context of the late 9th century B.C. illustrated by the case studies of Qal'eh Ismail Aqa (Silenzi 1984), Qalatgah (Muscarella 1971) or Tashtepe (Salvini 1984; Muscarella 2012: 265-267). These sites are dated by cuneiform inscriptions to the time of the co-regency of Išpuini and Menua or just the latter, and are therefore repeatedly included in the debate about the date of the destruction of Hasanlu IVB (Magee 2008).

The investigations of the German Archaeological Institute under the direction of W. Kleiss and S. Kroll contributed significantly to the knowledge of archaeological research on Urartian architecture. Their detailed survey documentation of the architectural legacies, especially of fortresses, as a representative image of Urartian rule, covered almost the entire territory of Iranian Azerbaijan. Although settlements were also thoroughly surveyed during these explorations, equal weight was not given to their appearance and character in assessing and impacting the Urartian kingdom.

The reason for this attitude arises again from an overly literary reading of the Urartian inscriptions, since their content often led scholars to interpret the spread of Urartian fortresses, along with the mention of the destruction of several dozens of fortresses and villages, as a general cultural turning point. Thus, the beginning of the Iron III period is generally defined by an event perceived as primarily violent, with the consequence that the landscape of Iron II is generally considered to have been eradicated by the victorious armies of Urartu.

However, a careful reading of the Urartian inscriptions, particularly when supplemented by the imagery emerging from the contemporary Assyrian inscriptions, clearly shows that the landscape of Urartu was complex and multifaceted at all the times, not only in regard to fortified and unfortified sites (Biscione 2009, 2012; Kroll 2005), but also in regard to the interaction with nomadic communities (Lindsay & Greene 2013). Of greatest interest in this regard is the hitherto unique unfortified site of Haftavan III, which is believed to have served as an administrative center (Burney 1972: 137-142; 1973: 164-165). This is

because, firstly, this site offers a rare opportunity to examine more closely the relationship between the administration of Urartian Kingdom and the agricultural population, and secondly, because it is the only settlement, so far investigated in northwestern Iran, which dates to the reign of Rusa II.

Today we know of over 80 fortresses in Iran-Azerbaijan, which are addressed as Urartian fortresses (Kleiss 2008). Despite this unexpected number, our knowledge is limited to the material culture, and we are primarily aware of material coming almost from fortresses founded in the first half of the 7th century B.C. by Rusa II or rather from their destruction horizon dating to the middle of the 7th century B.C. (Kroll et al., 2012: 1-38; Heinsch et al. forthcoming). To gain a deeper understanding of the Urartian Kingdom, it is necessary to emphasize the complexity of interrelationship between fortresses as an expression of the political power of the Urartian Kingdom, and rural settlements as interlocutors of the local sedentary societies (Stone 2012; Stone and Zimansky 2003; Zimansky 2012) preferably over the whole period of the cultural phenomena referred here to as KURUrarṭu, that is from its formation in the Late Bronze Age to its political reception as Armenia in Iron IV.

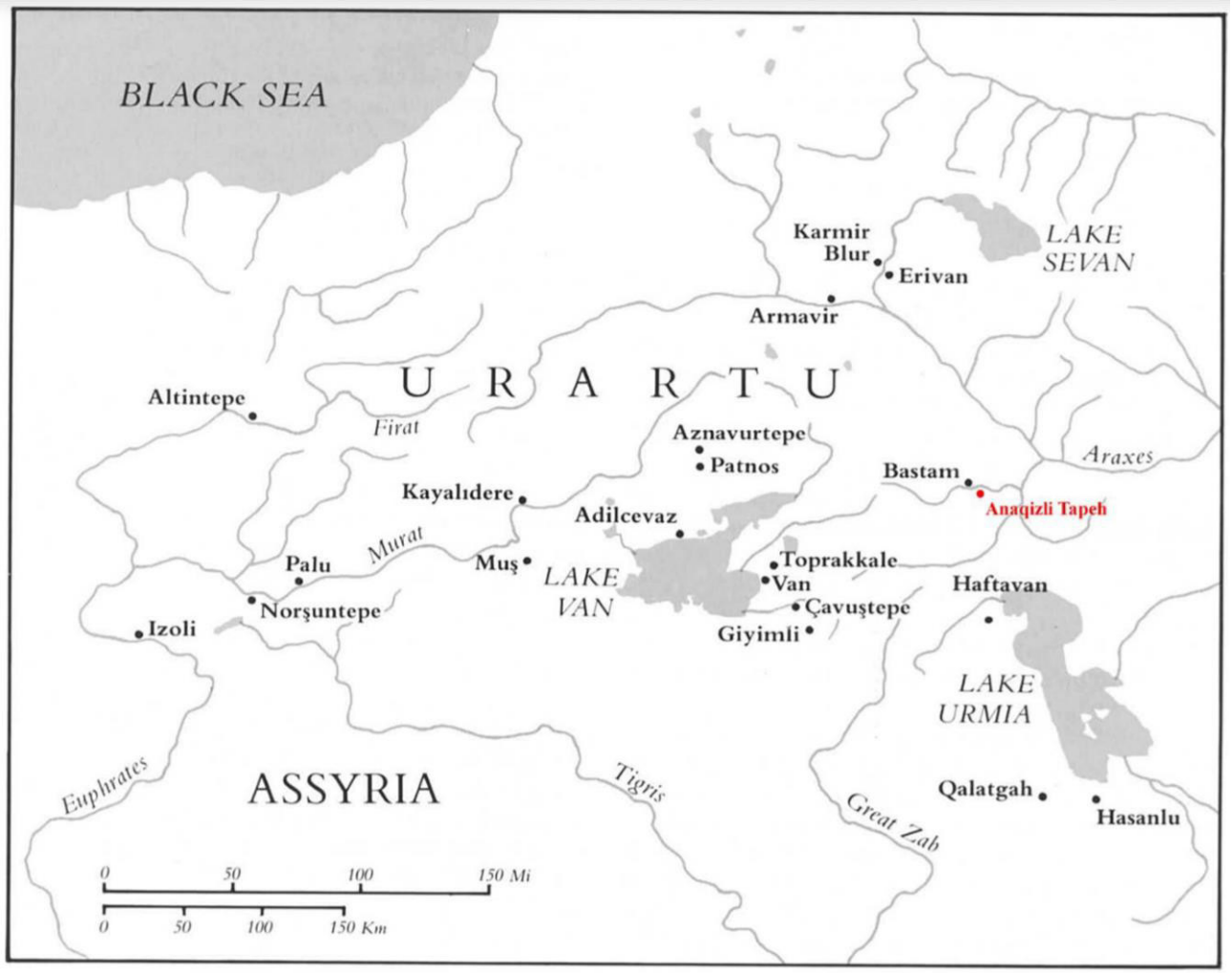

Fig. 1: Anaqizly Tappeh in the topographic context of Urartu (adapted from Muscarella, 1988: 424)

Fig. 2: The Qara Zia-Eddin plain with sites, mentioned in the text (Google Earth)

The Qara Zia-eddin plain takes a central position in this regard. First, because of the close relationship to the most important Urartian center in North West Iran, Bastam, and secondly, because the site of Bastam is currently one of the best investigated Urartian centers (Kleiss 1979, 1988), thus providing an excellent assemblage for comparative studies (fig. 1). The Qara Zia-eddin plain was recently emphasized by Dan (2010) as an outstanding example for the research of the landscape polity of the Urartian Kingdom (Olwig 1996, 2014). The plain was once integrated in a dense network of fortresses built along and across the main valleys and pass routes, which were used by the Urartian kings to control and connect the fertile plains around Lake Van and Lake Urmia. Bastam, located on the entrance, lies thereby at the intersection of one of the most important geographic areas of the Urartian Kingdom, characterized by the fertile plains bordering the three lakes of Van, Urmia and Sevan, aptly described by Zimansky (1995: 9, 24) as the "Urartian Archipelago". According to the classification of Biscione (2012: 82-83), the fortified landscape of Qara Zia-eddin consists of the seven fortresses: Qal`eh Haidari, Turki Tepe, Ashagi Korul, Allahverdikand, Uzub Tepe, Duchgagi and Qal`eh Oghlu, which depended on the main center Bastam (fig. 2). The geographic distribution of these sites clearly indicates a mainly west-east orientation, indicating the existence of a basic route connecting Bastam directly to the capital Tushpa on the east shore of Lake Van via the Zagros Mountains. As recently pointed out by Biscione (2012: 80), the unique size of Bas-

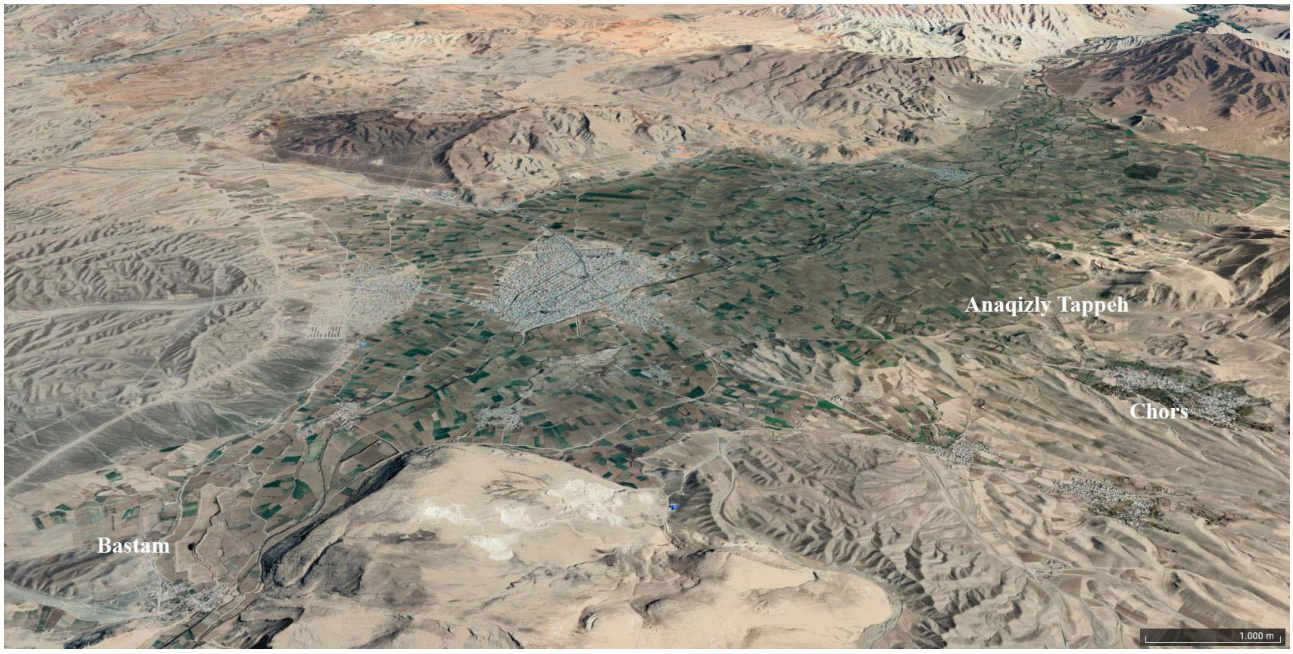

Fig. 3: The Qara Zia-eddin plain with the sites Bastam and Anaqizly Tappeh (Google Earth)

