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A Recent Archaeological Project in the Iranian Kurdistan

Binandeh, A.[1]; Di Paolo, S.[2]

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Abstract

the QaNaTES Project, a collaborative program initiated in 2017. The project aims to conduct fieldwork at Tepe Qaleh Naneh, an archaeological site located in the Marivan area in northern central Zagros, Iran. The excavations have provided valuable insights into the occupational deposits at the site, revealing burials, wall structures, and various materials such as pottery and lithics. These deposits span from the Chalcolithic to Islamic periods, with a particular focus on the Late Chalcolithic period, which appears to be the most significant occupation phase. Laboratory analyses have been conducted on organic samples, including charcoals and bones, as well as on items such as obsidian objects. These analyses have enabled the study of adaptation models and developmental patterns in a region, the northern central Zagros, which remains relatively understudied. The ecosystem of Tepeh Qaleh Naneh and Marivan plain, between the Middle Chalcolithic period to Bronze age, consists of extensive vegetation of oak forest-steppe And the amount of precipitation, at least in the Late Chalcolithic period, was not less than 600 mm. the material culture discovered at Tepe Qaleh Naneh indicates an increase in social complexity, as evidenced by the presence of stone mace-heads (ceremonial tools), specialized productions such as painted pottery, and evidence of long-distance contacts. Interestingly, the site appears to have stronger connections with Mesopotamia than with western Iran. The identification of Uruk pottery, including beveled-rim bowls, suggests commercial and cultural relations between the society in the Marivan region and northern Mesopotamia during the late Chalcolithic period. These findings shed light on the gradual differentiation of society during the Chalcolithic period, a critical period that witnessed the emergence of the first porto-urban communities in southern Mesopotamia. Even if the Zagros communities followed a similar trend during the Chalcolithic period, they also developed local traditions as response to interregional contacts.

Keywords: Zagros, Zaribar Basin, Tepeh Qaleh Naneh, Prehistory.

1. Assistant Professor, Department of Archaeology, Faculty of Art and Architecture, Bu-Ali Sina University, Hamedan, Iran
Email: a.binandeh@basu.ac.ir
2. Assistant Professor, Institute of Heritage Science National Council of Research (CNR), Rome. Italy.

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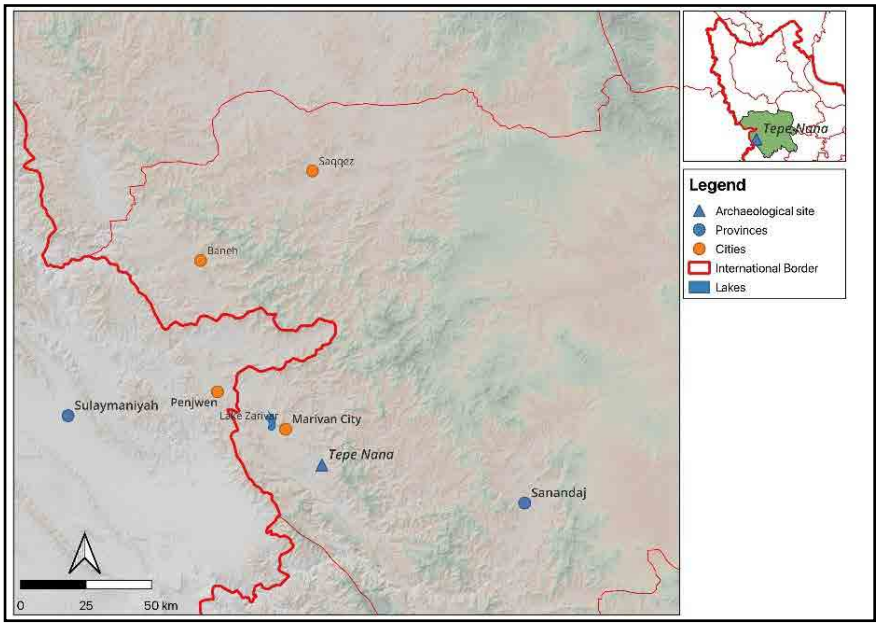
Introduction

QaNaTES is the acronym of the scientific program "(Tepe) Qaleh Naneh: Test Excavations and Survey" started in 2017 as the result of a cooperation project between CNR-ISPC and the Bu-Ali Sina University, Hamadan (hereafter BASU). This project, funded by CNR, the Ministry of Foreign Affairs and International Cooperation and BASU, is aimed to study the settlement development in the northern central Zagros with particular reference to the relationship between settlement strategies and ecological bases in diachronic and synchronic sense (Di Paolo 2018; Binandeh and Di Paolo 2019; Binandeh and Di Paolo 2020). The focus of the QaNaTES project is the excavation of Qaleh Naneh (N 35°25′14.00″, E 46°18′05.10″), a Tepe located next to the present-day village of Naneh and partially underneath it, about 20 km. southeast of the modern city of Marivan in the northwestern part of Kurdistan province, western Iran (Fig. 1). The conical-shaped mound measures approximately 300 meters northwest–southeast and 200 meters southwest–northeast, with an area of approximately 6 hectares (Binandeh et al., 2019), although originally was larger. The south-eastern slope, in fact, is partially eroded by the civil buildings of the modern village: some complete vases dated to the Iron age were found by villagers during the excavation of the foundations of a house.



