



**Citation:** Yousef Hassanzadeh (2022). An archaeological View to the Mannaean Kingdom. *Asia Anteriore Antica. Journal of Ancient Near Eastern Cultures* 4: 13-46. doi: 10.36253/asiana-1746

**Copyright:** ©2022 Yousef Hassanzadeh. This is an open access, peer-reviewed article published by Firenze University Press (<http://www.fupress.com/asiana>) and distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

**Data Availability Statement:** All relevant data are within the paper and its Supporting Information files.

**Competing Interests:** The Author(s) declare(s) no conflict of interest.

## An Archaeological View to the Mannaean Kingdom

YUSEF HASSANZADEH

*Iran National Museum, Head of Research Center*  
yhassanzadeh@gmail.com

**Abstract.** The Mannaean Kingdom's heartland is located south of Lake Urmia and north of Lake Zaribar in the Zagros Mountain in western Iran from the 9<sup>th</sup> to 6<sup>th</sup> centuries BC. Until recently, knowledge on the Mannaeans mostly came from Assyrian texts and, in rare cases, from Urartian inscriptions. In the last five decades, new findings from archaeological excavations and surveys have revealed other aspects of Mannaean material culture. Most of these excavations have been published in Iranian journals, which present summaries without clear methodologies or typologies. This article is an attempt at synthesizing recent publications on archaeological field studies, in some of which the author participated. The goal is document the state of knowledge of the Mannaean culture based on the results of recent archaeological excavations and to share a more articulate understanding of this kingdom with a larger audience.

**Keywords.** Mannaean Kingdom, 1<sup>st</sup> Millennium BC, Iron Age, Zagros Mountains, West Iran.

---

### I. MANNAEA'S (MANNA'S) ROLE IN ZAGROS REGION

In the geographical region of the Zagros Mountains, from the late Bronze Age to the beginning of the *Achaemenid* Empire (559-330 BC), numerous small and large polities appeared, among which the *Ellipis* and the *Mannaeans* are perhaps the best known. Data derived from the Assyrian tradition of keeping annals with descriptions of military campaigns in various regions are currently the primary source of historical information for these Zagros-region polities. These sources make clear that geographical proximity to, and periodic engagement with, Assyria contributed to the growth and prosperity of the *Mannaea* and *Ellipi*. Both these powers were neighbors of the powerful and glorious *Assyrian* Empire and served as buffers preventing friction between the Assyrians and rival kingdoms. On the northern borders of the Zagros Mountains, the *Mannaeans* separated *Assyrians* from the kingdom of *Urartu*, while

the *Ellipsis* in the central Zagros region was situated between *Assyrians* and the *Elamites*. Naturally, the more powerful polities attempted to absorb the buffers and bring their affiliates to power in that region. As a result, to defend their affiliates or to end the dominance of their rivals, Assyria, Urartu, and Elam would occasionally meddle in the affairs of or invade the smaller polities (Hassanzadeh, Curtis 2018, Young 1988, Levine 1974, 1977, Dyson 1965b).

On the other hand, the *Mannaea* and *Ellipi* were aware of their key position. They constantly worked to secure their interests as the balance of power shifted. By securing political agreements with whoever held power at a given moment, *Mannaea* was able to use its “in-between” position (Fuchs 1994: 447-450) to great advantage, shaping it into a powerful political-cultural nucleus. Meanwhile, *Assyria’s* incessant invasions of the Zagros region further strengthened and unified the small polities and tribes of the Zagros region, leading to the formation of a power called *Media*. Ultimately, the *Mannaeans* would be integrated into this great alliance. It is worth mentioning that during the final years of the *Assyrian* Empire, *Mannaeans* acted as Assyria’s allies against the *Medes*. According to Babylonian texts, Nabopolassar, the king of Babylon, defeated a coalition of Assyrian and Mannaeen troops who arrived to assist the city of Assur in the spring of 616 BC (Luckenbill 1927: 417); this demonstrates that the *Mannaeans* were aware of the strategic balance of power in the region and were providing a Zagros counterbalance to the voracious spread of *Media*. Eventually, however, their fear became reality and after the defeat of the *Assyrians*, *Mannaea* became part of *Media*. The latest mention of the Mannaeans comes from an external literary tradition, in which they are described as subordinate to the Medes (Jer. 51:27).

At its maximum expansion around 714 BC, the Mannaeen territory was expanded up to the area dominated by Urartu, where the *Saband* Mountains and *Bozghush* heights (between Lake Urmia and the Caspian Sea just south of Tabriz) created a natural border between *Urartu* and *Mannaea*. From the west, Mannaea’s neighbor was Assyria with the Frontier Mountains of modern Iran and Iraq as their border. From the east, the Mannaeen state had a mutual frontier with Median provinces (Levine 1974). For the southern frontier, a line stretched from *Marivan* to *Dehgolan* up to *Ghezel Ozan* valley (north of the central Zagros in Kurdistan) has been suggested. In the south, Mannaeen share their border with The Assyrian province of *Zamua*<sup>1</sup> and *Parsua*<sup>2</sup> (Fig. 1). The buffer state of *Allabria* was between the *Parsua* and *Mannaea* (Zadok 2012).

## II. POLITICAL HISTORY OF MANNAEA

The name *Mannaea* appears first in Assyrian inscriptions during the reign of *Shalmaneser III*<sup>3</sup>, dating to 843 BC (Diakonoff 1985: 61; Yamada 2000: 62-63). In the thirtieth year of his reign, this Assyrian king conducted a campaign to Mannaea led by a general (commander in chief) known as *Daiiān-Aššur* (Diakonoff 1985: 65; Yamada 2000: 66 and 224). *Izirtu* appears as the capital city of Mannaea (Frame, Fuchs 2020: 52, RINAP 2, Sargon II

<sup>1</sup> Zamua is an Assyrian province located between Sulaimaniya and Marivan. Levine suggested Lake Zaribar in Marivan as Lake Zamua (Levine 1989, for a detailed discussion on Zamua / inner Zamua, see: Medvedskaya 2000).

<sup>2</sup> Parsua was established as a result of the first campaign of Tiglath Pileser III in 744 BC (Radner 2003: 44, 49-50, 57) and is located in the modern Sanandaj area in Iranian Kurdistan province (Zadok 2001). Parsua is located in the south-east of Mannaeen territory (Radner 2013: 443).