tam clearly shows that this fortress represented not only the main political center in North West Iran, but very likely of the Urartian Kingdom during the 7th century B.C. Bastam connected and controlled the access to both the capital city of Tushpa and the main north-south routes from Livar in the Marand plain and Seqendel in the Avar through the Verachram Fortress into the Ararat Plain to Erebuni, Karmir Blur, Armavir and further west to Altintepe in Anatolia. However, this route was under control long before the foundation of Bastam, as evidenced by the expansion of the Urartian kingdom towards the Caspian Sea already under Sarduri II, as evidenced by the Seqendel stone inscription (Salvini 1982) found next to the eponymous Iron II and Iron III fortresses (Kleiss & Kroll 1980) as well as vividly recorded in the rock inscriptions of King Argišti II (714-680 B.C.E) at Shisheh northeast of Ahar, at Nasht-e ban and Razliq northeast of Sarab (Khanzaq et al. 2001).

It can therefore be assumed that the Qara Zia-eddin plain lay along one of the main routes of communication since the beginning of the Urartian Kingdom, the policies of which, of whatever nature, certainly, influenced the history of the fortified settlements located in the plain. This research aspect is particularly relevant in view of the decline of the Urartian Kindgom in the 40is of the 7th century B.C.

It is precisely for this dramatic event that Bastam became the central research site and makes the plain so important for exploring the relationship between the Urartian Kingdom on the one hand and the local cultures on the other, that were part of KURUrarṭu. In fact, Bastam´s horizon of destruction allows for a unique archaeological "snapshot" of an occupation period, complemented by a clearly imperial setting covering a mere 20 to

30 years. The culture material from Bastam forms the basis for comparative studies with the culture material from the Qara Zia-eddin plain, and in particular from the ongoing excavation project at Anaqizly Tappeh, in order to better appreciate the impact of Bastam´s foundation and decline on the cultural development in the Qara Zia-eddin plain, and therefore to better understand and appreciate the impact the Urartian presence have had on the southeastern boarder of the Urartian Kingdom.

In May 2016 and 2017, the RICHT, in cooperation with the Institute for Ancient History and Ancient Near Eastern Studies at the University of Innsbruck, started the project "The political Spread of Urartu" aiming at the archaeological investigation of the Qara Zia-eddin plain in the cultural context of Bastam as main center of the Urartian Kingdom. In June 2016, the first campaign focused on the geomagnetic and archaeological surveying of the Anaqizly Tappeh. This report aims to present the results of these survey activities.

Geography

The province of West Azerbaijan in North West Iran is culturally strongly related to the South Caucasus. As part of the Alpine-Himalayan belt and is mainly influenced by the continental collision between the Arabian and Eurasian plates (Maheri-Peyrov et al. 2020). In contrast to other parts of the Alps- Himalayan belt, the collision in this region is very recent (e.g. Hatzfeld & Molnar 2010). Limestone outcrops from the Jurassic and Cretaceaous periods make up a significant part of the foothills, as do the contemporaneous alluvial fans and terrace formations that characterize much of the landscape. The Aq Çay and Araxes rivers shaped the landscape significantly and formed intermontane river valleys, like the Qara Zia-eddin plain. Four natural corridors give access to the Qara Zia-eddin plain: The western access is traversed by the river Aq Çay, which rises at the 70 km distant Aktaş Dağı Mountain (2715 m) on the border between Iran and Turkey. The river flows from northwest across the plain in the southeastern direction, where the path leaves the plain through a natural valley narrowing. Another further natural course is that in the east due to a natural valley narrowing that leads into the Araxes valley. In the south, a corridor crosses the mountainous terrain towards the modern city of Khoy, some 40km from the Qara Zia-eddin plain.

The Qara Zia-eddin plain measures respectively up to 20 and 11 km from West to East and North to South. In the south of the Qara Zia-eddin plain, and about 200 m north of the village Chors, raises the characteristic rocky outcrop of Anaqizly Tappeh (fig. 3 and fig. 4). The hillrock lies on an altitude of 1206 m above sea level and rises about 75 m above the surrounding terrain at its highest point. The outcrop measures 1000 x 600 m at the base and is oriented north-south (coordinated: 38°50`38``N 45°02`21``E). Both in the north and in the south, the hill is accompanied by other smaller elevations (fig. 5). The area on the Anaqizly Tappeh consists of two plateaus, the so-called Upper Plateau,

Fig. 4: View of the upper plateau of Chors – Anaqizly Tappeh (©Anaqizly Tappeh Project)

Fig 5: Anaqizly Tappeh with the subsequent further hill formations in the south of the Qara Zia-Eddin plain (A. Darvish-Zadeh)

which extends about 350 x 200 m and slightly protrudes to the north-west. The so-called Lower Plateau is located to the southeast and has approximately the same extension (fig. 6). The hill rock is marked to the south by cliffs. On both plateaus, building structures are visible on the surface. Illicit excavation pits can be seen in various places on the site already from the earliest CORONA satellite imagery.

Methods

The first task at Anaqizly Tappeh was the geomagnetic prospection of the areas on the Upper and Lower Plateaus to use as basis for the planning of archaeological excavations. The same geomagnetic grid system was used also for the archaeological survey of these areas, which aimed at least roughly at delineating the time span of occupation that could be expected in the singular trenches (see below Site Survey Summary). In addition, efforts were spent to ascertain the existence of a defensive structure in particular along the western slope of the Upper Plateau where it gently changes into the Lower Plateau. A side effect, but nevertheless important was finally the documentation of the state of preservation of the site and how strong structures have been damaged by the illicit diggings.

For the geomagnetic survey 5-chanel vertical-difference-magnetometer of the company Sensys with a DLM-98 data logger was used. Measurements were collected at a sampling interval of 5 cm by the use of an Odometer along transects spaced at 50 cm apart within usually 25 m x 50 m wide grid fields. Each of the five FGM650 sondes contains two vertical aligned one-axis fluxgate sensors with a base distance of 650 mm and a magnetic sensitivity of ±20.000 nT. The daily calibration occurred on the same spot on site. The data processing and conversion into grayscale pictures is accomplished with the software MAGNETO® also provided by Sensys. The data were processed in Geoplot software to generate magnetic grayscale plots. Simultaneously, a series of aerial photographs were taken by drone using ground control points measured with a total station to create 3D models, aerial orthophotos and digital elevation models (DEMs) of the site. The data enables a detailed topographic analysis by considering both the geomagnetic anomalies as well as wall debris visible at surface or visible changes in soil composition and consistency. Due to the structural features visible at surface and their elucidation in relation to attachments, which the area consistently shows over a large number over this part of the plateau, we focused our magnetometer measurements on the Upper Plateau of Anaqizly Tappeh. Due to the large number of surface findings, the Upper Plateau was finally divided into section A and B to facilitate addressing the terrain (fig. 6).

Geomagnetic Survey and Results

Clear layouts of related structures were recorded within the geomagnetic grid fields 13, 14, 33-35 and 39 in the north and 1-4, 25, 26, 46, 48 and 49 in the south of the Up-

Fig. 6: Anaqizly Tappeh, near Chors: The Upper and Lower Plateau (Google Earth)

Fig. 7: Anaqizly Tappeh with the grid system (Google Earth, adapted by Walter Kuntner)

per Plateau (fig. 7). The following archaeological remains are thereby particularly interesting for further archaeological investigations: In the northern grid fields, hereinafter called area A, the geomagnetic imagery reveals the existence of a rectangular structure surrounded by a circular wall (fig. 8). The structures extend to the rocky slope in the northwest. Working traces, most likely for terracing the slope could be detected associated with two stairs, which seem to mark some kind of footbridge between the slope and the area of the Upper Plateau.

In the south, hereinafter called area B, the geomagnetic imagery shows the presence of rectangular buildings, which seem related to wall remains of worked stones. In area B, a circular structure with a diameter of approximately 28 meters is also discernible, which is surrounded by two parallel-aligned structures, each consisting of a regularly built chain of rooms, each with a size of 8 x 4 meters. Further south, this structure is crossed by another structure, which is again surrounded by a chain of rooms, which is, however, aligned at a different angle.

The geomagnetic survey of the Lower Plateau of Anaqizly Tappeh was conducted in 2017. In contrast to the survey conducted in the Upper Plateau, the geomagnetic prospec-

tion of the Lower Plateau was severely hampered because of the presence of large boulders and pits. Nonetheless, the geomagnetic imagery shows the existence of regularly built structures similar to the house plans detected on the Upper Plateau. It is noticeable that in the Lower Plateau considerably fewer findings could be found on the surface.

Survey findings

The finds collected during the archaeological survey were catalogued according to the grid of the geomagnetic survey. The vast majority of the finds (98%) consists of pottery fragments. Among the other finds are a large number of terracotta figurines, seals, stone tools, among which obsidian arrowheads and a flint saw are most remarkable, but also a large number of instruments from the stone industry.

In total, the archaeological survey from the Anaqizly Tappeh yielded more than 3500 pottery fragments. The number of non-ceramics, on the other hand, amounts to 180 pieces. The majority of the small finds comes from the grid fields 8 to 11 in the northeast of the Upper Plateau. It is tentatively suggested that this concentration may be indicative for the location of burials in this area. The pottery and small findings material triples if the finds from the adjacent hill formations are also counted.