◀ **Fig. 1: Map showing the location of Qaleh Naneh and major present-day places mentioned in the text (Authors, 2020)**

The area under investigation is probably part of the intermontane basin which roughly has at its center Lake Zarivār/Zaribār (farsi), Zrêwar/Zrêbar (Kurdish). The geomorphological studies are still in progress and are, in

fact, also aimed at understanding whether the system of fluvial terraces including Tepe Qaleh Naneh is the same or a distinct depositional system although connected to the lake deposits (Mancini and Mazzini 2018). The small plateau, including the archaeological site, extends to the south and southeast of the city of Marivan, ca. 130 km west of Sanandaj, the capital of the Kurdistan province. Part of a vast system of narrow high-altitude valleys, separated by parallel ridges characteristic of the Zagros ridges, this area is situated at an altitude between 1100 and 1300m and surrounded by reliefs reaching 2800m. Qaleh Naneh is located at 1327m above sea level.

The site was first identified by Kurdistan Heritage Office in 1999. In 2002 the BASU survey recorded it as Site no. 20, during the first archaeological survey in this area (Mohammadifar & Motarjem, 2002). The site was again surveyed by A. Saed Mochashi in 2014 (Saed Mochashi et al., 2018),The site was surveyed again in 2017 by the Italian-Iranian team (Di Paolo, 2018; Binandeh et al., 2019), (Fig. 2).

For a long time the northern central Zagros (Kurdistan and Western Azerbaijan provinces) has been a neglected area for archaeological research, also due to the apparent absence of permanent sites and sedentary communities in the Zagros (Hole, 1996). The recent syntheses including insights on the regional scale of the archaeological record have not emphasised the potential of this area with some exceptions (Azarnoush and Helwing, 2005; Renette and Mohammadi Ghasrian, 2020; Matthews and Nashli, 2022). Indeed in recent years, the starting of new archaeological projects allows to this area to be integrated in the ongoing debate on the local developments, the regional contacts and the long-distance trade, especially with Northern Mesopotamia and Anatolia.

Fig. 2. Tepe Qaleh Naneh from NW (Authors, 2020). ▶

In particular, the Late Chalcolithic is a central period for the study of the long process that transformed the small village communities into a network of urban societies. By the end of this phase, specialised centres and hierarchically structured systems form networks of communities involved in trade relations and cultural contacts. The QaNaTES project is aimed to fill in the knowledge gap concerning the relationships established between different communities on a regional and supra-regional scale, with particular reference to the northern central Zagros. The attention is also focused on the dynamics of social and cultural change through the investigation of human-environment interactions, mobility and resource exploitation. The material culture with which humans perform their social world and define the cultural relationships marks "as the cognitive or symbolic ordering of space" (Ingold, 2000: 193). The landscape as "tension" between proximity and distance is, among other things, revealed by the dynamics of production, distribution and consumption of ceramics on a regional scale (Wylie, 2007: 1), a very difficult subject to study often due to the unpublished data or the lack of enough radiocarbon dates that allow to correlate the different ceramic traditions chronologically.

The presence of Dalma cultural tradition farther south of Baneh area including the Marivan plain, in fact, contrasts with what has been assumed to date, especially according to the results from the excavations at Tepe Namashir in the northwestern part of Kurdistan province (see: Zamani Dadaneh et al., 2021; Contra Renette and Mohammadi Ghasrian, 2020: 119). On the other hand, the Late Chalcolithic 1 painted tradition, usually described as Ubaid-related, is now reconsidered as belonging to the Pisdeli horizon in terms of fabrics and style (Henrickson 1985: 70; Renette and Mohammadi Ghasrian, 2020: 113-114). In particular, the evidence of the black paint on a cream-whitish slip occurring on Late Chalcolithic I-II small hemispherical bowls and high-necked jars at Qaleh Naneh show that in the northern central Zagros the Pisdeli painted horizon, although exhibiting strong regional connections, differs in terms of technique, motifs and decorative schemes (see: Fig. 5). As for the occurrences of Bevelled Rim Bowls at Qaleh Naneh in all three trenches (A-C), their presence still needs to be appraised (in some cases they seems residual in later contexts; see: Fig. 6). Explanations for the appearance of this Mesopotamian pottery type, have recently been summarised (Renette and Mohammadi Ghasrian, 2020: 112-113 with previous literature). The approach of a local vs non-local pottery (also justified by the absence of other Uruk materials) and the doubt it is a chronological marker, was supposed several years ago

(Potts, 2009) and, more recently, discussed based on the specimens found at Godin Tepe (Gopnik et al., 2016). The association between radiocarbon dates from contexts with Bevelled Rim Bowls at Qaleh Naneh and the results of archaeometric characterisation of clays is one of the future goals of the QaNaTES project.

