Architectural Phases of Ali Abad Tape, Northwestern Iran

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Abstract: Ali Abad Tape is located in the northern part of Bukan city, north-west of Iran. A stratigraphic excavation has been done at this site recently and different objects such as pottery, animal bones, lithic tools, animal figurines and etc. have been revealed during the excavation. In addition to, nine architectural phases in various layers brought to light at the prehistoric site of Ali Abad. Stone and mudbrick as well as clay mortar have been used for construction of buildings.

Keywords: Ali Abad, Architectural Phases, Bronze Age, Northwestern Iran

1. Introduction

Ali Abad Tape was identified accidently after revealing some potsherd while digging wells by residents of this area. Based on these potsherds and its situation that located under the current building construction and urban planning, the stratigraphic excavation permit was issued by Iranian Center for Archaeological Research (ICAR). The excavation was conducted along a limit space. Then a trench opened vertically. In addition, the context record method was selected for excavation and object registering. Cultural deposits of about twelve meters were uncovered during this excavation. Various objects had been revealed including potsherds, animal bones, lithic tools, animal figurines and etc.

Nine architectural phases had been uncovered during the stratigraphic excavation at the prehistoric site of Ali Abad. These phases were located in different contexts and at various depths. Every context was registered separately and given a register number. Architectural phases appeared in the contexts 1003, 1004, 1009, 1012, 1013, 1031, 1034, 1042, 1044, 1054, 1062 and 1068. The present paper describes these uncovered phases of architecture of Ali Abad.

2. Geographical Location

The prehistoric site of Ali Abad is located between 36° 32' 50.3196" North latitudes and 46° 12' 33.2496" East longitudes of geographical coordinates in the northern part of Bukan city, south of Western Azerbaijan Province, northwestern Iran (Figure 1). Ali Abad covers an area of more than 3 hectares. The site is placed at a height of about 13 meters above the surrounding plain. The study area is situated in the vicinity of Simineh River and at about 1363 meters above sea level. This river with its length of 200 km (Nemati, Naghipour, & Fard, 2014) originates from ChehelCheshmeh Mountains in the Kurdistan Province and flows into Lake Urmia. The area geographically is mountainous with cold temperature in the winter season and hot in summer. Northwestern Iran is described as semiarid with its average annual rainfall of about 210 mm (Pazand & Hezarkhani, 2012).



Figure 1: Map of Iran and Location of Northwest of Iran, Bukan city and Ali Abad

Northwestern Iran consists of the three present provinces of West Azerbaijan, East Azerbaijan and Ardabil. This region of Iran extends for about 100,000 sq. km. There is enough rainfall for doing rain-based agriculture in this area (Geoffrey D. Summers, 2013; Swiny, 1975). The most natural phenomenon of North-West of Iran is the Lake Urmia. Most of the rivers of this region flow into this lake namely: 1) Zarrine-River, 2) Barandouz River, 3) Simineh River, 4) Mahabad River, 5) Gadar River, 6) AjiChay River and 7) Nazlou River (shahmirzadi, 1999, pp. 77-92; Swiny, 1975). Lake Urmia is the largest saline lake in the Middle East which is located between West and East Azerbaijan in the northwestern Iran. It is the 20th largest lake and the second most saline lake in the world (Delju, Ceylan, Piguet, & Rebetez, 2013).

3. History of Archaeological Investigation in the Study Area

Archaeological investigations in Bukan region consisted of a few surveys and excavation seasons. Naderi(Naderi, 2006) had surveyed the Shahrikand area which is located around 20 kilometers southwest of Bukan. He testified stone tools belonging to Lower Paleolithic Age at this area. Swiny investigated the BeygOwbasi in the south of Bukan city. The straw-tempered wares, Haji Firuz wares type, belonging to the Neolithic Age had been documented by him (Swiny,

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1975). He also discovered the Bronze Age painted bichrome and monochrome potsherds in the Bukan and Mahabad area. The soundings were directed by Solecki in the Chuldbhd caves between Bukan and Miandoab(Solecki, 1969). Dalma and Pisdeli wares belonging to the Chalcolithic Age had been documented by Karami(Karami, 2006) at Qaragoiz, around 20 kilometers southwest of Bukan in 2004. Omrani, Shahidi, and Abedi (2012)introduced one Chalcolithic Age site at Sari Ghamish, and four Bronze Age sites at Tape Nachit, ToptQale, BeyObasi and QareKand in the Bukan region (Figure 2).