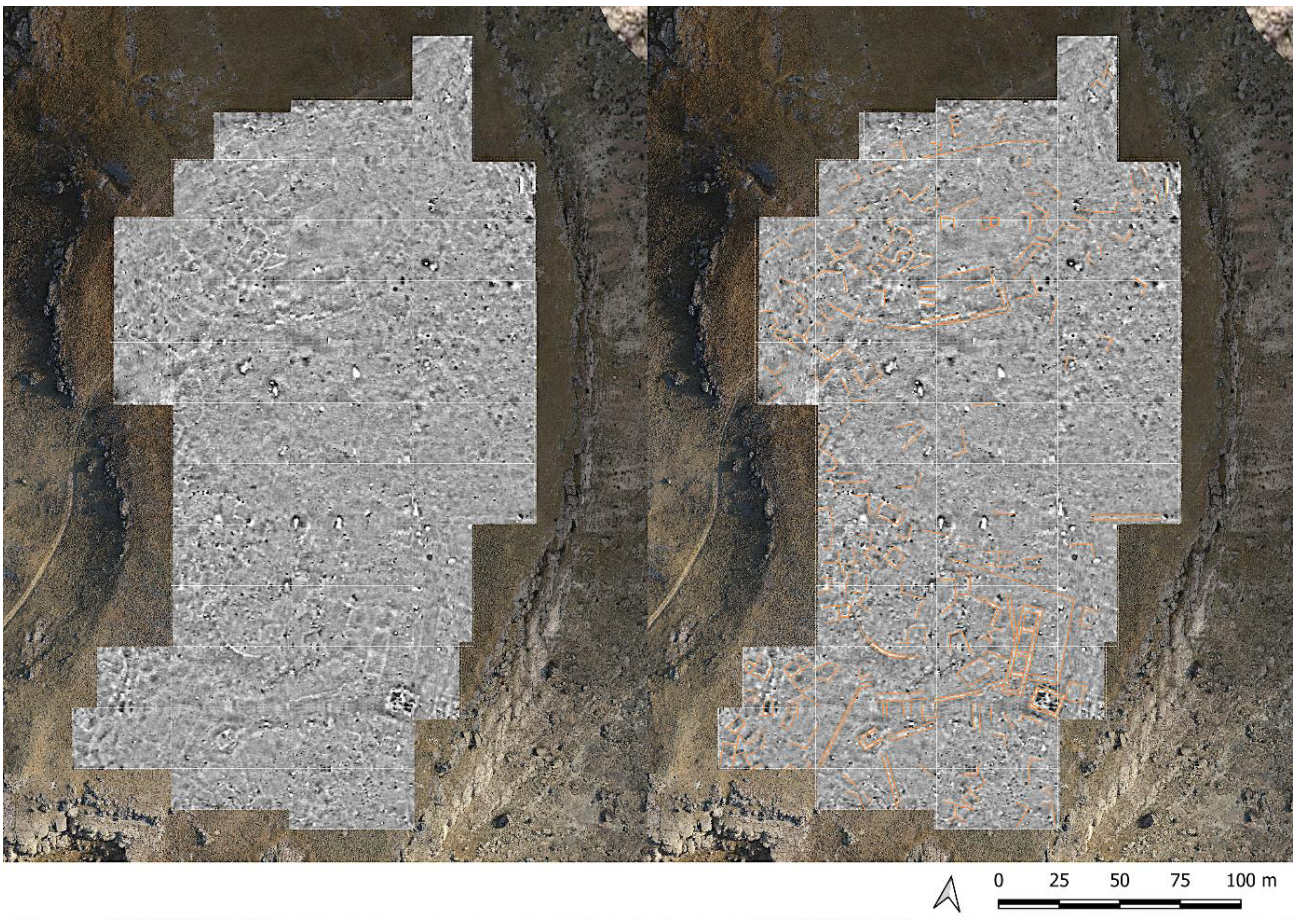

Fig. 8: Geomagnetic documentation with interpretation (Walter Kuntner)

Among the Anaqizly Tappeh pottery assemblage, 1289 diagnostic pottery fragments were recorded and documented; these are rim and bottom fragments as well as decorated body fragments. The ornaments are quite varied: In addition to surface finishing such as polishing and painting, plastic ornaments, such as fingerprints, grooves, punctuated, combed and rolled patterns also plastic applications occur, such as beads or knobs. The pottery fragments are unevenly distributed across the Plateau areas. The strongest concentrations were ascertained in Areas A and B described above. However, the concentration refers not to the amount than to the type of ceramic wares. The above-average occurrence of Middle Bronze Age pottery, as already observed by S. Kroll (Kleiss and Kroll 1975), is remarkable.

Another, equally high find density relates to Iron III pottery found during the survey. The pottery fragments of this period found on the surface occur with quite different clay qualities and colour nuances. Overall, ceramic fragments can be distinguished by fine, medium-fine, medium-coarse and coarse clay quality. Coarse ceramic vessels can be assigned to storage vessel fragments. The types of ceramics that occur can generally be divided into three types of ceramics: clay-based ceramics, red-slipped ceramics and painted ceramics. The latter should be treated separately, since it is red slipped pottery with painting on the one hand and painting on a light (reddish-light brown) background on the other (fig. 16). The evidence from excavations on the Upper Plateau dates the painted pottery to the later Iron III and Iron IV periods. The clay-based pottery and the red slipped pottery, on the other hand, finds its comparison exclusively in the Iron III layers.

The "clay-based" pottery

Most of the pottery found can be assigned to the group of clay-based pottery (fig. 9-12). The colour of the clay varies from yellow-brown to red-brown to dark brown. Black ceramic fragments do not occur in the otherwise very dark pots either. Almost all pottery fragments are medium-fine to medium-coarse in their clay quality. Only fragments of very large vessels show a rough clay quality with some very large inclusions. Almost all fragments are smoothed, rarely roughly polished. Some pieces have a slip. A slip can be found on some pieces, but it is not clear if this was a misfire and whether if the slip was originally intended to be red. The main forms are pots of ever smaller capacity, bottles and buckets (fig. 9-12). Few bowl forms have been found on a rather small scale. The bowls usually have a slightly rounded, thickened rim. But there are also inwardly thickened rims (fig. 12, 9). All pots and bottles found in Anaqizly Tappeh have outwarded rims. In some examples, the lip profile shows a slight triangular shape. Pots usually only have a short neck, followed by a globular vessel body (fig. 12, 2-6). There are also pots whose bodies are almost straight (fig. 9, 17-18). Small bowls without clearly recognizable profiling are rare; the vessel walls may be straight or inwarded (fig. 12, 7). In an example, the edge thickens inwards (fig. 11, 9). Larger flat bottoms belong to storage vessels (fig. 12, 17-18).

Red slipped pottery

Pottery fragments with a red slip usually only occur on fine to medium-fine clay quality. Almost all pieces are smoothed or polished. The red coating can be of different colours (fig. 13-15). The colours vary from light red to dark burgundy, with the darker shades of red being more common. The quality of the very fine, red and finely polished ware, as well-known from Bastam, is not ascertained so far at Anaqizly Tappeh. Rather, the finds of reddish-grey pottery or red ware with grey or a grey and black core with a red slip show parallels to sites that were already inhabited earlier. Two main forms can be distinguished within bowl forms: Carinated bowls with a slight constriction and a wide rim (fig. 15, 5-6) and bowls with a slightly rounded rim on the outside (fig. 13, 1-2). What is also striking about this find at Anaqizly Tappeh is that these two main forms were not found mixed up on the surface, but spatially separated in areas A and B. The group of jars dominate the find inventory: rims that are slightly thickened and rounded outwards are particularly common. In addition, the small to medium-fine vessel shape with a short neck predominates in the find inventory. The handle finds consists of a fragment of a lid (fig. 15, 8) and a handle (fig. 15, 7). A spout fragment belonging to a jug was also found (fig. 15, 10). Vessel bases are generally flat.

Painted pottery

Within the group of painted pottery, two types of painting can be distinguished: pottery with black painting on a red slip and red painting on light clay pottery.

Pottery with a red slip and black painting

The vessels mostly consist of fragments of spherical vessels, either bottles or jugs (fig. 16, 1-5). Due to their red slip, these fragments can easily be assigned to the red-slipped pottery. The vessels presented here differ greatly from the other ceramic fragments presented so far. Black paint on red slip pottery is found in stratigraphic contexts dated to Iron III (Heinsch et al. 2019: Pl. 6) and Iron IV (Heinsch et al. 2019: Pl. 8). Comparisons related to both ware and vessel shape are particularly well-known from Verahram (Kroll 1976: 29, fig. 5) and Qal'eh Oghlu (Kroll 1976: 41, fig. 12, 21).

Kroll (1976) refers to the occurrence of ceramics in the Anatolian region for the period in question. So far, only survey finds in the Iranian-Azerbaijani region have contributed to knowledge of this pottery. The excavations in Anaqizly Tappeh confirm Kroll's assumption, based on the close connection between the red-coated pottery, that it is a Urartian-period pottery.

Yellow and light red pottery with painting

Several examples of painting were found on yellow and light red pottery fragments

without a slip. The vessels are made of a fine yellow to yellow-brown clay. In addition, there occurs, however, also a ware coloured light red to pink. All fragments are painted with a matt red-brown colour. Among the vessel shapes are carinated bowls (fig. 16, 6 and 8) and bowls with a slightly thickened rim (fig. 16, 7). Comparisons are again known from Verahram (Kroll 1976: 29, fig. 5, 16-17), Qal'eh Siah (Kroll 1976: 37, fig. 10, 24) and Qal'eh Oghlu (Kroll 1976: 41, fig. 13, 6-9). The excavations on the Anaqizly Tappeh date this type of pottery to the transition from Iron III to Iron IV.

Black(-grey) pottery

Noteworthy is finally the black (grey) pottery from Anaqizly Tappeh (fig. 17). The ware is medium-fine to medium-coarse tempered with mineral inclusions. The surface is smoothed, occasionally also polished. In places, this pottery type is covered by a heavy incrustation that was difficult to remove from the pottery and presumably stems from lying on the surface for a long time. The black (grey) pottery was mostly found in the grid field 2, at a place where the terrain slopes down to the south. Excavations at the Anaqizly Tappeh show that the black/grey pottery was in use before the Urartian presence. Based on the stratigraphic findings, we locate them in the Iron II period.