<sup>3</sup> This text is on the famous “Black Obelisk” now in the British Museum (BM 118885 = 48=11-4,1), A.O.102.14 (Grayson 1996: 69-70). Lines 159 to 169 refer to Mannaeans: “(159) In my thirtieth regional year, while I was residing in Calah, I gave orders (and) sent out Daiiān-Aššur, (160) the field marshal, chief of my extensive army, at the head of the army. Crossing the River Zab he approached the cities belonging to the city Ḫubuškia. He received tribute from Datana, the Ḫubuškaean. Moving on from the cities belonging to the city Ḫubuškia he approached the cities of Magdubu, the Madaḫisaeen, (and) received tribute. Moving from the cities of the land Madaḫisa he approached the cities of Udaku, (165) the Mannaeen. Udaku the Mannaeen took fright in the face of the flash of my strong weapons and abandoned Zirtu, his royal city, (and) ran away to save his life. He went after him (and) brought away his oxen, sheep, (and) property without measure. He razed, destroyed, (and) burned his cities. Moving on from the land Mannaš he approached the cities of Šulusunu of the land Ḫarna (or Ḫir/Kin/Murna). He captured Masašuru, his royal city, together with the cities in its environs”.

1: line 86; Novotny, Jeffers 2018: 195, RINAP 5.1, Ashurbanipal 9: line ii27), recorded as Z<sup>tr</sup> according to Aramaic inscription from Qalaichi Bukan (Lemaire 1998, Eph'al 1999; Balatti 2017: 87-90).

Urartian inscriptions record campaigns against Mannae from 820 BC until the middle of the 7<sup>th</sup> century BC. These campaigns led to the complete defeat of Mannaea at times and provided the opportunity for Urartians to campaign beyond Mannaeen borders towards the west of modern-day Iran (Kroll 2005; Diakonoff 1985: 69). The defeat of Mannaea by Urartu, however, never resulted in their submission, a fact that was also never claimed by Urartian kings (Salvini 2005; Burney, Lang: 1971: 133, 144).

The ascension of *Tiglath-Pileser* III to power, the revival of Assyria's supremacy, and the great defeat imposed by this king on the Urartians put an end to the military campaigns of Urartu against Mannaeans, who were able to recover parts of their lost territory with the help of Assyrians. According to inscriptions by *Tiglath-Pileser* III, around 737 BC a person called *Iranzu* reigned over Mannaea (Tadmor 1994: 99-100). Existing evidence shows that he was a powerful king who had expanded Mannaea's territory in every direction. *Tiglath-Pileser* III led a military campaign to the west of Iran around 737 BC and waged war against various provinces, but did not attack Mannae and its provinces (Tadmor and Yamada 2011: 53-54, RINAP 1, *Tiglath-Pileser* III 17: line 10b-12; Levine 1972: 6-11). Aware of the Assyrian king's campaign, *Iranzu* welcomed him and offered gifts including horses of various types, as well as large oxen and sheep (Tadmor, Yamada 2011: 53-54, RINAP 1, *Tiglath-Pileser* III 17: line 10b-12; Tadmor 1994: 99-100).

According to records from the reign of Sargon, after *Iranzu's* death in 717 or 716 BC his son *Aza* came to power, but was later assassinated during an Urartian uprising (Frame, Fuchs 2020: 52, RINAP 2, Sargon II 1: line 78b-83a). As a result, *Aza's* brother *Ullusunu* (Fuchs, Schmit 1998: PNA 1: 238), an ally of the Urartians, seized power (Frame, Fuchs 2020: 52, RINAP 2, Sargon II 1: line 83b-85a). Sargon immediately attacked Mannaeen territory and invaded its capital. *Ullusunu*, who had fled to the mountains, turned the events to his advantage by becoming an ally of the Assyrians and seeking forgiveness and was thereby returned to power by Sargon (Frame and Fuchs 2020: 52, RINAP 2, Sargon II 1: line 85-92). Assyrian campaigns from 719 until 715 BC were not effective in reducing Urartu's provocations and the separatist acts of Mannaea's revolting provinces. Accordingly, Assyria organized a major campaign in the region against Urartu in 714 BC (Mayer 1984; Balatti 2017: 87-90).

After reviving Assyria's power and seeking revenge on the Mannae by recapturing its lost frontier regions, *Ashurbanipal*, Assyria's potent king, waged war against the Mannaeen king *Abseri* (Luckenbill, 1927: 326-28). According to *Ashurbanipal's* annals, after this campaign Mannaeans revolted against their own king, assassinated him along with his family, and threw his body in the city (Novotny, Jeffers 2018: 239, RINAP 5.1, Ashurbanipal 11: line iii4-10). *Ualli*, one of *Abseri's* sons who had survived, came to power with the support of Assyria. He sent his crown prince *Erisinni* as a hostage to *Ashurbanipal's* court and pledged to pay taxes to Assyria (Novotny and Jeffers 2018: 239, RINAP 5.1, Ashurbanipal 11: line iii11-26; Balatti 2017: 87-90).

The relationship between Assyria and the Mannaeans was stable for a while, but as the Assyrian Empire diminished, so did the Mannaeans. During the year 616 BC, the Babylonian army defeated Assyrians in the middle Euphrates. In Babylonian inscriptions (Luckenbill 1927: 411), it is recorded that Babylonian armies arrested a group of Mannaeans who were helping the Assyrian army (Zawadzki 1988: 118). According to Babylonian texts, during the spring of 616 BC the Babylonian king Nabopolassar defeated the Assyrian army as well as the Mannaeans who had come to Assyrians' aid in *Kablini* (Luckenbill 1927: 417; Oates 1991: 178). Apparently, in the aftermath of this defeat and decline of the Mannaeans, the Median kingdom annexed Mannaea to its territory. In the sixth century BC a Hebrew source had mentioned the Mannaeen kingdom, along with the *Scythian* and *Urartian* kingdoms, for the last time (Jer. 51:27) as an autonomous part of Media. With few exceptions, the Mannaeans are not mentioned in Achaemenid sources, suggesting that Mannaea ceased to exist as an independent identity and was fully subsumed under the sovereignty of the Medes<sup>4</sup> through a process which Young calls "Iranization" of Zagros (Young 1988: 22; see also Zadok 1979: 171).

<sup>4</sup> In Achaemenid sources there is no direct mention of the Mannaeans, suggesting that they were understood to have been absorbed into Media. Given the Mannaeen tradition for wall decorations, I believe that "Medians" mentioned among the artists decorating the

### III. LINGUISTIC DATA REGARDING MANNAEANS

Unfortunately, there exists very limited information regarding the language of Mannaea. No indigenous inscription has been found within Mannaeen geographical boundaries, and there does not seem to be a local tradition of using writing. According to Zadok (2002: 140) “It is unlikely that there was ever any ethno-linguistic unity in Mannaea” but a geographically varying mixture of languages, including Iranian languages, Hurrian, and Kassite. The few inscriptions were known from this region (the Qalaichi Bukan inscription (Eph’al 1999, Fales 2003, Lemaire 1988, Sokoloff 1999, Teixidor 1999, Tropper 1998) and Rabat brick inscriptions (Reade, Finkel 2014) are written in Aramaic and Assyrian cuneiform scripts. This does not indicate that Mannaeans used the Aramaic or Assyrian languages, as an Assyrian inscription from the reign of Sargon (ca. 714 BC) (SAA 11: 31) refers to a Mannaeen interpreter in the Assyrian court known as Gi-Ki-I / Gikî (Fales, Postgate 1995: SAA 11, pages 29, 31: line 6-7). Rather, it may have been that Mannaeen rulers adopted the scribal practices of the Assyrian court by employing Aramaic and Assyrian scribes (Sokoloff 1999).<sup>5</sup> Elite personal names and toponyms referring to Mannaeen places and people in Assyrian and Urartian manuscripts indicate that many had a Hurrian linguistic character (Postgate 1987-90: 340).