The Environment: Geology and Hydrography

The intramontane Marivan plain has peculiar features. The environmental evolution with particular reference to the hydromorphological characteristics of the basin of Lake Zaribār requires a revision and specific studies. The Lake Zaribār is situated at an elevation of about 1300 m above sea level in a broad inter mountain valley surrounding (both in the west and east sides) by ridges rising up to 2100 m.

The modern lake is ca. 5 km. long and up to 170 m. wide. According to the analysis by H.E. Wright of the topographic maps of the area (Indian Field Survey Company, scale 1:100000, contour interval 100 feet), the lake may have formed by the change of direction of the river Qizilja Su (Wright, 1961). The presence of alluvial fans of the tributaries (visible from the satellite photos) descending from the adjacent hills segmented the wide valley suggesting that the basin was formed following the change of course of the Qizilja Su (nowadays it flows northwest of the lake). This deviation allowed the formation of the lake basin and the conservation of the detrital mass of the conoidal deposits. However, the hypotheses put forward about the origin and evolution of this hydrographic network (from glacial erosion to volcanism or tectonic activity) are not supported by enough scientific evidence (Wasylikowa, 2005).

The geomorphology of the Qaleh Naneh area is being studied by a joint team of CNR and BASU (M. Mancini, I. Mazzini, E. Karimpour). It is characterised by at least seven different morpho-stratigraphic units, often heteropic among them, which can be distinguished through the sedimentological and micropaleontological analysis. These lithofacies outline a complex history of the Lake Zaribar hydrological system and the Qaleh Naneh basin. The small plateau including the site seems, in fact, integrated into a complex system of fluvial terraces which are in turn related to lake deposits. The first scientific data, based on the cartography of the Iranian Geological Service and a survey carried out in 2018, reconstruct two distincts but connected depositional systems. The first is centered on Lake Zaribar; the other, further south, includes Qaleh Naneh (Mancini and Mazzini, 2018).

The northern central Zagros is characterised by a rich hydrographic network, with waterways of different flow rates. This situation also allowed the construction of dams with the consequent formation of artificial lakes (the Azad Dam formed by the Gura River about 40km west of Sanandaj, the Garan Dam from the name of the homonymous river, tributary of Sirwan, northeast by Marivan). Even smaller watercourses are present in the area of the archaeological site: for instance along the road to Marivan and the so-called Pish-e Qaleh stream by villagers (literally "behind the fortress/castle") which flows right at the base of the ancient settlement and is endowed with a strip of arboreal and shrubby vegetation clearly visible in Fig. 2.

◄ **Fig. 3. Vegetation in the Marivan region with Lake Zaribar in the background (Authors, 2020).**

The Marivan plain is characterised by different environments (high mountains and plains, forests, riverine valleys and lakes). The annual rainfall in this district (latitude 35°) ranges from 400 to 1,000 mm with an average of 600 mm. The data refer to the period 1997-2010 but they do not deviate from previous rainfall measurements (Hesami, 2016). In this area, the winters are cold (−25°) and wet, while the summers are hot and dry (+40°). Every spring and autumn, part of the population and his animals move within the Zagros range to and from summer highlands and winter lowlands to take advantage of seasonal peaks in pastures and avoid extreme temperatures (transhumance). Nowadays, the most common type of vegetation is made up of oak, elm, walnut, ash and beech woods to which are added evergreens and shrubs. It is an open forest type, with Quercus

brantii as the dominant tree, highly degraded by intensive pasturage and cutting for charcoal. Mountain ridges around Lake Zeribar are covered with oak scrub (Van Zeist and Bottema, 1977). Forms of human interaction with the environment have been varied. Seasonal movements of people and their animals within the Zagros ranges, and their interaction with settled cultivators, is a key defining feature of historically attested Iranian societies, although its value within the earliest societies is still debated (Matthews and Nashli, 2022: 15; Balatti, 2017). Plants remains provide an extremely important source of evidence on ancient environment and the production and use of plants for food and other purposes. The first analyses of ancient plant remains at Qaleh Naneh have allowed the identification of the Juglans Regia (the common walnut) in a Late Neolithic context according to the radiocarbon dates. This evidence has to be confirmed by further findings but opens new research perspectives concerning the chronology of the pollen records from lake sediments (Lake Urmia; Lake Almalou; Lake Zaribar; Lake Maharlou) and the reconstruction of the palaeoenvironmental change in the Western Iran and, more in general, in the Ancient Near East (Binandeh et al., 2023). As for faunal remains, the total number of bones collected is 1735 fragments. Most of the them were found in layers dating from the Chalcolithic to Bronze Age periods, whereas Iron Age strata returned no bones, and 42 fragments are related to the Parthian phase. About 66.5% of the identified species belong to domestic species and 33.5% to hunted wild species. The faunal spectrum includes: Mollusca, Caprini (15.5%) including Capra aegagrus, Capra hircus, Ovis orientalis & Ovis aries), small ruminants (30.1%), Bos taurus 12.3%, Equus sp. (0.2%), Cervidae (1.6%), Sus scrofa (0.7%), Ursus arctos (0.9%), Canidae (0.2%), Carnivora (1%), Lepus sp. (0.2%) and Aves (0.3%). The results show a kind of subsistence economy based on breeding goat, sheep and cattle along with hunting of wild species to provide meat and products such as fur. It is worth mentioning that the proportion of Bos taurus and Caprini species in the Middle and Late Chalcolithic, Uruk and Bronze Age is different depending on subsistence strategies in each period. Considering the presence of architectural remains and the constant and high amount of domestic cattle in all occupation periods of the site, it seems evident that Qaleh Naneh was a permanent settlement (Jafari 2021).