Conclusion

The geomagnetic prospection of the Upper and Lower Plateaus of Anaqizly Tappeh has yielded several complex and extended architectural remains, which at least partly were also contemporaneous to the Kingdom of Urartu. The pottery evidencing the existence of an Iron III settlement, which most probably was unfortified, significantly expands our picture of the use and control of the Qara Zia-eddin plain. Of note is the strong presence of red-slipped pottery making up 60% of the Iron III assemblage, which indicates that the settlement continued after the demise of the Kingdom of Urartu. Future long-term excavation should focus on the research question of what impact the Urartian Kingdom ultimately had on the settlements of Anaqizly Tappeh, which existed from the Chalcolithic to late Sasanian periods.

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Bibliographical Refrences

Biscione, R.,

(2009) "The Distribution of Pre- and Protohistoric Hillforts in Iran", *Studi Micenei ed Egeo-Anatolici* 51, pp. 123-143.

(2012) "Urartian Fortification in Iran. An Attempt at a Hierarchical Classification", in Kroll, S., C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds.), *Biainili-Urartu*, The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51), Peeters Publishers, Leiden, pp. 77-88.

Burney, C.,

1972 "Excavations at Haftavan Tepe 1969: Second Preliminary Report", Iran 10, pp. 127-142.

1973 "Excavations at Haftavan Tepe 1971: Third Preliminary Report", Iran 11, pp. 153-172.

Dan, R.,

2010 "The Archaeological and Geographical Landscape of Urartu", In Matthiae, P., F. Pinnock, L. Nigro et al. (eds.), Proceedings of the 6th International Congress on the Archaeology of the Ancient Near East, May, 5th–10th 2009, "Sapienza"–Università di Roma (3), Harrassowitz Verlag, Wiesbaden, pp. 331-340.

Danti, M.,

2013 *Hasanlu V. The Late Bronze and Iron I Periods*, Hasanlu Excavation Reports 3, University Museum Monograph, Philadelphia.

Fuchs, A.,

2004 *Bis hin zum Berg Bikni, Zur Topographie und Geschichte des Zagrosraumes in altorientalischer Zeit*, Unpublished Habilitation, University of Tübingen.

Hatzfeld, D. & P. Molnar

2010 "Comparisons of the kinematics and deep structures of the Zagros and Himalaya and of the Iranian and Tibetan plateaus and geodynamic implications", *Rev. Geophys*. 48, pp. 1–48.

Heinsch-Kuntner, S., et al.

2019 "Archaeological Investigations at Anaqizli Tapeh–Chors, 2016, Archaeology", *Journal of the Iranian Center for Archaeological Research*, No. 4., Winter 2020, pp. 33-48.

Heinsch, S. W., et al.

forthcoming "Potter´s marks from Aramus".

Khanzaq, R.B., et al.

2001 "Haldi's Garrison – Haldi's Protection. The Newly Found Rock Inscription of Argisti II in Shisheh, Near Ahar (East Azerbaijan, Iran)", *Studi Micenei ed Egeo-Anatolici* 43, pp. 25-37.

Kleiss, W.,

1979 *Bastam I. Ausgrabungen in den urartäischen Anlagen 1972-1975*, Berlin: Teheraner Forschungen IV.

1988 *Bastam II. Ausgrabungen in den urartäischen Anlagen 1977-1978*, Berlin: Teheraner Forschungen V.

2008 "Urartu in Iran", in E. Yarshater (ed.), *Encyclopaedia Iranica*, Online version available at https://iranicaonline.org/articles/urartu-in-iran, posted 07 April 2008.

Kleiss, W. & S. Kroll,

1975 "Bolurabad", *Archäologische Mitteilungen aus Iran und Turan* 8, pp. 15-26.

Kleiss, W. & S. Kroll,

1980 "Die Burgen von Libliuni", *Archäologische Mitteilungen aus Iran und Turan* 13, pp. 21-61.

Kuntner, W. & S. Heinsch,

2021 "Der Untergang Urartus aus Sicht der Festung von Aramus", in Heinsch, S., W. Kuntner, and R. Rollinger, Befund und Historisierung, *Dokumentation und ihre Interpretationsspielräume*, (ARAXES, Studies in the Archaeology & History of the Caucasus Area & Adjacent Regions, 1), Brepols Publishers NV, Turnhout, pp. 181-196.

Kroll, S.,

1976 *Keramik urartäischer Festungen in Iran. Ein Beitrag zur Expansion Urartus in Iranisch-Azarbaidjan* (Archäologische Mitteilungen aus Iran, Ergänzungsband 2), Verlag von Dietrich Reimer in Berlin.

1984 "Archäologische Fundplätze in Iranisch-Ost Azarbaidjan", *Archäologische Mitteilungen aus Iran und Turan* 17, pp. 13-134.

2005 "The Southern Urmia Basin in the Early Iron Age", *Iranica Antiqua* 40, pp. 65-85.

2011 "Urartian Cities in Iran", in Köroğlu, K., and E. Konyar (eds.), *Urartu. Transformation in the East, Istanbul: Yapi Kredi Yayinlari*, pp. 150-167.

2013 "Notes on the Post-Urartian Horizon at Bastam", in Tekin, O., M. H. Sayar, and E. Konyar (eds.), *Tarhan Armağani. Essays in Honour of M. Taner Tarhan*. Istanbul: Yapi Kredi Yayinlari, pp. 247-255.

Kroll, S., et al.

2012 "Introduction", in: Kroll, S., C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds.), *Biainili-Urartu*, The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51), Peeters Publishers, Leiden, pp. 1-38.

Lindsay, I. & A. Green,

2013 "Sovereignty, Mobility, and Political Cartographies in Late Bronze Age Southern Caucasia", *Journal of Anthropological Archaeology* 32, pp. 671-712.

Magee, P.,

2008 "Deconstructing the Deconstruction of Hasanlu: Archaeology, Imperialism and the Chronology of the Iranian Iron Age", *Iranica Antiqua* 43, pp. 89-106.

Maheri-Peyrov, M., et al.

2020 "Upper crustal structure of NW Iran revealed by regional 3-D Pg velocity tomography", *Geophysical Journal International* (2020) 22, pp. 1093-1108.

Muscarella, O. W.,

1971 "Qalatgah: an Urartian Site in Northwestern Iran", *Expedition* 13, pp. 44-50.

1988 *Bronze and Iron: Ancient Near Eastern Artifacts in the Metropolitan Museum of Art*, The Metropolitan Museum of Art, New York.

2012 "Hasanlu and Urartu", in: Kroll, S., C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds.), *Biainili-Urartu*, The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51), Peeters Publishers, Leiden, pp. 265-279.

Olwig, K. R.,

1996 "Recovering the Substantive Nature of Landscape", *Annals of the Association of American Geographers* 86, no. 4, pp. 630-653.

2014 "Used" Landscape's Cultural Heritage Contra "Virgin" National Nature, *Revue d'ethnoécologie* 6, pp. 2-12.

Salvini, M.,

1982 "Die Felsinschrift Sarduris II", in Seqendel (Libliuni), *Archäologische Mitteilungen aus Iran und Turan* 15, pp. 97-100.

1984 "I documenti", in Pecorella, P.E., and M. Salvini (eds.), *Tra los Zagros e l'Urmia: Ricerche Storiche ed Archeologiche nell'Azerbaigiano Iranico*, Roma: Edizioni dell`Ateneo (Incunabula Graeca 78), pp. 53-96.

2009 "The Eastern Provinces of Urartu and the Beginning of History in Iranian Azerbeijan", in Sağlamtimur, H., E. Abay, Z. Derin et al. (eds.), *Studies in Honour of Altan Çilingiroğlu, A Life Dedicated to Urartu on the Shores of the Upper Sea*, Arkeoloji ve Sanat Yayinlari, Istanbul, pp. 581-598.

Silenzi, D.,

1984 "Le strutture di Qal'eh Ismail Aqa", in Pecorella, P.E., and M. Salvini (eds.), *Tra los Zagros e l'Urmia: Ricerche Storiche ed Archeologiche nell'Azerbaigiano Iranico*. Roma: Edizioni dell`Ateneo (Incunabula Graeca 78), pp. 215-228.

Stone, E. C.,

2012 "Social Differentiation within Urartian Settlements", in: Kroll, S., C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds.), *Biainili-Urartu*, The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51), Peeters Publishers, Leiden, pp. 89-99.

Stone, E. C. & P. Zimansky,

2003 "The Urartian Transformation in the Outer Town of Ayanis", in Smith, A. T. and K. Rubinson (Eds.), *Archaeology in the Borderlands: Investigations in the Caucasus and Beyond*, (Cotsen Institute of Archaeology Monographs 47), University of California, Los Angeles, pp. 213-228.

Zimansky, P.,

1995 "Urartian Material Culture as State Assemblage, An Anomaly in the Archeology of Empire", *Bulletin of the American School of Oriental Research* 299/300, pp. 103-115.

2012 "Urartu as Empire. Cultural Integration in the Kingdom of Van", in: Kroll, S., C. Gruber, U. Hellwag, M. Roaf and P. Zimansky (eds.), *Biainili-Urartu*, The Proceedings of the Symposium held in Munich 12-14 October 2007 (Acta Iranica 51), Peeters Publishers, Leiden, pp. 101-110.