Three scholars who have contributed the most to linguistic studies of the Mannaeans are Streck (1898/1899), Boehmer (1964) and Zadok (2002). They classified and provided the existing linguistic evidence for the language and reach of the Mannaeans, primarily through analysis of toponyms and personal names. The known toponyms and personal names identified with Mannaea are:

#### IIIA) Places

- IIIA.1) *Zi-ir-ta* (Grayson 1996: 70) or *I-Zir/Zi-ir-ti/tu* (Fuchs 1994: 439), *I-zir-te* /I (Lanfranchi, Parpola 1990: SAA 5, page 148, 204, line r.6; Novotny, Jeffers 2018: page 195, RINAP 5.1, Ashurbanipal 9: line ii 27).
- IIIA.2) *I-zi-bi-ia* (Fuchs 1994: 429); *U-zu-bi-i/a*, *Uz-bi-a* (Piepkorn 1933: 47; Borger 1996: 34), mentioned in Sargon II’s inscription, was attacked by Assyrians along with Izirtu and Armaed (Frame, Fuchs 2020: 52, RINAP 2, Sargon II 1: line 87); it has tentatively been identified with the present-day Ziwiye (refer to Godard 1950: 5; Adamec 1976: map 1-20-D).
- IIIA.3) *Ur-me-e(LA)-te*, *Ar-ma-et(-ta)* was at the center of Mannaea (Fuchs 1994: 424; Borger 1996: 34).
- IIIA.4) *Sa-an-ha* has been indicated with A.5.
- IIIA.5) *Ú-lu-ši-a* (Lanfranchi, Parpola 1990: 217, 5f), later pronounced *Lu-u-ši-a* (around 798 BC) (Millard 1994: 34), was possibly located near the Assyrian province of *Zamûa*.

Many other locations from the period of *Aššurbanipal* were noted in Piepkorn’s 1933 article (see Borger 1996: 34). But no specific and significant information regarding their precise location have been obtained. These locations are as follows:

- IIIA.6) *At-ra-a-na/ni* or *Te-ra-a-na* (go to Parpola 1970: 55f)
- IIIA.7) *Ar-si-ia-ni-iš*
- IIIA.8) *A-za-qa-ia/na-ni*
- IIIA.9) *E (ia)-ir-is/iš-te-ia-na*

---

Royal Palace of Darius at Susa, as recorded in the DSF, were in fact Mannaeans. See Link: <https://www.livius.org/sources/content/achaemenid-royal-inscriptions/dsf/line-54>: “The men who adorned the wall, those were Medes and Egyptians.” Within later Median territory, only Mannaeen sites such as Qalaichi, Rabat, Ziwiye, Hasanlu, etc. provide evidence for sophisticated wall decoration.

<sup>5</sup> This is contra Marf 2019, note 24, who states that Sokoloff 1999, 106 claimed that the scribes in question were Mannaeans. Sokoloff is clear on this point, suggesting “the writer (of the Bukan stele) may have been a native Aramaean scribe, who emigrated from the western Aramaic areas to the east.”



- III.A.10) *Bi-ir-(ru-u)-a*  
 III.A.11) *Gu-si/su-né-e* is possibly in the south and south-west of *Mannaea*, near the border of Assyria.  
 III.A.12) *A+A-ú-si-áš*  
 III.A.13) *Áš-šá-áš<sup>g</sup>(-)dan-na-su*  
 III.A.14) *Pa(?)-š[á-...-n]a-su* which was at the centre of the Mannaeen geographical borders during the 7<sup>th</sup> century BC.  
 III.A.15) *Áš-di-ia-áš*  
 III.A.16) *Ur-ki-ia-mu-un*  
 III.A.17) *Ár/Up-pi-iš*  
 III.A.18) *Si-bu-u-a*  
 III.A.19) *Na-zi-ni-ri* Royal city  
 III.A.20) *Ši-me-ri(-)Ha-di-ri* which, according to Urartian inscriptions, was clearly situated in the Mannaeen territory (Diakonoff and Kashkai 1979: 25, 81).

There used to be following population centers at the frontier of Mannaea and Urartu, indicated in texts:

- III.A.21) *Suk/su-u-ki-a*  
 III.A.22) *Ba-a-la*  
 III.A.23) *A-bi-ti-ik-na*  
 III.A.24) *Pa-a/ap-pa*  
 III.A.25) *La-lu-uk-nu/ni*  
 III.A.26) *Ma-al-la-a-ú* a mountain between Mannaea and Urartu where a military fortress was situated (Thureau-Danging 1912: 172).  
 III.A.27) *Uš-qa-ia* (Diakonoff, Kashkai 1979: 13) near the entrance of A.28.  
 III.A.28) *Za-ra-an-da*  
 III.A.29) *Da-ar-ba-né* (Diakonoff, Kashkai 1979: 29)  
 III.A.30) *Su-ú-bi*, which was called *Man-na-a+a* by Urartians (Thureau-Dangin 1912: 169-172). Our only information source regarding this province is the accounts of *Sargon's* eighth campaign during the siege of the Urartian Fortress of *Ushkaya* in which *Su-ú-bi* was indicated (Luckenbill 1927: 84-85).  
 III.A.31) *Ú-iš-di-iš* (Thureau-Dangin 1912: 91) which was called *Ú-Gi-iš-ti* by Urartians (Diakonoff, Kashkai 1979: 92f) has been located in the north of *Maragheb* (Diakonoff 1985: 80).  
 III.A.32) *Zig/k/qirtu* (Fuchs 1994: 471). This province was situated at the border of Urartu (Lanfranchi, Parpola 1990: 123, SAA 5: 164, line 1-12) and has been located in the *Miane* region (Mollazadeh 2009: 50).  
 III.A.33) *An-di-ú* (Grayson 1996: 213) was first mentioned during the reign of *Shalmaneser* III (858-823 BC) (Luckenbill 1926: 210). In one of the brick inscriptions of *Nimrud* that dates back to 802 BC, *Adad-Nērārī* III (805-782 BC) has claimed the sovereignty of numerous lands in Zagros, among which *An-di-ú* has been mentioned. In his latest study, Diakonoff suggested the location of *An-di-ú* along the coasts of the Caspian Sea (Diakonoff 1985: 65) and Malekzadeh has approved this idea, by considering the existence of *Marlik* graveyard and *Amlash* pottery types (Malekzadeh 1994: 17).  
 III.A.34) *Mi-is-si* (Arutyunyan 1985: 138) is the southernmost region of *Mannaea*. In his Eighth campaign, *Sargon* advanced from *Parsua* to *Mi-is-si*. *Ashurnasirpal* II, in his Third campaign to *Zamūa*, mentions a place called <sup>uru</sup>*Me-su* situated in the eastern mountains of *Shahrizor* near a lake. In Levine's view, considering the vicinity of *Mi-is-si* with *Parsua* and the location of *Parsua* and *Namri* in the southern mountains of *Shahrizor*, the region of Lake *Zaribar* (*Zrebar*) and the city of *Marivan* is an appropriate area for locating *Mi-is-si* (Levine 1974). In another statement, *Mi-is-si* has been located in the region of *Bijar*, *Divan-Darreh*, or *Takab* (Mollazadeh 2009: 50).  
 III.A.35) *Kumurdu* (Borger 1996: 34) is possibly south of Mannaea.  
 III.A.36) *Su-ri-ka-aš* (Thureau-Dangin 1912: 31), a region at the border of *Karalla* and *Allab/pria*, has been mentioned in the eighth campaign of *Sargon* II in 714 BC (Levine 1977: 137; Thureau-Dangin 1912: 31). This includes A.36.a) *Si-ni-bi-ni* (Thureau-Dangin 1912: 35) that according to Herzfeld is equivalent