Figure 2: Map of Bukan city and the ancient sites

The salvage archaeological excavation was conducted by E. Yaghmaee at Qalaichi in 1985. He exposed numerous glazed bricks and a stele with 13-line Aramaic inscription (Hassanzadeh, 2006). Qalaichi is a Mannean site located in the vicinity of Qalaichi village about 8 kilometers northeast of Bukan which dated back to about 800-600 B.C., the Iron Age III. At this site, the excavations were continued by BahmanKargar from 1999 to 2006. During these years, he uncovered an architectural complex (Mollazadeh, 2008).

4. Description of the Site

Ali Abad Tape is a prehistoric site located at a district in the northern part of Bukan city known with the same name. Bukan is a city in the West Azerbaijan Province, in the North-West of Iran. The site is more than 3 ha (ha is an abbreviation for Hectare). In extent and it is covered by modern buildings. Ali Abad Tape is located at about 1 kilometer east of Simineh-Rud (Figure 1). Residents of this area dug earth in search of fresh water in recent years. They brought out potsherds during the digging at the diverse depths. It occurred in different places on this mound. Corresponding author of this paper collected the sherds and initiated the analysis and typology of them. The most of sherds were paralleled to those that had been uncovered by Charles Burney at Yanik Tape in eastern side of Lake Urmia, northwestern Iran in 1960. Following that time, the culture having these types of ceramics was coined "Yanik Culture" by Dyson in the archaeological literature of Iran.

5. Method of the Study

During the stratigraphic excavation at Ali Abad Tape, 68 cultural contexts were uncovered. Natural soil appeared at the depth of 11.40 centimeters. A total of nine architectural phases were excavated at different depths at Ali Abad Tape. These phases consisted of stone walls, mud-brick walls and floors. Every structure got a registry number and was documented in the Registry Sheet. In addition, each construction plan was drown manually at the same time which has been done by computer software later. The description of any uncovered structure is discussed in detail at this study.

6. The Chronology of the Site

Unfortunately, the C14 dating has not been done for the collected samples of Ali Abad Tape due to lake of financial support. The relative chronology was done based on collected sherds from wells. Three types of pottery were recognized as grey and black burnished; red or orange and buff wares. The first type, grey and black burnished, were comparable to the Early Bronze Age pottery of eastern Anatolia (C. A. Burney, 1958); level 4B of Yanik Tape in the eastern side of Lake Urmia, northwestern Iran (C. A Burney, 1961); pottery of Haftava VIII, northwestern Iran (Geoffrey Denis Summers, 1982); Kul Tape IV, northwestern Iran (Abedi et al., 2014); Gourab Tape, west of Iran (Khaksar, Hemati Azandaryani, & Nourozi, 2015) and Tape Pissa, west of Iran (Mohammadifar, Motarjem, & Niknami, 2011).

The red and orange wares belonged to the Middle and Late Bronze Age known as Urmia Ware in the northwest of Iran. This group was parallel to the pottery of Haftavan VIB (Edwards, 1981); Godin III (Henrickson, 1986); Gol Tape (Tala'i, 1984) and Kul Tape III (Abedi et al., 2014). The third group, buff wares, also related to the Middle and Late Bronze Age. The same ceramics have been identified at Bukan and Mahabad area (Swiny, 1975); the pottery of Gol Tape (Tala'i, 1984); Kul Tape III (Abedi et al., 2014) and Haftavan VIB (Edwards, 1981). Therefore, according to the relative chronology, Ali Abad site had been occupied from Early Bronze Age to Late Bronze Age (3200 – 1200 B.C.).

7. Architectural Phase

7.1 Phase I

Context 1003: This architectural phase was located at the depth of -60 cm to -109 cm from the bench mark. The structure consisted of a stone wall, made of irregular and different sizes of stones as well as clay mortar. It looked like a foundation for a contemporary building. The structure was situated throughout the northern side of trench that continued from both northern and eastern sides. The wall was not exposed completely due to excavation limitation. Dimensions of this construction were included of 3.5 meters long, 50 cm wide and 50 cm high (Figure 3).

Context 1004: This context was parallel to the context 1003 and it comprised some fallen stones in different sizes looking like a modern-day building stones. The foundation was not

seen for this stones. It seemed as fragments of a fallen wall. This assembly was placed in the southern part of the trench at the depth of -90 cm. The dimensions were 130 cm long, 50 cm wide and 35 cm high (Figure 3).



7.2 Phase II

Context 1009: This context consisted of a floor with different compact layers. A big stone appeared at the western corner of the context. It mostly looked like a base for holding a pole. In addition, fragments of ash and burnt ground were seen on this floor. This structure was located at depth of -130 cm from the bench mark and dimensions included 154 cm long and 130 cm wide.