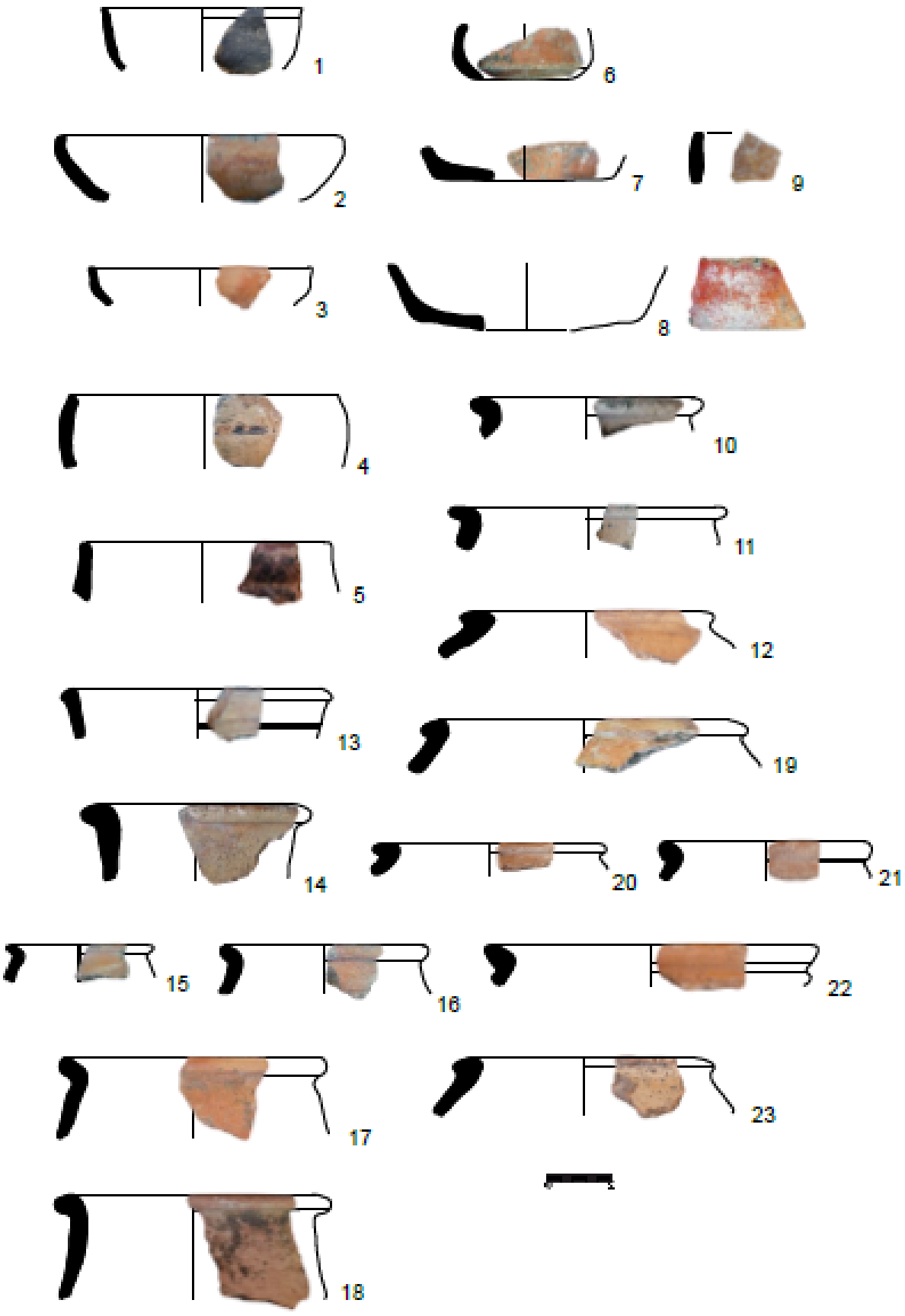

Fig. 9: Clay-based pottery from Anaqizly Tappeh, Area A

Table 1: Description of Fig. 9			
Row	Clay Quality	Colour	Surface
1	middlefine	brownish-grey	smoothed
2	middlefine	brown	smoothed
3	middlefine	yellow-red-brown	smoothed
4	medium-coarse	grey-brown	smoothed
5	middlefine	reddish-brown	well-smoothed
6	fine	yellow brown	well-smoothed
7	middlefine	yellow brown	well-smoothed
8	middlefine	yellow red	smoothed
9	middlefine	yellow brown	brown slip, smoothed
10	middlefine	grey-brown	well smoothed
11	fine	grey-brown	smoothed
12	middlefine	yellow-brown	well-polished
13	middlefine	brown (greyish)	well-smoothed
14	middlefine	reddish-brown	well-polished
15	middlefine	yellow brown	smoothed
16	middlefine	reddish-brown	smoothed
17	middlefine	yellow red	smoothed, surface partly polished
18	middlefine	dark brown	well-smoothed
19	medium-coarse	yellow-brown	smoothed
20	middlefine	reddish-brown	smoothed, partly polished
21	middlefine	brown	well-smoothed
22	middlefine	reddish-brown	smoothed
23	middlefine	brown	light tan slip, smoothed

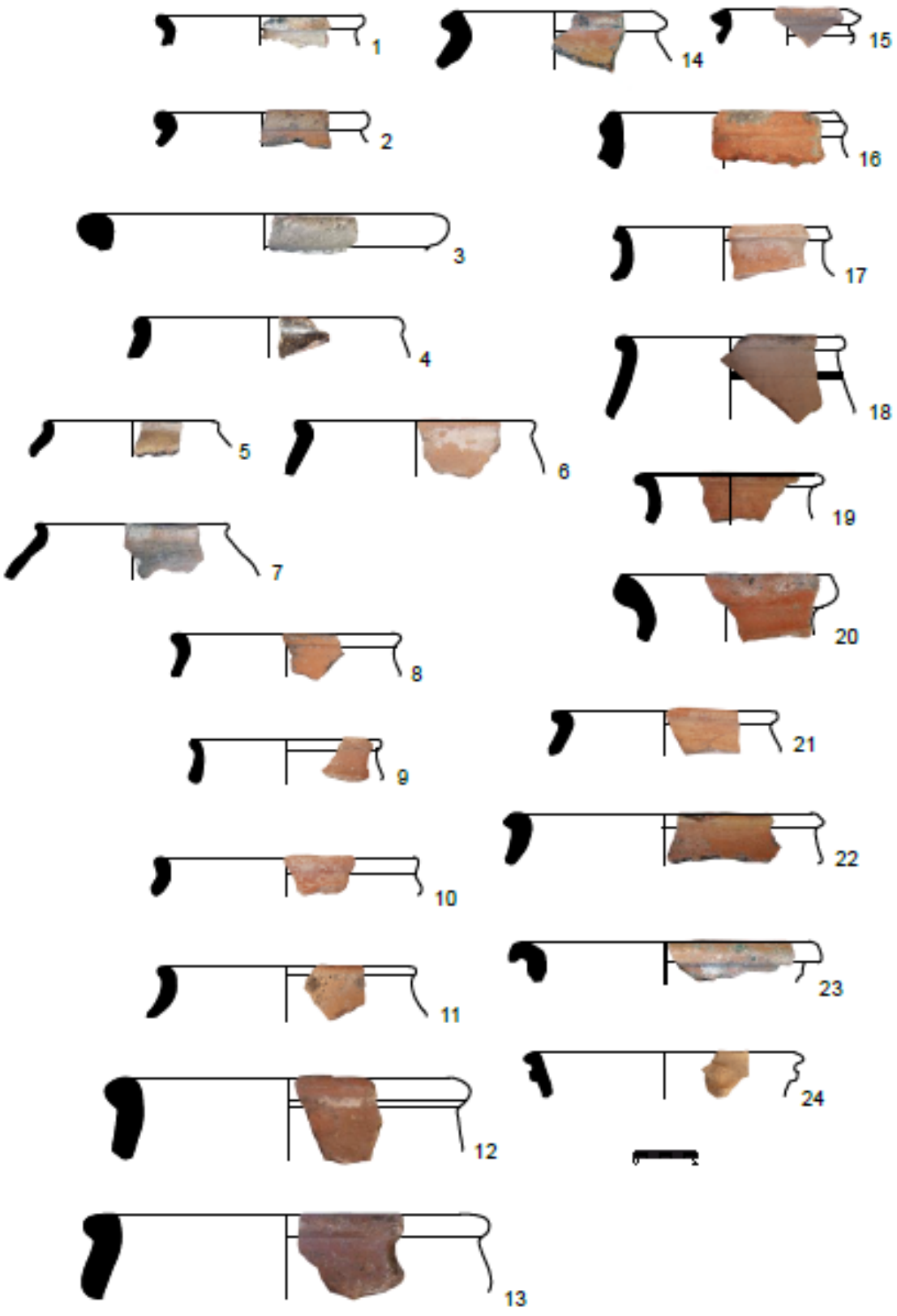

Fig. 10: Clay-based pottery from Anaqizly Tappeh, Area A

Table 2: Description of Fig. 10			
Row	Clay Quality	Colour	Surface
1	middlefine	greyish-brown	well smoothed
2	middlefine	Reddish-brown	smoothed
3	medium-coarse	greyish-brown	Smoothed and partly-polished
4	middlefine	dark brown	Slip (?), smoothed
5	middlefine	Yellow-brown	well-polished
6	middlefine	Light reddish- brown	Slip (?), smoothed
7	middlefine	Greyish- brown	smoothed
8	middlefine	Reddish-brown	well smoothed
9	middlefine	yellow red	smoothed
10	middlefine	yellow red	well smoothed
11	middlefine	yellow red	smoothed
12	medium-coarse	yellow-brown	Smoothed and partly polished
13	medium-coarse	brown	well-polished
14	middlefine	reddish-brown	Smoothed
15	fine	Greyish-brown	well-smoothed
16	middlefine	Yellow-red	smoothed
17	middlefine	yellow red	well smoothed
18	medium-coarse	Greyish-brown	Smoothed
19	middlefine	Reddish-brown	Brown slip, Smoothed
20	middlefine	Reddish-brown	Slip (?)
21	middlefine	Yellow-red	Smoothed
22	medium-coarse	Reddish-brown	Smoothed and polished
23	medium-coarse	Greyish-brown	smoothed
24	middlefine	Yellow-brown	Smoothed and partly well-polished