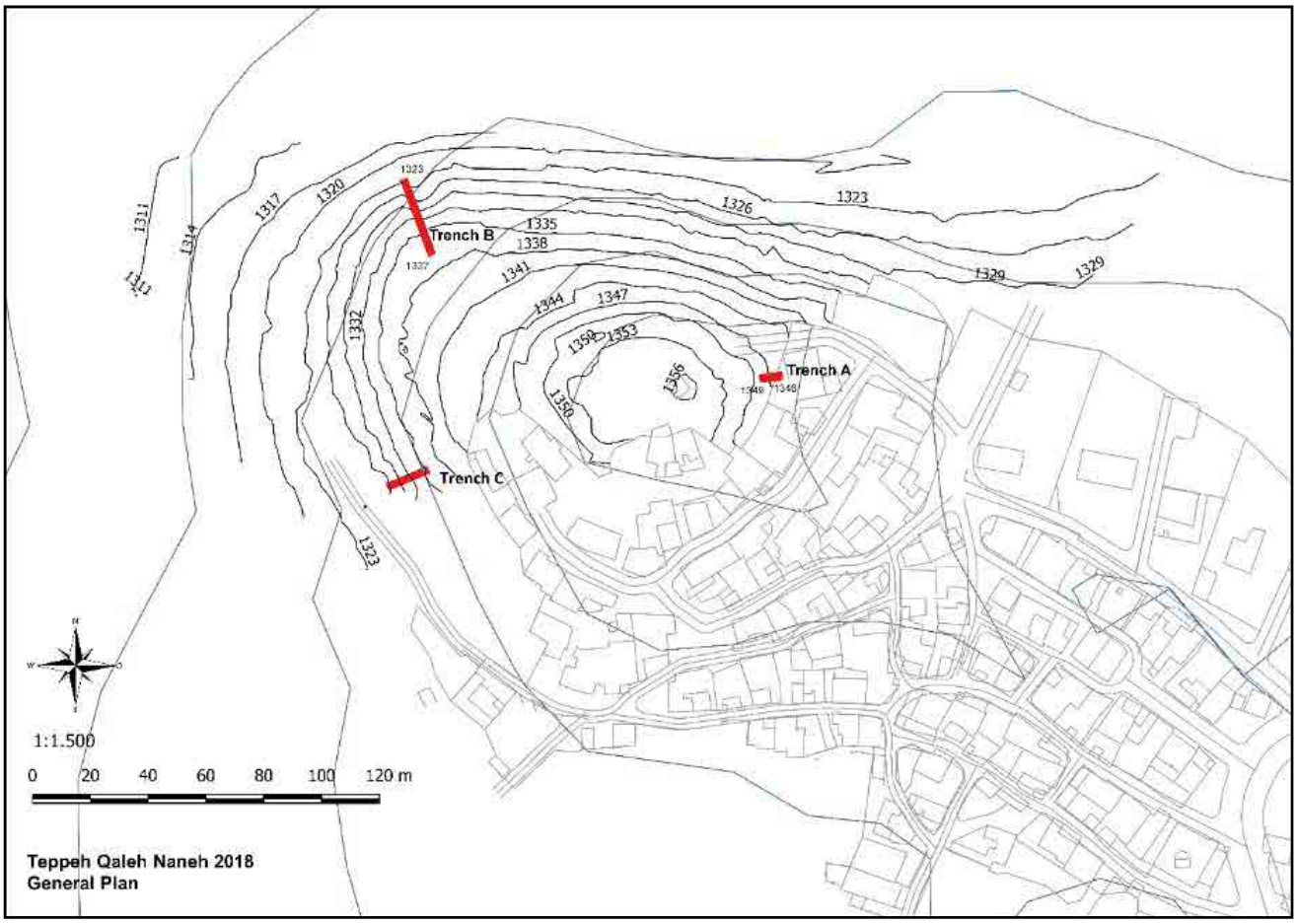
Fieldwork: Preliminary Results and Future Goals

Qaleh Naneh was identified in 1999 and recorded in 2002 and 2014 during the first archaeological surveys in this area (Mohammadifar and Motarjem,

2002; Saed Mocheshi et al., 2016; Saed Mocheshi et al., 2018). The site was surveyed again in 2017 by the Italian-Iranian team (Di Paolo 2018; Binandeh et al.,2019). The results of the first survey carried out by the Iranians in the Marivan Plain were only partially published (Zamani Dadaneh and Mohammadi Ghasrian, 2019; Zamani Dadaneh et al., 2019a and b; Zamani Dadaneh et al., 2023). All these activities took place between 2018-2021.