to *Sine* (*Sanandaj*) based on phonetics (Herzfeld 1938: 164; A.36.b) *Rap-pa-a*; and A.36.c) *A-rat-ta-a* (Zadok 2002: 22-23). According to Sargon's inscription, the Mannaeen king *Ullusunu* covered the distance between his capital and the frontier fortress of this province in 14 hours (Luckenbill 1927: 108). *Surikaš* has been located in the *Baneh* region (Mollazadeh 2009: 50).

- IIIA.37) *Har(r)a(n)a* (Grayson 1996: 70, RIMA 3: Shalmaneser III A.O.102.14, lines 168, 181)
- IIIA.38) *Allab/pria* (Parpola 1970: 12). There exists few geographical signs for determining the exact location of *Allab/pria*. *Allab/pria* has been mentioned only 3 times in texts: once within the accounts of the sixth campaign of *Shalmaneser* III (Grayson 1996: 40, RIMA 3: Shalmaneser III A.O.102.6, line iii58-iv6), the second time in Adad-Nirari III Period (810-783 BC) (Grayson 1996: 212-213, RIMA 3: Adad-nārārī III A.O.104.8, line 8) and another time during the reign of *Sargon* II (Frame, Fuchs 2020: 53, RINAP 2, Sargon II 1: line 89; RINAP 2, page 61, Sargon II 1: line 192; RINAP 2, page 85; Sargon II 2: line 225; RINAP 2, page 117; Sargon II 4: line 36; RINAP 2, page 134; Sargon II 7: line 55; RINAP 2, page 217; Sargon II 43: line 32; RINAP 2, page 266; Sargon II 65: lines 31 and 37; RINAP 2, page 350; Sargon II 82: line 54; RINAP 2, page 425; Sargon II 115: line 23). In Levine's viewpoint (Levine 1974) *Allab/pria* used to be a region between *Surikaš* and *Parsua*. An area within the boundary of *Saqez* in the north, *Marivann* in the west, and *Sanandaj* in the south has been suggested for the territory of *Allab/pria* (Hassanzadeh 2009a: 56).

In addition, there are place names for the region south of Lake Urmia in Urartian texts, although it is not clear that they were within the sphere of Mannaeen control (Diakonoff, Kashkai 1979).

These locations are as follows:

- IIIA.39) *A-la-te* (a mountainous region)
- IIIA.40) *Ar-tsr-mu*[...]
- IIIA.41) *Ur-ia*
- IIIA.42) *Te-er*-[*t*]*u*(?)*-be*
- IIIA.43) *U-ba-a-ru-gi-il-du*
- IIIA.44) *K*[*u*]/[*l*]*u*-[...]-*ru-pi-ra*
- IIIA.45) *Er-Ir-ki-u-ne*
- IIIA.46) *Me/Mi-na-ap-su(-ne)e*
- IIIA.47) *Du-qa-ma-a*