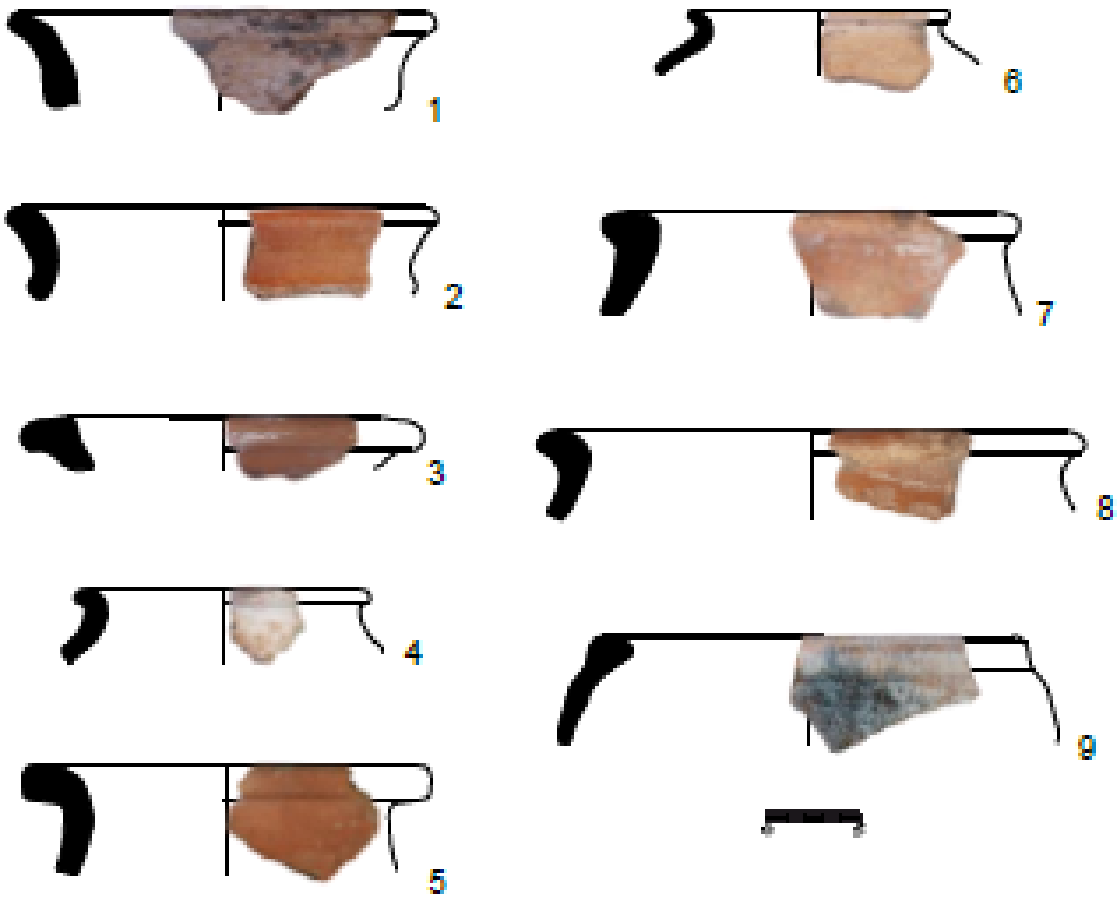

Fig. 11: Clay-based pottery from Anaqizly Tappeh, Area A

Table 3: Description of Fig. 11			
Row	Clay Quality	Colour	Surface
1	middlefine	greyish-brown	smoothed
2	middlefine	reddish-brown	Red-brown slip, well smoothed
3	middlefine	reddish-brown	brown slip, smoothed and partly well-polished
4	middlefine	red-yellow	smoothed
5	medium-coarse	reddish-brown	red slip. remains of black paint, well-polished
6	fine	yellow brown	Red-brown slip, well smoothed
7	middlefine	yellow brown	well-smoothed
8	medium-coarse	yellow red	well-smoothed and polished
9	middlefine	greyish-brown	smoothed

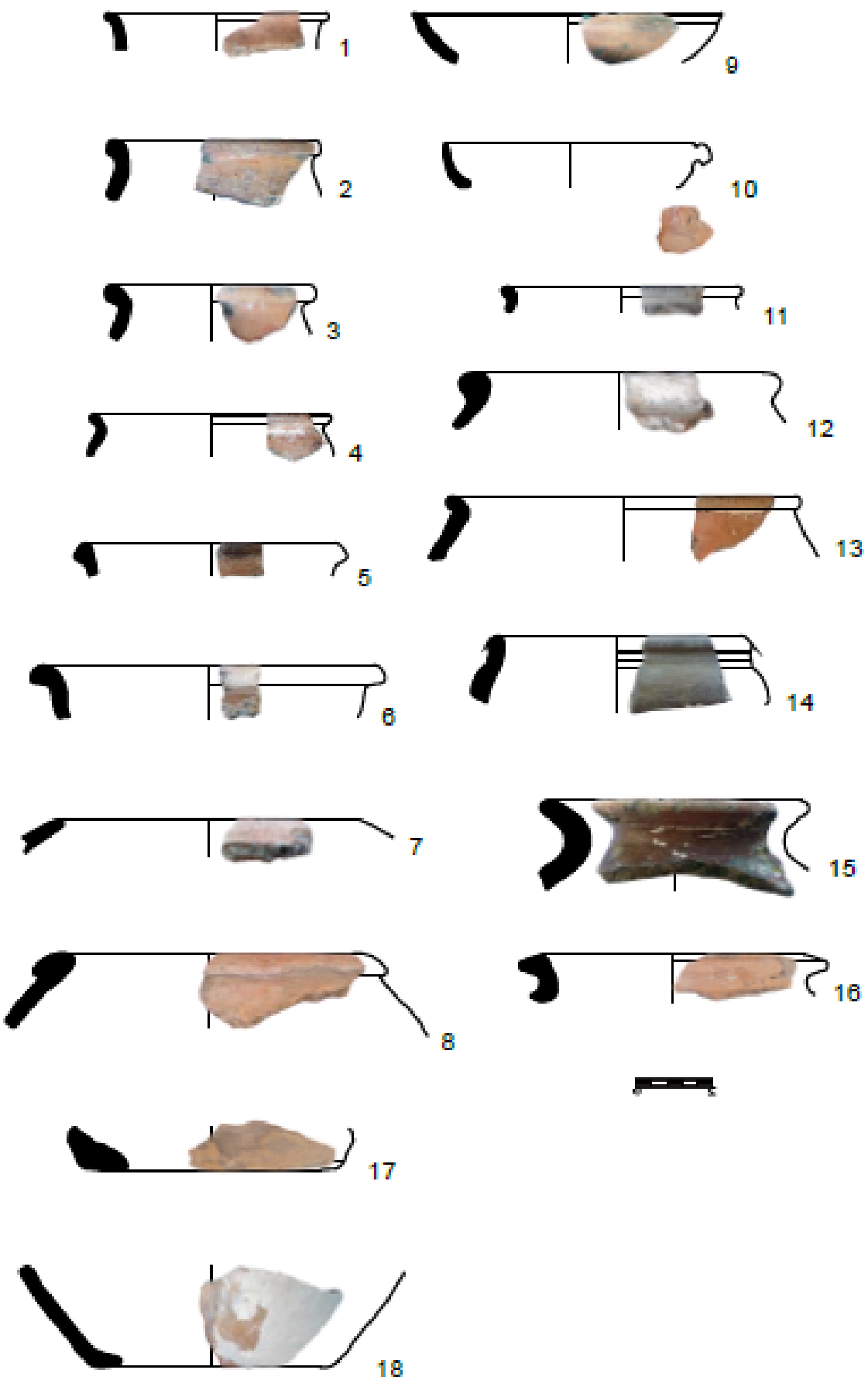

Fig. 12: Clay-based pottery from Anaqizly Tappeh, Area B

Table 4: Description of Fig. 12			
Row	Clay Quality	Colour	Surface
1	middlefine	reddish-brown	well smoothed
2	middlefine	red – grey	smoothed
3	middlefine	greyish-brown	smoothed
4	middlefine	brown	smoothed and polished
5	middlefine	reddish-brown	smoothed
6	middlefine	greyish-red- brown	smoothed
7	medium-coarse	yellow brown	smoothed
8	medium-coarse	yellow red	yellow-red slip (?), well smoothed
9	middlefine	yellow red	red painted, smoothed
10	middlefine	yellow-red	well smoothed and partly well-polished
11	fine	greyish-brown	smoothed
12	middlefine	light greyish brown	smoothed
13	middlefine	brown	reddish-brown slip, smoothed
14	middlefine	brown	greyish-brown slip, smoothed and well-polished
15	medium-coarse	reddish-brown	Smoothed and partly polished
16	Medium-coarse	yellow brown	smoothed
17	coarse	yellow brown	red painted, well smoothed
18	coarse	light yellow red	red painted, smoothed