Qaleh Naneh is one of the largest sites of the Marivan area. The fieldwork at Qaleh Naneh has yielded the following results so far: a) the excavations in different areas of the Tepe to obtain stratigraphical sequences as complete as possible regarding the occupation periods of the site; b) the creation of the first topographical map of the site; c) the starting of field and laboratory research concerning the archaeological finds.

In order to study the formation process of the site and the chronology of the archaeological deposits, three 2m wide step-trenches were dug along the eastern, northern and western slopes until virgin soil was reached (Trenches A, B and C) (fig. 4).



▲ Fig. 4. General map of Qaleh Naneh (Authors, 2020).

The first excavations revealed a multi-layered site, dating, at least, from the Chalcolithic to the Islamic periods, although the Chalcolithic is probably the longest and, probably, the most important phase. The archaeological deposits are characterized by wall structures (especially in Trenches A and C), burials (Trench B) and various categories of finds: ceramics, lithics (including obsidian cores and tools), organic materials (human and animal bones, wood charcoals), and so on. For the oldest phases, the pottery is predominantly hand-made. It is possible to distinguish different fabrics (coarse, medium and fine) based on clay minerals and inclusions, as well as firing conditions.

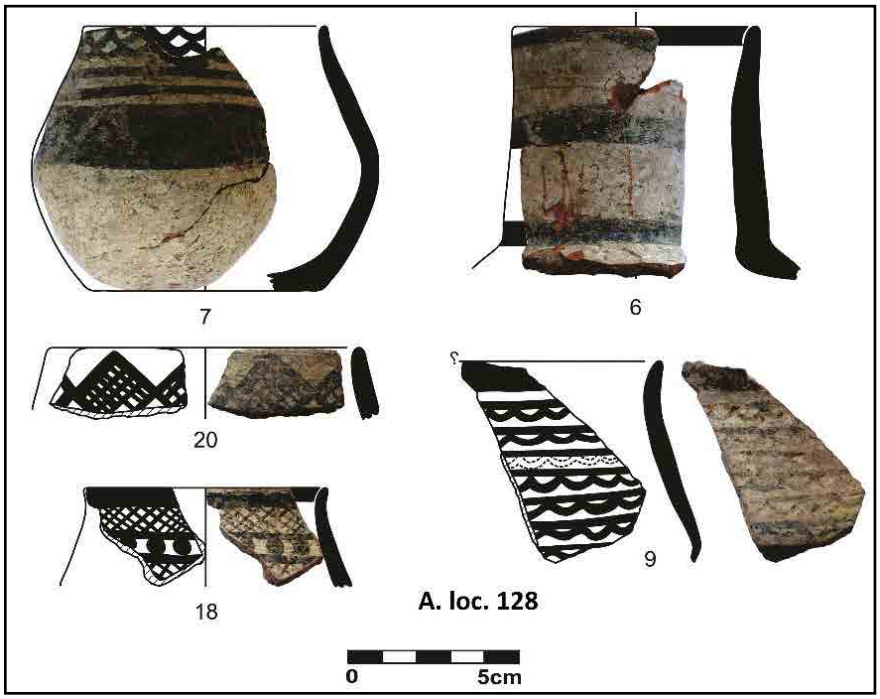


Fig. 5. Selection of Late Chalcolithic 1-2 pottery from Trench A (Authors, 2020). ▶

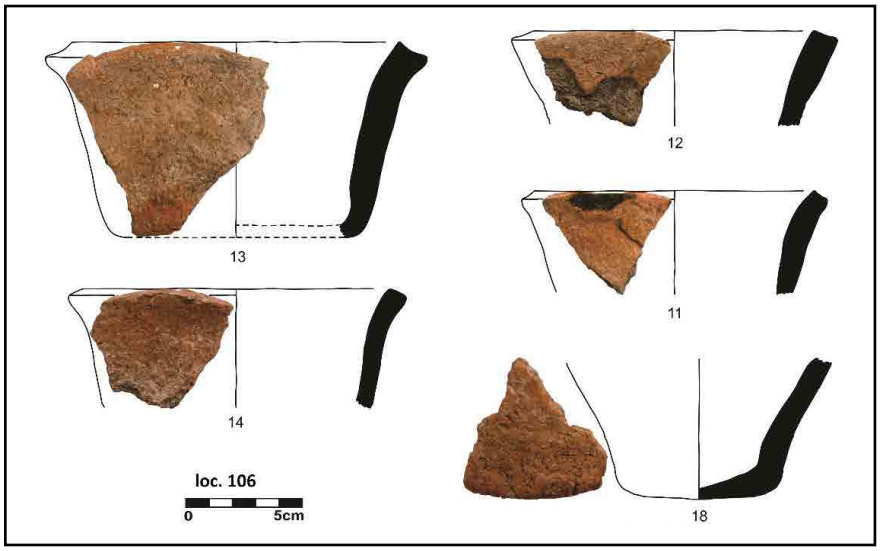


Fig. 6. Selection of Uruk period pottery from Trench A (Authors, 2020). ▶

As for the most relevant shapes, open forms in medium and small sizes are prevalent, but also high-necked and sharp-edged jars are common. The painted types have a monochromatic and opaque paint ranging from different shades of brown to black; it is applied to open forms but also to bigger, closed and coarse vases (Fig. 5). Chaff-faced Ware, manually produced with tempered clay and minerals, is documented at Qaleh Naneh, demonstrating that it was also common in the northern central Zagros. At Qalah Naneh, the Bevelled Rim Bowls occur but, as in many other Iranian sites, without typical Uruk material culture: therefore, they cannot be used as an indicator for Uruk sites (Henrickson, 1994; Potts, 2009). This type has been identified in two trenches (A and C) in different fabrics and size classes (Fig. 6).