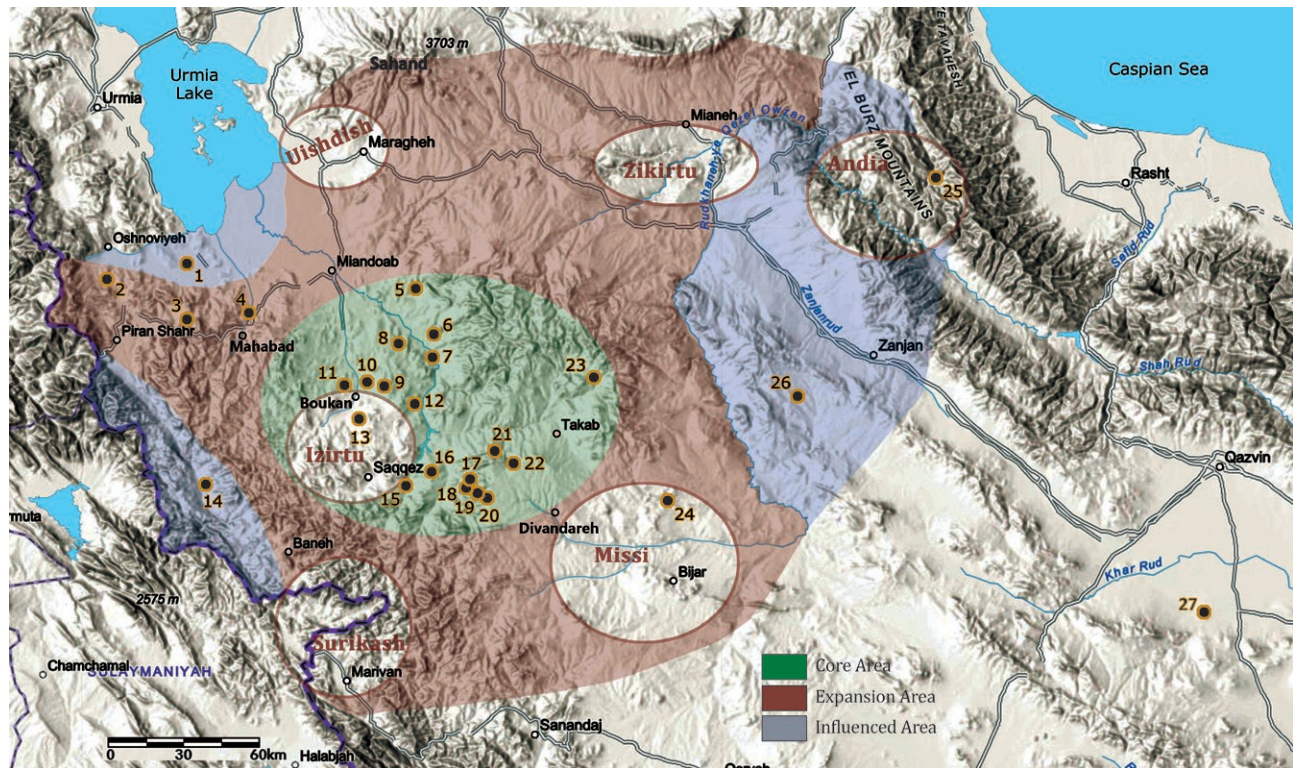
### IIIB. Names of People

- IIIB.1) *U-da-ki*, was an Iranian name in 829 BC during the reign of *Shalmaneser* III (Grayson 1996: 70, RIMA 3, Shalmaneser III, A.O.102.14: line 165).
- IIIB.2) *Ir-an-zu/ú* was a Mannaeen ruler and political ally of Sargon II during the last thirty years of the eighth century BC. We have his name in the Assyrian inscription of Tiglath – Pileser III 3 times and Sargon II 4 times (Tadmor 1994: 98; Tadmor, Yamada 2011: 53, RINAP 1, Tiglath-Pileser III 17: line 10b-12; RINAP 1, page 84 and 87, Tiglath-Pileser III 35: line I 15'-20' and line iii24-30; RINAP 1, page 121, Tiglath-Pileser III 47: line 39b-41; Frame, Fuchs 2020, RINAP 2, page 50, Sargon II 1, line 58; RINAP 2, page 132, Sargon II 7, line 36; RINAP 2, page 255, Sargon II 63, line i11'; RINAP 2, page 268, Sargon II 65, line 62; RINAP 2, page 424, Sargon II 115, line ii14).
- IIIB.3) *A-ka-c-a* was a representative of Mannaea during the time of the *Rūsa* II 730-714 BC in Urartu (Melik-İsvili 1971: 231)
- IIIB.4) *A-za-a* 719-716 BC is probably an Iranian name (meaning “billy goat” = “leading an army”) and was one of the sons of *Iranzu*, brother of *Ullusunu* (Fuchs, Schmitt 1998: PNA 1: 238). A strong coalition of Mannaeen princes formed against him, supported by the Urartian king, who acted in favour of his own candidate *Ullusunu*, *Azâ*'s brother. In the ensuing battle, *Azâ* was killed. The opposition set up

Ullusunu as king, but could not prevent the Assyrians from taking revenge in 716 (Zadok 2002: 25; Fuchs, Schmitt 1998 (PNA 1): 238; Frame, Fuchs 2020, RINAP 2, page 52, Sargon II 1, lines 80, 81 and 82; RINAP 2, page 80, Sargon II 2, lines 72, 73, 74 and 75; RINAP 2, page 116, Sargon II 4, line 22', 24', 25' and 26'; RINAP 2, pages 132 and 133, Sargon II 7, lines 37 and 38).

- IIIB.5) *Ul-lu-su-nu* (Fuchs 1994: 416), *Iranzu's* other son and *Aza's* brother, was assassinated by supporters of Urartu. After the Assyrian campaign, he had become a supporter of *Sargon* (Boehmer 1964). We have his name 9 times in Sargon II period (Frame, Fuchs 2020, RINAP 2, pages 52-61, Sargon II 1, lines 83, 87, 88, 101, 102, 137 and 191; RINAP 2, pages 81-85, Sargon II 2, lines 80, 95, 96 and 224; RINAP 2, page 116, Sargon II 4, lines 26' and 27'; RINAP 2, pages 133-134, Sargon II 7, lines 38, 40, 44 and 50; RINAP 2, pages 255-257, Sargon II 63, lines I' 8', ii' 14', 21' and 24'; RINAP 2, pages 266-274, Sargon II 65, lines 32, 52, 62, 80 and 155; RINAP 2, pages 345, Sargon II 82, lines iii 12''' and V 47'; RINAP 2, pages 387-388, Sargon II 102, line 15'; RINAP 2, pages 424-425, Sargon II 115, line ii22).
- IIIB.6) *Bagdatti*, one of *Ullusunu's* brothers and the ruler of the Mannaeen province of *Uishdish* (Luckenbill 1927: 10, 56). As his territory was at the frontier of regions influenced by Urartu, he had a role in *Aza's* assassination. *Bagdatti* was taken captive by the Assyrians (Boehmer 1964: Note 27). We have his name in Sargon II inscriptions 2 times (Frame, Fuchs 2020, RINAP 2, page 116, Sargon II 4, line 25'; RINAP 2, page 313, Sargon II 74, line ii 13).
- IIIB.7) *Metatti/Mitatti*, probably the ruler of *Zikirtu* (Baker 2017: 255), fought the Mannaeen ruler as an ally of the first Urartian rulers, was defeated by *Sargon* in 714 BC, and was forced to escape (Boehmer 1964: Note 29).
- IIIB.8) *Ah-se-e-ra / Ahšēri*, a *Hurrian* name during the time of *Esarhaddon* and *Ashurbanipal* (Novotny and Jeffers 2018, RINAP 5.1, page 63-65, Ashurbanipal 3, line iii 16, iii 23, iii 43, iii 76; RINAP 5.1, page 87-89, Ashurbanipal 4, line iii 9, iii 30, iii 1'; RINAP 5.1, page 122, Ashurbanipal 6, line iv 24''; RINAP 5.1, page 146, Ashurbanipal 7, line iv 18', iv 1'', iv 36''; RINAP 5.1, page 195, Ashurbanipal 9, line ii 21, ii 32, ii 38; RINAP 5.1, page 238-239, Ashurbanipal 11, line ii 126, ii 133, iii 4, iii 6; RINAP 5.1, page 277, Ashurbanipal 13, line iii2).
- IIIB.9) *Ualli* was a Mannaeen king (son of *Ahseri*) during the reign of *Ashurbanipal* (Borger 1996: 35; Piepkorn 1933) with whom *Ashurbanipal* fought during his fourth or fifth campaign. He was assassinated by the Mannaeen people around 664/665 BC (Boehmer 1964: note 31). We have his name in *Ashurbanipal* inscriptions 9 times (Novotny, Jeffers 2018, RINAP 5.1, page 65, Ashurbanipal 3, line 80; RINAP 5.1, page 89, Ashurbanipal 4, line iii2'; RINAP 5.1, page 123, Ashurbanipal 6, line iv 73''; RINAP 5.1, page 147, Ashurbanipal 7, line iv 41''; RINAP 5.1, page 170, Ashurbanipal 8, line iv 1''; RINAP 5.1, page 65, Ashurbanipal 9, line ii 41; RINAP 5.1, page 239, Ashurbanipal 11, line iii 11; RINAP 5.1, page 268, Ashurbanipal 12, line iii 2''; RINAP 5.1, page 305, Ashurbanipal 23, line 90).
- IIIB.10) *E/I-ri-si-in-ni* is most probably a *Hurrian* name (Borger 1996: 36). He was the son (heir to the throne) of *Ualli* who was sent to the Assyrian court along with his daughter. *Ashurbanipal* mentioned this event 9 times in his inscriptions (Novotny, Jeffers 2018, RINAP 5.1, page 65, Ashurbanipal 3, line iii 85; RINAP 5.1, page 89, Ashurbanipal 4, line iii 8'; RINAP 5.1, page 123, Ashurbanipal 6, line iv 81''; RINAP 5.1, page 148, Ashurbanipal 7, line iv 49''; RINAP 5.1, page 170, Ashurbanipal 8, line iv 8''; RINAP 5.1, page 195, Ashurbanipal 9, line ii 46; RINAP 5.1, page 239, Ashurbanipal 11, line iii 18; RINAP 5.1, page 268, Ashurbanipal 12, line iii 3''; RINAP 5.1, page 276, Ashurbanipal 13, line iii 8'').
- IIIB.11) *Daiiukku*, *Bagdatti's* successor in *Uishdish*. He was responsible for the surrendering of 22 Mannaeen fortresses to the Urartian *Rūsa I* and after taking back the fortresses for *Ullusunu*, *Sargon II* sent him to exile to *Hama* in *Syria* (Boehmer 1964: Note 28; Frame and Fuchs 2020, RINAP 2, page 54, Sargon II 1, lines 102 and 103; RINAP 2, page 82, Sargon II 2, lines 96 and 98; RINAP 2, page 134, Sargon II 7, line 49).
- IIIB.12) *Belihabu* is probably a Mannaeen ruler (according to Diakonoff 1985: 102).