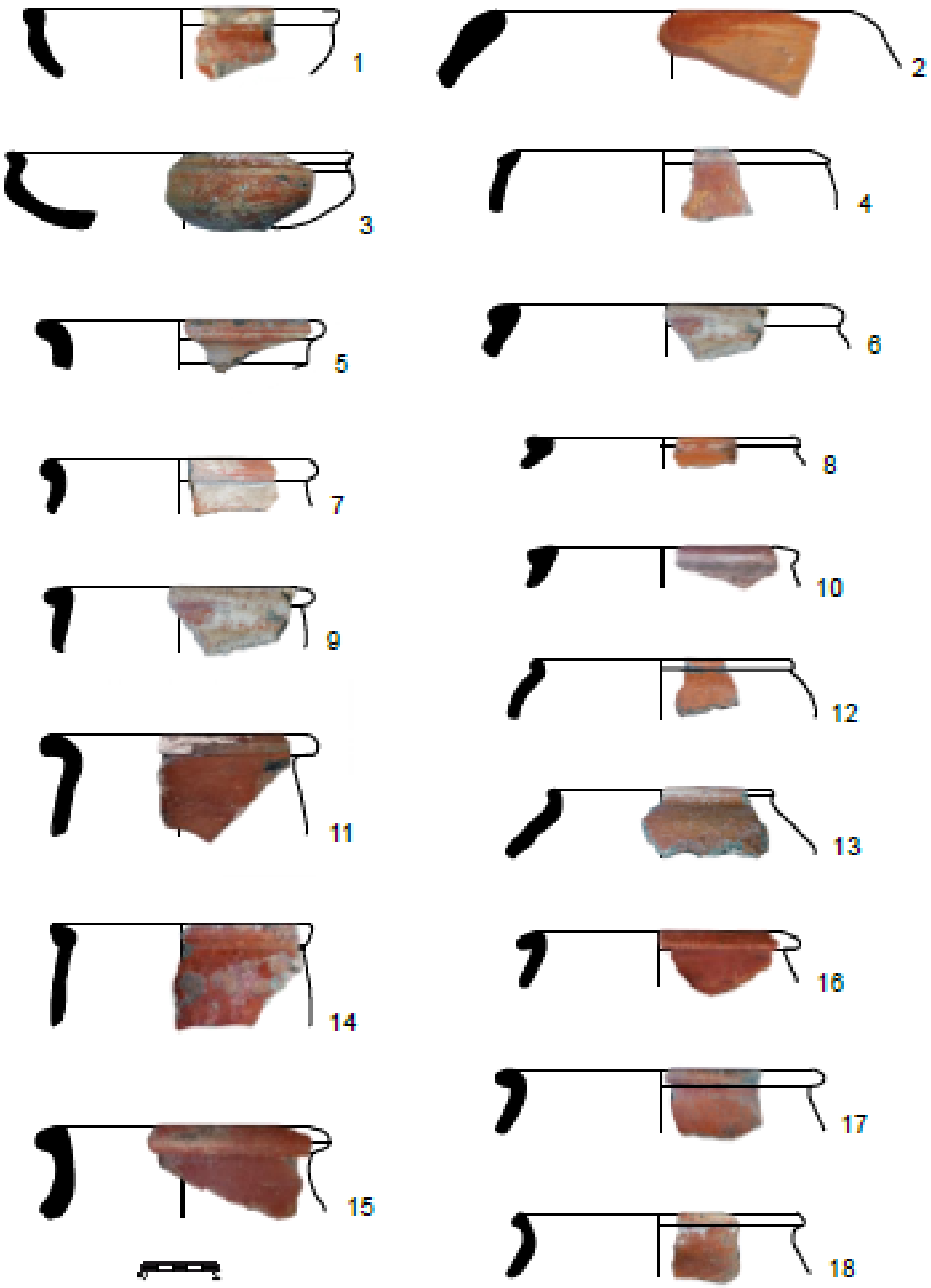

Fig. 13: Red slipped pottery from Anaqizly Tappeh, Area A

Table 5: Description of Fig. 13			
Row	Clay Quality	Colour	Surface
1	middlefine	red-brown	red slip, well smoothed
2	middlefine	yellow-brown	red slip, well smoothed
3	middlefine	brownish-red	red slip, smoothed, partly coarse polished
4	middlefine	yellow-brown	red slip, coarse polished
5	fine	reddish-brown	red slip, partly coarse polished
6	middlefine	reddish-brown	red slip, smoothed
7	middlefine	yellow brown	red slip, well smoothed
8	middlefine	yellow red	red slip, well smoothed
9	middlefine	reddish-brown	red slip, smoothed
10	middlefine	reddish-brown	red slip, coarse smoothed
11	medium-coarse	red-grey	red slip, smoothed
12	medium-coarse	yellow-brown	red slip, well-polished
13	middlefine	brown-grey	red slip. smoothed
14	medium-coarse	reddish-brown-grey	red slip, well smoothed, partly well-polished
15	middlefine	reddish brown, grey	red slip, smoothed
16	middlefine	yellow brown, grey	red slip, well smoothed
17	middlefine	red-grey	red slip, well smoothed
18	middlefine	red-grey	red slip, smoothed

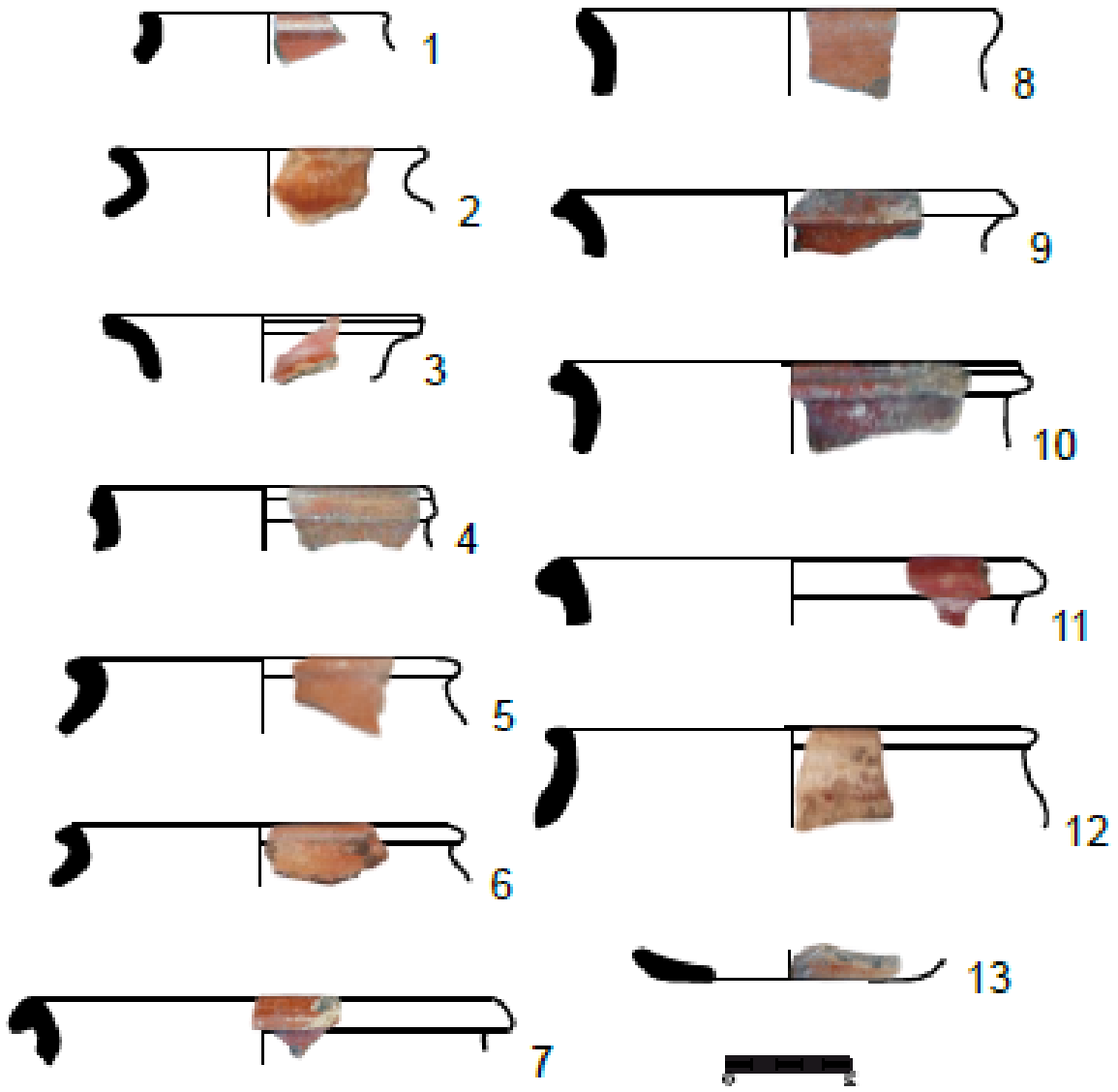

Fig. 14: Red slipped pottery from Anaqizly Tappeh, Area A

Table 6: Description of Fig. 14			
Row	Clay Quality	Colour	Surface
1	middlefine	reddish-brown	red slip, well smoothed
2	fine	yellow-red	red slip, well smoothed
3	middlefine	yellow-brown	red slip, smoothed, well-polished
4	middlefine	brown-grey	red slip, smoothed and polished
5	middlefine	yellow-red, grey	red slip, smoothed and partly polished
6	middlefine	yellow brown, grey	red slip, smoothed
7	middlefine	reddish-brown, grey	red slip, smoothed and well-polished
8	middlefine	reddish-brown, grey	red slip
9	middlefine	reddish-brown, grey	Red slip, smoothed and well-polished
10	middlefine	burgundy-grey	red slip, well smoothed, partly polished
11	fine	dark red, grey	red slip, well smoothed and polished
12	middlefine	yellow-brown	red slip, well-polished
13	middlefine	reddish-brown, grey	red slip, smoothed and polished