The rest of the corpus includes ceramics with a gray impasto and glazed with no type of decoration. Material dating back to the Late Bronze Age includes several features: closed shapes such as necked or painted jars, cups with red glazed slip, and highly glazed ceramics ranging from dark gray to black. Iron Age materials come from Trench B. Different fabrics (from the finest to the coarser) are associated with slipped vases, sometimes with engraved comb decoration. The common pottery has a brownish mixture and cream or gray slip, also decorated with engraving. Coarser types have the usual light brown-cream colour scale.The Parthian phase is currently known only from the materials coming from Trench B (upper layers) and associated with an inumation in a jar of a type attested in the Marivan region.

The research on the Chalcolithic pottery of Qaleh Naneh aims to investigate the possible import phenomena of specific classes of materials (especially for the Ubaid- and Uruk- related material), the possibility of local production for those types attributed to Mesopotamia through archaeometric analyses (Bevelled Rim Bowls for instance), and the identification of the mineral components of the pigments used for the paint painted decoration of the vases. The production cycle that leads from the natural raw material through the identification of resources (clay) in the region to the finished product through the manufacturing process intended as an intentional alteration of the chemical-physical characteristics of the starting material is of particular interest. Even the technical steps, such as the shaping and firing operations, can be resolved according to different choice methods and must therefore be appropriately studied from a local perspective and only, at a later stage, related to Mesopotamian productions (Binandeh and Di Paolo, in preparation a; Binandeh and Di Paolo, in preparation b). The

overall excavation strategy, in fact, will be implemented in the next years. The site of Qaleh Naneh was partially eroded by the civil buildings of the nearby village. It is necessary that the archaeological activity continue in a costant and lasting way over time and that the local authorities undertake to do so before the site become inaccessible to archaeologists and that it can be adequately documented. In 2018, for instance, some complete vases discovered by villagers were delivered to the archaeologists. It could be useful to 'map' these findings and any other artefact with the help of villagers, such as building materials found during modern construction works, in order to obtain a more complete framework about the occupation of the site and the nature of this occupation. About the future plans, further soundings and an open area at the top of the site are needed (especially in the Trench A area). The step-trenches have already yielded information about the cultural history of the site. Further soundings are needed where Uruk materials are expected. At the same time, excavation methods which emphasise digging horizontal areas of the site (on the northern side) will be adopted: horizontal trenches on the northern side of the Tepe will be opened permitting the investigations of the past activities extensively.

In 2018-2019, a topographic plan of the site was prepraed by an Italian topographer and thanks to the data provided by the land cadastre archive registers of the municipality of Marivan. This complex work has to be completed, integrated and improved in the next future, Besides, the scientific program includes the use of the drone photogrammetry, permitting capturing large volumes of 2D images over the site and compiling them to create 3D topographical models and orthomosaic maps—or images created from collections of photographs making possible to create a 3D map of the archaeological site.

Obsidian Provenance Analyses and Radiocarbon Dating

The excavations at Qaleh Naneh have opened research perspectives concerning the processing, use and circulation of both imported and locally present raw materials. One of these materials is obsidian, a material widely attested in many sites of the ancient Near East from the Neolithic onwards. Determining the origin of obsidian allows us to define the sources of supply and the areas of circulation with a view to identifying the interconnections between communities and the dynamics of exchange of materials and artifacts. Although the most immediate reasons for the use of obsidian are related to the possibility of obtaining more effective tools than flint, for example, other reasons must be taken into consideration in the study of

◄ Fig. 7. Obsidian cores from Qaleh Naneh (Authors, 2020).

obsidian artefacts from Qaleh Naneh. The presence and quantity of this material in both a synchronic and diachronic perspective can connote the most important sites capable of activating complex mechanisms of acquisition and exchange. This aspect will be clarified soon, to the extent that it will be possible to determine the quantity, type and chronology of the artefacts from secure contexts (Binandeh, Di Paolo, Glascock, in preparation).