**Fig. 1:** Map of Iron Age sites in north-west Iran with Mannaean cultural material: 1. Hasanlu, 2. Kani Kisal, 3. Gargul, 4. Bardakonte, 5. Jan Aqa, 6. Jowsatu, 7. Tepe Qapan, 8. Qaleh Bardineh, 9. Kaldageh, 10. Qalaichi, 11. Grda Qit, 12. Shah-Moradan, 13. Tbt, 14. Rabat, 15. Saheb, 16. Kani Zerin, 17. Ziyiye, 18. Changbar, 19. Mala Mcha, 20. Qaplantu, 21. Kani Koter, 22. Kul Tarikheh, 23. Zendan-e Suleiman, 24. Ghamchi-Khay, 25. Çala dêm, 26. Kul Tappeh, 27. Sagzabad (Map by Yusef Hassanzadeh). Mannaean realm about 714 BC showed in the colored zone (Based on Levine 1974: 101, Fig. 1 and Hejebri-Nobari, Mollazadeh 2004: 89).

- IIIB.13) *In-s/zab/p-ri* was the governor of the city of *I-zir-te* that has been mentioned during the reign of *Sargon II* (Lanfranchi and Parpola 1990: SAA 5, page 148, 204, line 11).
- IIIB.14) *Abat-šarri-ušur* was a Mannaean envoy (Lanfranchi, Parpola 1990: SAA 5, page 126, 171, line r.4).
- IIIB.15) *Ri-pa-man-na-a* was mentioned in 634 BC (Radner 1999: 204).
- IIIB.16) *Gi-ki-I / Gikī* was a Mannaean interpreter (Fales, Postgate 1995: SAA 11, page 29, 31: line 6-7).
- IIIB.17) *Adakupa* is an envoy of the Zikirtean(s) (Fales, Postgate 1995: SAA 11, page 31 r. 1-3 (nd)).
- IIIB.18) *Zi-ba/ma-ga* was registered on brick inscriptions of the Achaemenid period in 527/6/2/15 BC<sup>6</sup>.

#### IV. ARCHAEOLOGICAL EXPLORATIONS IN MANNAEAN SITES

The most important sites where Mannaean remains have been found in archaeological exploration and studies (Fig. 1) are as follows:

<sup>6</sup> For information regarding Mannaeans during the Achaemenid period, see Zadok 1979: 171; for comprehensive information regarding Mannaean linguistics, see Zadok 2002.



#### IV.1. Ziwiye (map 1, No. 17)

The site of Ziwiye is located 42 kilometers directly northeast of Saqez, adjacent to a village of the same name, and is one of the key sites of the Iron Age in north-western Iran, dating back to ca. 800 BC and lasting through the 7<sup>th</sup> century BC. Some historians identify modern Ziwiye with the region of Mannaea called Zibia or Izbia in, for example, the descriptions of Sargon II's sixth campaign (Frame, Fuchs 2020: 52, RINAP 2, Sargon II 1: line 87), following an assumption made by Godard based on their phonetic similarity (Godard 1950: 5; Adamec 1976: map 1-20-D). Others, however, have called this identity into question (Levine 1974: 108, 120; Muscarella 1977: 205). The site first drew attention in the late 1940s following a chance discovery which then led to seven years of commercial excavations of the site by antiquities dealer Ayoub Rabenou (Muscarella 1977; Hassanzadeh 2012), lasting from November 1946 to August 1953. Many objects said to be from Ziwiye were published by Andre Godard, an archaeologist and antiquities collector who was then the Director of the Iran National Museum. Pieces allegedly discovered at Ziwiye, or attributed to the site, found their way to museums across the world, including the Metropolitan Museum in New York, the Louvre Museum in Paris, the British Museum in London, and the Iran Bastan Museum in Tehran, in numbers so large that their provenance has been called into question (Muscarella 1977). It is important archaeologically to make a clear distinction between the excavated site of Ziwiye and the Ziwiye "treasure" (Muscarella 1977).

Since the first fieldwork at Ziwiye, archaeologists have conducted fifteen controlled excavation seasons at the site. These include Robert Dyson, for a brief season in 1964 (Dyson 1963c; 1965b); Nosratollah Mo'tamedi, for a total of eight seasons, from 1976 to 1979 and 1994 to 1999 (Mo'tamedi 1996), Simin Lakpour, for a total of four seasons from 2000 to 2003, Kamyar Abdi, for one season in 2008 to review preceding operations (Abdi 2012), and Abdolreza Mohajernejad, for one season in 2012 to prospect the ground and surroundings of Ziwiye (Mohajernejad *et al.* 2014). Unfortunately, only a very small segment of the results of these studies has ever been published, but this author's analysis of pottery collected at the site suggests occupation from the end of the 8<sup>th</sup> century through the 7<sup>th</sup> century.