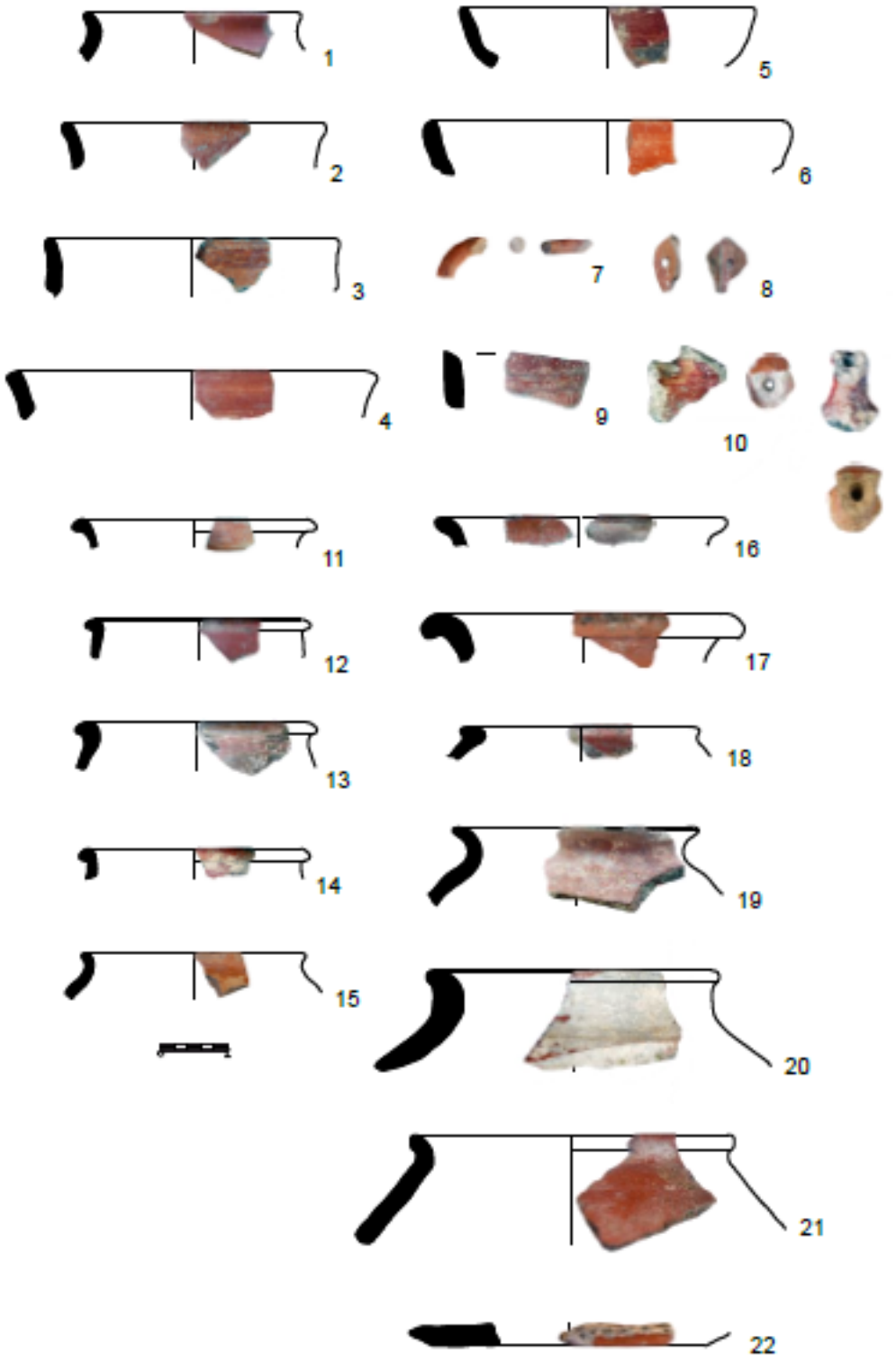

Fig. 15: Red slipped pottery from Anaqizly Tappeh, Area B

Table 7: Description of Fig. 15			
Row	Clay Quality	Colour	Surface
1	middlefine	reddish-brown	red slip, well-smoothed and polished
2	middlefine	red-grey	red slip, well smoothed and polished
3	middlefine	brownish-grey	red slip, smoothed, well-polished
4	fine	red, grey	red slip, well smoothed and polished
5	middlefine	burgundy-grey	red slip, smoothed and polished
6	middlefine	yellow brown	red slip, smoothed and polished
7	middlefine	red-grey	red slip, smoothed
8	middlefine	brownish-red	red slip, smoothed and polished
9	middlefine	burgundy - grey	red slip, smoothed
10	middlefine	reddish-brown	red slip, well smoothed and polished
11	fine	red - grey	red slip, well smoothed
12	middlefine	burgundy - grey	red slip, well smoothed and polished
13	medium-coarse	brownish red, grey	red slip, smoothed
14	middlefine	reddish-brown-grey	red slip. smoothed
15	middlefine	yellow brown-grey	red slip, smoothed and polished
16	middlefine	reddish-brown, grey	Red slip, smoothed and polished
17	middlefine	brownish-red, grey	Red slip, smoothed and polished
18	middlefine	brownish-red, grey	Red slip, smoothed and polished
19	medium-coarse	brownish red, grey	Red slip, smoothed
20	medium-coarse	red-grey	red slip, smoothed and polished
21	medium-coarse	burgundy grey	Red slip, smoothed and well-polished
22	medium-coarse	burgundy grey	Red slip, smoothed and polished

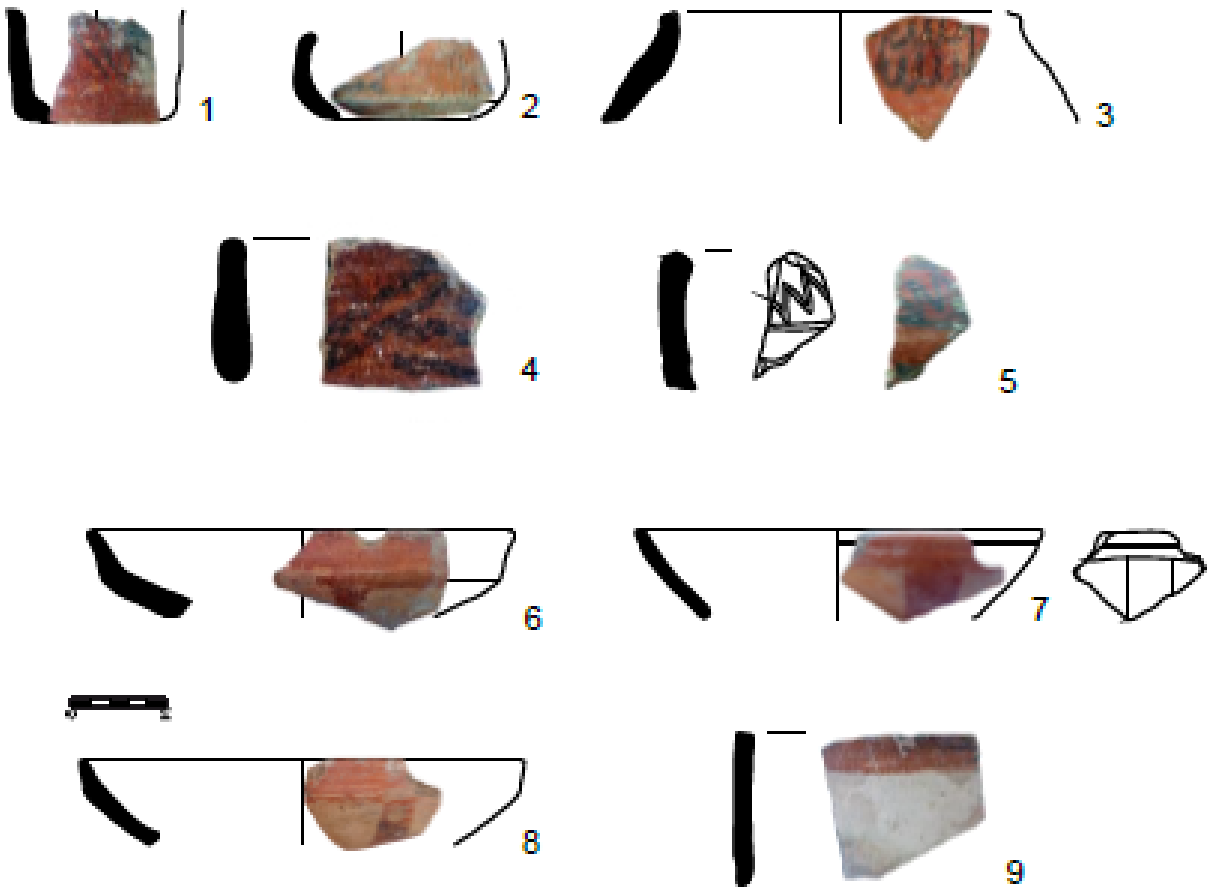

Fig. 16: Painted pottery from Anaqizly Tappeh

Table 8: Description of Fig. 16			
Row	Clay Quality	Colour	Surface
1	middlefine	reddish-brown	red slip, remains of black paint, well smoothed
2	fine	red	red slip, remains of black paint well smoothed
3	middlefine	yellow-brown	red slip, remains of black paint, well-polished
4	middlefine	brown	red slip. remains of black paint, well-polished
5	middlefine	reddish-brown	red slip. remains of black paint, well-polished
6	fine	yellow brown	red painted, smoothed
7	fine	yellow brown	red painted, well smoothed
8	fine	yellow red	red painted, well smoothed
9	middlefine	yellow red	red painted, smoothed

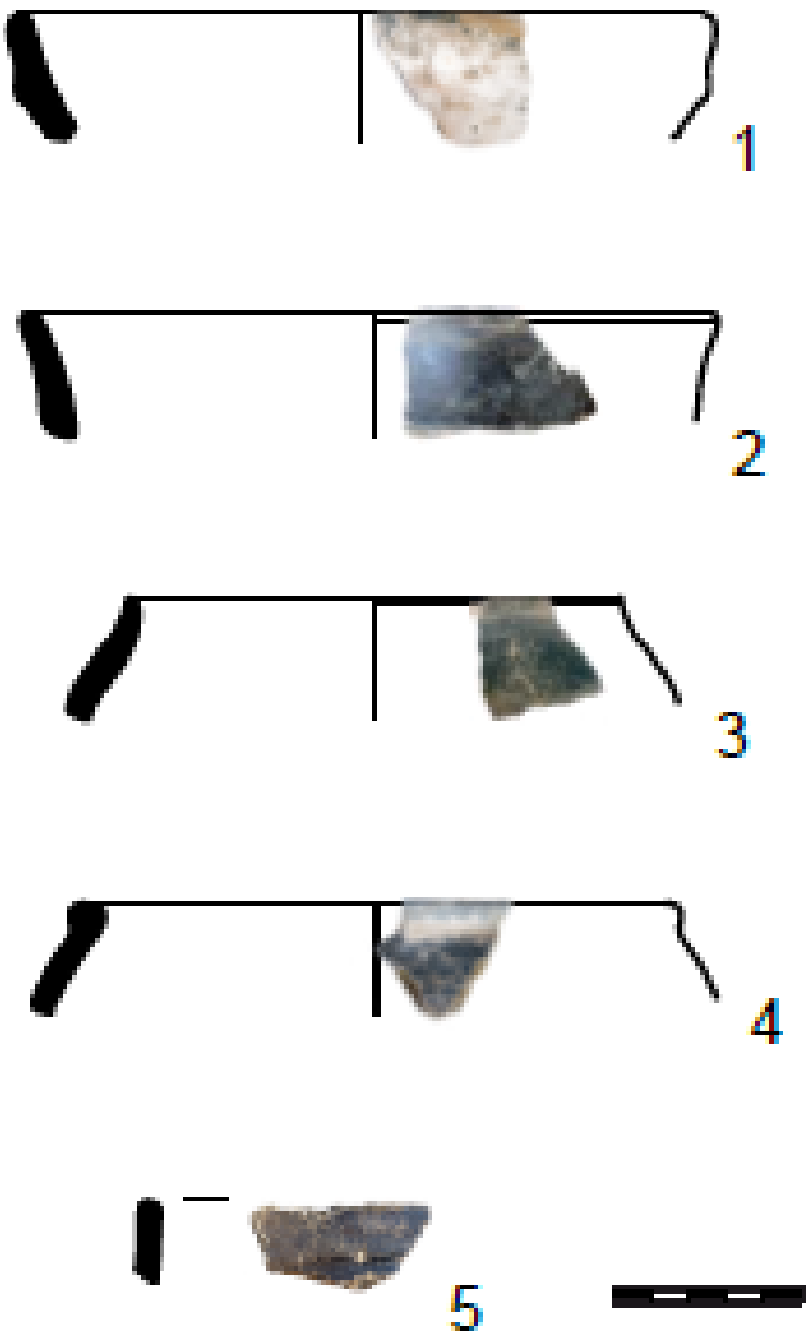

Fig. 17: Black (-grey) pottery from Anaqizly Tappeh

Table 9: Description of Fig. 17

Row	Clay Quality	Colour	Surface
1	middlefine	brownish-grey	black slip, well smoothed
2	fine	dark grey	black slip, well smoothed and polished
3	middlefine	brownish-grey	black slip, smoothed and polished
4	middlefine	dark Brownish-grey	black slip, well smoothed
5	medium-coarse	brownish-grey	black slip, smoothed