The obsidian of Qaleh Naneh found in Trenches A and C (along the eastern and northern slopes of the site) in the Chalcolithic and Early Bronze Age levels presents both in the form of finished artifacts, and as cores, splinters and scraps of processing, which makes it possible to examine the sequences of the chaîne opératoire, revealing the acquisition of the raw material which was then processed and transformed on site. In 2018, the first four samples were selected to start investigations on the origin of this material. They were examined by Prof. M.D. Glascock of the Archaeometry Laboratory (MURR) at the University of Missouri and subjected to XRF method, a non-destructive analytical technique used to determine the elemental composition of materials. These analyses indicate that the obsidian of Qaleh Naneh comes from two sources, both located in in the Lake Van region of eastern Anatolia. In particular, the supply area of Nemrut Dağ is an active stratovolcano (the last reported volcanic

activity was 400 years ago), which, about 270,000 years ago, underwent a great collapse of the caldera, creating a circular basin approximately 7x8 km in diameter. Obsidian in this area has been dated to 24,000 ± 14,000 and 34,000 ± 6000 years ago, among the most recent in the Near East. It is one of the two sources of peralkaline obsidian in the Near East exploited especially by the communities of northern Mesopotamia and western Iran.

The still few radiocarbon dates from Western Iran and, in particular, from northern central Zagros, do not allow to synchronise the fieldwork results in this region with the Mesopotamian and Iranian sequences. The periodisation remains a large extent speculative or a work in progress (see, about this, Renette and Mohammadi Ghasrian, 2020: 122-123). At Qaleh Naneh the archaeological contexts investigated allowed the recognition of chronological sequences based firstly on direct stratigraphic relationships and secondly on archaeological materials (especially pottery) with the possibility of linking them to an absolute date. In order to compare the results obtained with traditional dating systems, absolute dates were obtained through radiocarbon dating selecting samples from secure stratigraphic contexts. The selection of the samples was carried out by choosing those layers that had a clear and defined position in the relative sequence and in which the analysis of the ceramic finds did not indicate any reasonable possibility of intrusive processes or the addition of residues. Since radiocarbon dating is intended as the identification of a chronological range, methodologically similar to those offered by ceramic finds, the analysis of organic samples produced the overcoming of a macro-periodisation and provides a much narrower absolute dating range than those obtainable from the only study of archaeological data. The dating process has started with the collection of samples to be analysed: a total of 11 samples were selected: 9 wood charcoals and 2 animal bones. These samples underwent the first pre-treatments at the Beta Analytics preparation Laboratories (USA) and were subsequently dated using the particle accelerator. The radiocarbon age of the samples was indicated from which the calibrated calendar age (within the interval, where possible, of 2 sigma) was obtained using software (INTCAL program). The detailed results will be presented in a forthcoming article (Binandeh and Di Paolo, in preparation a-b). Anyway, the absolute dates obtained cover a calendric range of 2500 years from 5571 BCE (Late Neolithic) to 2918 BCE (Early Bronze Age) with a probability of 95%.

A set of scientific analyses on organic and inorganic materials are scheduled and will be carried out by Italian and Iranian scientists in

the next future (according to a program agreed between the parties). The radiocarbon dating, as one of the most widely scientific dating methods in archeology and environmental science, will be applied to organic remains, such as charcoals, seeds and so on, analysed in Italy (already started in 2020-2021). From 2023, it will be also fundamental to start the analysis of the pottery of Qaleh Naneh in order to define the characteristics of fabric and pigments. In Mesopotamia, for instance, the last Ubaid phases (3-4) are characterised by the use of pigments homogeneous in all the southern sites (Ur, Eridu, Oueili, Tello) and obtained by deposits of black fossil sand rich in iron, titanium and chrome (Courtois and Velde, 1991). We will attempt to choice the segments where the paint pigments on the Qaleh Naneh pottery are best preserved. This will be first performed visually. Since, however, it is clear that on the micro-scale the paint bands are fragmented and not continuously distributed, different measurements have to be performed for each segment of paint chosen. It is probable that in the segments in which the paint bands are thicker and the pigments are of higher quality or better preserved there are the highest concentrations of major elements. We would like to analyse the concentrations of a group of elements : Al, Si, P, S, K, Ca Ti, Cr, Mn, Fe, V, Co, Ni, Cu, Zn, Ga, and As. The elements to be analysed are the same as for the body of the pottery vessels and for the comparative pigments from other Iranian archaeological sites, and ores, if already identified or to be identified.

Conclusions

As for the Chalcolithic period, the absolute dates as well as terminologies for Mesopotamia (for Ubaid culture, see: Henrickson and Thuesen, 1989; Stein, 1994; Butterlin, 2018), and central Iranian plateau have changed drastically in the last decades. Some congresses dedicated to long-distance contacts marked an important step for expanding Mesopotamian archaeology into the regional chronology of Northern Mesopotamia. The resulting scheme divides an Early Chalcolithic of the early 5th millennium BCE (Ubaid period) from the following Late Chalcolithic, a long period consisting of five subperiods indicated as Late Chalcolithic 1-5 covering a period between ca. 4600-3100 BCE (for a recent reappraisal of this issue, see: Baldi et al., 2022). On the other hand, for north-central Iran the term “Transitional Chalcolithic” (ca. 5200-4300 BCE) has been given to a long timespan, approximately a millennium, bridging the Neolithic to the Chalcolithic, followed

by short Early, Middle, and Late Chalcolithic periods (Matthews and Nashli, 2022: 117-118).