The excavated buildings at Ziwiye stand on four platforms built into the hillside to create level surfaces on the steep site (the architectural remain description is based on the author's observations), and include:

A) an outer section and courtyard providing an open space, perhaps for bringing goods into the site as well as for keeping horses and other seasonal activities;

B) a service/administrative area that has a long staircase with rooms flanking both sides. Kitchen pottery and utensils suggest that service activities such as cooking for the occupants of the site were likely carried out in this area. Numerous ballista stones and other defensive equipment were recovered in this area, suggesting that this area was used for defense. Interestingly, a number of these stones are also observed on the southern slope of the hill (towards the present-day village of Ziwiye) indicating their use at times of defending the castle;

C) The main residence, which includes a columned hall and side rooms. Column bases in the hall were reused in several phases, making it, after buildings from Hasanlu IVC, one of the oldest columned halls in the history of architecture in Iran. Battlements were constructed along the outer side of the hall, some of which were also used as grain storage spaces.

It is important to note that these three areas were separated by very narrow, easily defended areas, as if they were designed to be defended by a small force in the event of an attack. The fortified nature of this architecture is also evidenced by the presence of what appears to be a clandestine escape route at the end of the columned hall, perhaps to allow the residents of the building to exit in an emergency. Finally, grain storage was built into the principal residence, providing food security during times of siege.

Unique and precious artifacts have been found at the site of Ziwiye. Among the most spectacular finds we can point to a gold necklace and apron, a gold bracelet, and rhytons made from glazed ceramic (Mo'tamedi 1997), decorated glazed jars, various ivory plaques, and glazed bricks that decorated the columned hall at Ziwiye. Art historians and archaeologists have discussed the cultural production of the site as being related to Assyria, Scythia, and Urartu, at the same time having a local, Mannaeen character (Mo'tamedi 1995; Muscarella 2017). The corpus of seals excavated at Ziwiye confirms the ceramic dates, as well as the connections between Ziwiye and Assyria in the 8<sup>th</sup> and 7<sup>th</sup> centuries BC (Ascalone, Baseri 2014).

From a broader perspective, these archaeological finds and their dating suggest that Ziwiye was an important Mannaeian-Median fortress that stood in the face of Assyrian invasions, and, at the same time, an important center for cultural exchange as well as a valuable workshop for local artists of this land (Hassanzadeh 2016a) during the Iron Age. Certain types of pottery characteristic of Ziwiye—glazed vessels and those with incised motifs, see part V.4 below—are considered to be hallmarks of Mannaeian culture and when found at other sites suggest connections with Mannaea.

#### *IV.2. Hasanlu (map 1, No. 1)*

This site is situated 7 kilometers north-east of the present city of Naghadeh and was excavated from 1956-1977 by R. Dyson from the University of Pennsylvania; From the beginning of the expedition, excavators attempted to identify the ethnolinguistic and political affiliation of the inhabitants of Hasanlu in Periods V and IV, based largely on geographical and historical evidence. Early in the excavations, the site and its culture in Period IV was called Mannaeian (Dyson 1960a: 119-20; 1960b: 132; 1961a: 534; 1961b: 64; 1962: 639; 1966: 416; 1967: 2965; Crawford 1961: 88, 94; Ivanchik 2001: 97, n.4), and Edith Porada (1965: 108, 110) referred to its artistic production as “Mannaeian Art”. Dyson, citing Assyrian and Urartian sources, suggests that the people in this region “spoke a dialect of Hurrian” (Dyson 1961b: 64; 1962: 642-44; 1966: 421) and that the political affiliation of Hasanlu was unknown (Dyson 1968: 89) but likely Mannaeian. As Oscar Muscarella remarked in 1971 “the racial determination of the V and IV periods have remained unresolved” (Muscarella 1971: 264; 1987: 136), and while contemporary scholars would not frame this discussion in terms of race, the identity of the residents remains unknown. For Hasanlu V, a period that has been thoroughly reinterpreted by Michael Danti (2013), Dyson saw evidence of an Indo-European migration at the site (Dyson 1963a: 33). Thirty years later, Winter (1989: 101-3) claimed that there is no evidence to support any relation between Period V and IV Hasanlu with Indo-Europeans, but accepted its association with Hurrian culture. Young suggested that they were probably Indo-Europeans who had become Iranian (Young 1985: 368, 374-75).

In terms of the ancient name and identity of Hasanlu, Salvini identifies Hasanlu as *Masatti*, a province in the northwest of Iran according to Urartian texts (Salvini 1995: 25, 41-42, 46; Dyson, Muscarella 1989: 19, n. 105). Julian Reade (1979) has identified Hasanlu as being in the region of *Gilzanu* mentioned in Assyrian royal inscriptions (not *Masatti*, unlike Winter 1989: 102). These claims depend essentially upon determining the geographical location of this site in comparison with others mentioned in Assyrian and Urartian sources, locations that change regularly with new interpretations; Salvini (1995: 25) concurs with Reade’s claim, which is supported in part by Assyrian artifacts discovered in Hasanlu, although the extent of the relationship between Hasanlu and Assyria has been called into question (Danti, Cifarelli 2016).

Important recent research by Iranian scholars has shown that the northernmost reaches of Mannaea’s geographical extent fall well to the south of Hasanlu. Hasanlu was therefore not likely a part of the Mannaeian territory, although for the brief time before the fall of Hasanlu to Urartu in about 800 BC, it may have been politically and possibly culturally associated with Mannaea (Khatib-Shahidi 2004: 72; Mollazadeh 2009: 53). If we accept that Hasanlu was, in fact, *Gilzanu*, it is likely that Hasanlu was an autonomous province<sup>7</sup> whose relationship with Mannaea is unknown (Cifarelli 2019: 28). Certainly at Hasanlu, excavators discovered glazed vessel fragments, glazed brick, and ivory fragments (Danti, Cifarelli 2016 363–64) that are similar to artifacts founded at Mannaeian sites like Ziwiye (Hassanzadeh 2016b).

#### *IV.3. Changbar Graveyard (map 1, No. 18)*

This graveyard is located 40 kilometers east of the city of Sazez and about a thousand meters from the well-known Ziwiye site. It was excavated between the years 1976 to 1979 under the supervision of Nosratollah Mo’ta-

<sup>7</sup> For more details about Hasanlu’s historical identity, see Kroll 2010 and Curtis 2019.

medi along with the excavations carried out at Ziwiye. Although the results of these excavations were never published by the excavator, nevertheless later analysis of the excavated artifacts that were housed in the National Museum of Iran showed that more than 331 graves were discovered during the course of these operations (Naghshineh *et al.* 2012: 108). Use of this cemetery appears to have begun slightly earlier than the palace levels at Ziwiye but is otherwise contemporary.