7.3 Phase III

Context 1012: The structure was seen at the depth of -155 cm to -175 cm from the bench mark. It was a wall constructed with different irregular stones and clay mortar. The directions of wall were toward northern side from the center of trench on the one hand and to eastern side of the trench on the other hand. It had a chamfered corner in the center. Dimensions included 160 cm length from the center to northern side and 130 cm towards eastern side. The width of this structure consisted of 45 centimeters (Figure 4).

Context 1013: This context was located at the depth of -136 cm to -180 cm and connected to context 1012. It consisted of some different sizes of stones in the southeastern corner of the trench. The dimensions measured 70 cm at length and 35 cm at width (Figure 4).



Figure 4: Phase III: Contexts 1012 and 1013

7.4 Phase IV

Context 1031: This structure was situated at the depth of -350cm to -406 cm from bench mark. This level consisted of two rows of irregular stones in different sizes (Figure 5). At a glance, it seemed as a collapse which covered whole of the trench and continued in the four sides. It was assumed that this structure was related to context 1034 and both of them were considered as one phase.



Figure 5: Phase IV: Context 1031

Context 1034: This context consisted of a wall located in southern part of trench at the depth of -411 cm (Figure 6). It was constructed with irregular stones and clay mortar. The wall dimensions were 187 cm at length, 50 cm at width and 41cm at height with its northwest-southeast direction. Plaster was seen on one side of the wall that seemed as the inner side of a building. A floor related to this structure revealed alongside of the wall and at the northern side of that. The floor consisted of several stages of compressed argil, lime and ochre surfaces.



Figure 6: Phase IV: Context 1034

7.5 Phase V

Context 1042: This context was located in the southeast corner of the trench at the depth of -562 cm. Its compressed surface consisted of several layers of hard-pressed soil and small stones along with a slab. This context seemed as part of the floor.

7.6 Phase VI

Context 1044: This structure included three rows of eastwest direction and four rows of north-south direction of mud-bricks. It was found at the depth of -580 cm. The dimensions of mud-bricks were $45 \times 25 \times 10$ cm. About one meter width of this assembly appeared in the trench and it continued from three sides. Accordingly, that can be considered as a mud-brick bench or a paved ground. Another assumption about this structure was based on a wide mudbrick wall. It is difficult to remark definite viewpoint about its location due to space limitations and it needs further investigations.

7.7 Phase VII

Context 1054: This architectural phase consisted of a mudbrick wall located at the depth of -660 cm with its north-south direction. The structure shape seemed as reversed "L". Dimensions of the wall were 135 cm long at the western side and 100 cm longat the eastern side. Its width was different between 25 cm in the southern portion and 50 cm at northern part. The wall had been plastered from both sides which seemed it had been an internal divider wall of a building (Figure 7).



Figure 7: Phase VII: Context 1054

7.8 Phase VIII

Context 1062: The structure consisted of a wall constructed by mud-brick which was located at the depth of -860 cm. The direction of this wall started from the eastern side of the trench to the western side. From there, it continued to northern side. Dimensions of the structure included 158 cm of length in the southern side, 127 cm of length from the northern side and 58 cm of width. In addition to this, the dimensions of mud-bricks were $35 \times 23 \times 10$ cm (Figure 8).

7.9 Phase IX

Context 1068: The last architectural phase was located over natural soil at the depth of -11 meters and 40 centimeters from the bench mark. This structure consisted of a row of small stones in north-to-south direction. Alongside of these stones a layer of burnt surface with ash deposit was seen. At a glance, this assembly is the evidence of settlement activities by the first residents of Ali Abad Tape (Figure 9).



Figure 8: Phase VIII: Context 1062



Figure 9: Phase IX: Context 1068

8. Conclusion

According to collected potsherds from wells and comparison of them with other excavated sites of North-West of Iran as well as southeastern of Anatolia, the settlements of prehistoric site of Ali Abad have been occurred from late of fourth to first millennium B.C. The main settlements have been identified as that of Bronze Age period. The architecture of Early Bronze Age was characterized as circular mud-brick houses with internal elements such as kitchen ranges and portable or fixed hearths. These were often in anthropomorphic or zoomorphic forms in the northwest of Iran, southern Caucasus, southeastern Anatolia and Levant regions. It is known as a character of Kura-Araxes culture. In the next period, the circular houses plan changed to rectangular and straight-lined buildings.

During the stratigraphic excavation at Ali Abad site, nine architectural phases have been excavated at different contexts and various depths. On the whole, the materials had been used through the earliest settlements to last occupation consisted of stone, mud-brick and clay mortar. As mentioned above, the plan of Early Bronze Age was circular, but it did not apply to the Ali Abad site. In other words, the straightlined plan had appeared in the Early Bronze Age period at this site. However, the categorical statement about this needs further investigation and largo-scale excavation at this site.

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