Therefore, it appears very complicated to anchor the Zagros chronological sequences to both schemes, whereas the development of a third (local) scheme could be useful also in relation to the other two (contra Renette and Mohammadi Ghasrian, 2020). It is evident that the communities of these areas were strictly integrated during the 5th millennium BCE. There are significant similarities in most of the Chalcolithic sites of Northern Mesopotamia: social networks through which various products, materials, and technologies were transferred (Peyronel et al., 2016; Stein 2017; Lewis et al., 2020). The patterns of material culture observable in the archaeological record are not the result of migration, colonisation or acculturation (Ubaid phenomenon), but the product of social action and local agency that takes place within the economic, political, and ideological relationships (Parker, 2010: 357). Even if the Zagros communities followed a similar trend during the Chalcolithic period, they also developed local traditions as response to interregional contacts. The excavations at Qaleh Naneh represent, therefore, an important step for the periodisation in northern central Zagros.

A different but equally important case is the presence of Bevelled Rim Bowls in some sites in Iraqi Kurdistan and northwestern Iran: for example, in the Little Zab basin (Nobari et al., 2012; Abedi et al., 2019; Binandeh, in press) whereas, north of Marivan district, some Uruk sites were reported with signs of commercial and cultural relations with North-Western Iran and Northern Mesopotamia communities during the final Chalcolithic (Binandeh, 2016). The findings at Qaleh Naneh in the Zaribar basin seem related to materials uncovered, in the Iraqi Kurdistan, on the Gard Qola site (Vallet, 2018) and in Chamchamal region (Ess et al., 2015), Tell Begum in the Shahrizor plain (Nieuwenhuyse et al., 2016) Gurga Chiya and Kani Shaie in Bazian plain (Carter et al., 2020; Tomé et al., 2016), some sites of Suleimaniyah area and Rania plain (Skuldbøl and Colantoni, 2018). All these sites are easily accessible from the northern corridor of the Zab and Zaribar basin, indicating extensive contacts between these regions. The material culture at Qaleh Naneh shows a gradual differentiation of the society during the Late Chalcolithic, probably as result of the cultural and commercial relations with the neighbouring regions.

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علی بیننده[I]، سیلوانا دی‌پاولو[II]

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چکیده

محوطهٔ ننه با ۶ هکتار وسعت در کنار روستای ننه و در فاصلهٔ چند کیلومتری جنوب‌شرقی شهر مریوان واقع شده است. به‌صورت کلی، از شمال با دره‌های میان‌کوهی به شمال‌غرب ایران و حوضهٔ جنوبی دریاچهٔ ارومیه مرتبط است. گذرگاه‌های میان‌کوهی از جنوب آن را به کامیاران و کرمانشاه پیوند می‌دهد. دسترسی به شمال بین‌النهرین در این منطقه نسبت به مناطق همجوار آسان‌تر است و درمیان سه جغرافیای فرهنگی متفاوت قرار دارد. روستای معاصر ننه بخش‌هایی از جنوب و شرق تپه را اشغال کرده است. پس از بررسی منطقه و محوطه چنین پرسش‌هایی مطرح شد: تپه ننه در دورهٔ مس‌وسنگ چه جایگاه و نقشی در حوضهٔ زریبار داشته است؟ با کدام مناطق بیشترین ارتباط تجاری و فرهنگی داشته است؟ مکانیزم تأمین مواد موردنیاز به چه‌صورت بوده است؟ و متناظر با آن فرضیه‌هایی از این‌دست مطرح شد: با توجه به یافته‌های سفالی و نهشت قابل‌توجه در نقاط مختلف تپه به‌نظر می‌رسد محوطه دست‌کم در دورهٔ مس‌وسنگ یکی از مراکز بزرگ و اصلی استقراری حوضهٔ زریبار است. در دورهٔ مس‌وسنگ متأخر ارتباط گسترده‌ای با محوطه‌های هم‌زمان در بین‌النهرین داشته و بعضی از مواد در منطقه و برخی دیگر از مناطق اطراف از طریق شمال بین‌النهرین تأمین می‌شده است. برای جواب به این پرسش‌ها و سنجش فرضیه‌ها، در سه کارگاه، کاوش لایه‌نگاری انجام شد. آثار دوره‌های مس‌وسنگ تا دوران اسلامی شناسایی شد و نهشت‌های دورهٔ مس‌وسنگ جدید از حجم و وسعت قابل‌توجه برخوردار است. شواهد نشان می‌دهد دشت مریوان، از دورهٔ مس‌وسنگ تا عصر مفرغ، دارای پوشش گیاهی گسترده بوده و روابط تجاری و فرهنگی گسترده‌ای بین منطقهٔ مریوان و مناطق پیرامون خصوصاً شمال بین‌النهرین برقرار بوده است.

کلیدواژگان: زاگرس، حوضهٔ دریاچهٔ زریبار، تپه قلعه‌ننه، پیش‌ازتاریخ.

I. استادیار گروه باستان‌شناسی، دانشکدهٔ هنر و معماری، دانشگاه بوعلی‌سینا، همدان، ایران (نویسندهٔ مسئول).
Email: a.binandeh@basu.ac.ir

II. استادیار مؤسسه CNR، روم، ایتالیا.

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