#### *IV.4. Zendan-e-Soleyman (map 1, No. 23)*

Zendan-e-Soleyman, in the north of the city of Takab, was explored between the years 1959 and 1964 under the supervision of the German Archaeological Institute. This site includes a conical peak made of travertine rising 110 meters, the remnant of a once-active travertine spring within a period of 15000 to 20000 years (Thomalsky 2011: 105). In 1958, Hans Von Der Osten identified a number of walls around the Zendan-e-Soleyman Mountain and gathered a few pieces of ceramics, leading to the first chapter of excavations a few months later led by Von Der Osten and Rudolf Naumann. During the excavations, field supervision was assigned to Hans Georg Uller and Zone Sachrisson. During 1960 and 1961, Carl Nylander and Wolfram Kleiss started outlining and documenting the existing architecture of the site. After a one-year interruption, the Zendan-e-Soleyman excavation was resumed under the supervision of Kleiss and with the cooperation of Rainer Michael Boehmer (Thomalsky 2011: 105-106; Naumann 1967; Boehmer 1967). Based on the ceramic analysis, the later of the two periods observed at Zendan-e-Soleyman (Period II) appears to coincide with occupation levels at Ziwiye, although with more Urartian imports, while the earlier material (Period I) has better parallels with Hasanlu IVb (Boehmer 1988; Thomalsky 2006: 280). The architecture of the site features a high terrace with a gate, a courtyard, and other buildings. Excavators argue that its location by an isolated mountain, its unusual geological features (the travertine spring), and its open-air courtyard suggest that it is a setting for cult activities. Overall, the close ceramic parallels with Ziwiye suggest that during Period II, Zendan-e-Soleyman was within the Mannaeen sphere.

#### *IV.5. Qalaichi (map 1, No. 10)*

This site is located 7 kilometers to the northeast of the town of Bukan in the West Azerbaijan province. It is a few hundred meters away from a village bearing the same name, to the southwest of Urmia Lake, and on the east coast of the river known as Simineh-Rood. The site's height is 1,539 meters above the mean sea level.

An archaeological survey by Kleiss in 1976 revealed the first signs of this important site of the Mannaeen kingdom (Kleiss 1977: 27-29). He mentioned the site as Haidar Khan and made a sketch plan of the fortifications. During the second quarter of 1979, remarkable finds from the Teppeh Qalaichi first found their way to the antiquities market of Bukan. For 6 long years, the site of Qalaichi was continually plundered by illicit diggers and smugglers (Mousavi 1994), when finally a rescue excavation team, under the supervision of Ehsan (Esmail) Yaghmai was assigned to the site in the year 1985. Reaching the site, Yaghmai began the rescue excavation project, and he recounts that the result of two months of effort by the archaeological team under the Ministry of Culture and Higher Education was the discovery on the ancient Qalaichi mound, in Bukan of the ruins of an ancient structure dating back to the first millennium BC (Yaghmaei 2017). According to the excavator, this structure showed features of religious architecture. The motifs on glazed bricks, including kneeling figures who appear to be engaged in ritual activities, and skeletal remains of quadruped possibly sacrificed in ceremonial activities, confirmed the hypotheses. The building included a vast hall spanning from the east to the west of the hill. On the west side of the hall, there were two chambers and on the east side of the hall, there were towers, an entrance gate, and side chambers (Yaghmaei 2015). The most historically significant discovery of the 1985 excavation campaigns was the Aramaic inscription (mentioned earlier) dated to about 700 BC (Lemaire 1988) on a standing stone at Qalaichi. An additional fragment was found in 1990 on antiquities market in Tehran. The extant piece has only 13 written lines. This inscription dates to the reign of Ullusunu, the powerful king of Mannaea from 716 BC onwards (Lemaire 1988, 1998, Eph'al 1999; Sokoloff 1999).



Excavations at Qalaichi, led by Bahman Kargar, were resumed in 1999 and continued up to 2006. During several excavation seasons, Kargar unearthed the remains of a temple dating back to the Mannaean period within an expanse of ca. one acre – as will be thoroughly explained in the architectural section of this article. In addition to unearthing remains of architecture at Qalaichi, excavators found numerous glazed bricks, in particular the large cache found during the ninth and last season of excavations in 2006 (Kargar 2004; Binandeh *et al.* 2017). These glazed tiles display an extraordinary range of motifs, including geometric and floral patterns; birds; animals such as goats, bulls, and lions; winged human figures in a kneeling pose; winged human-headed lions, sometimes with the horned cap of divinity; and bird-men, sometimes with ibex horns (Hassanzadeh, Mollasalehi 2011).

The architectural remains at Tappeh Qalaichi seem to belong to a cultural phase dating to the reigns of the Mannaean kings. So far, three building stages have been identified at the site: Ia, Ib, and Ic from the top to the bottom, respectively (Kargar 2004: 231).

**Ia:** This is the uppermost Mannaean cultural level at Tappeh Qalaichi. Esmail Yaghmai discovered architectural remains in the centre of the mound, including several small chambers with pisé (compressed earth) walls, and inner surfaces decorated with paintings of vegetal, geometric, animal and human themes. The remains do not exist anymore because they were destroyed by plunderers during the 14-year intermission in excavations (Kargar 2004: 231). Based on the author's observations, this phase includes some walls which were made on top of a columned hall and some clay platforms in the south yard, some of which were decorated with glazed bricks and were most likely used for the purpose of praying in the open space when main phase (B) was destroyed (Kargar 2021: 64-78).

**Ib:** The architecture of the Qalaichi site consists of an enclosed area of one hectare surrounded by stone walls. The walls of the outer ramparts have two entrances; the main entrance is located on the east side and consists of a bastion on either side of the entrance as well as a guardhouse. The other small entrance that is situated on the north side was probably used for the entry of important people or for emergency exit (Kargar *et al.* 2020: 36-37).

These structures were erected over a rocky surface, paved with uncarved stones. Several stone platforms were also built in order to facilitate the construction of the intended structures. Structures within the site were constructed with two to three rows of stones at the base and completed with unbaked mudbrick. They include a vast columned hall measuring 19 by 35 meters and five lateral chambers. A platform for placing votive offerings is located in the middle of room No.1. The floors of rooms No. 3 & 4 are paved with unbaked mudbrick. The internal walls of the hypostyle hall and rooms 3 & 4 were decorated with red and white ochre and blue paintings. Another significant feature of the architecture of the Qalaichi site is the stone platform located in the northwestern part of the site (Fig. 2). In addition, the waste dump found in the northeastern part of the site, in which more than 5000 pieces of animal bones were discovered, is a clear sign that sacrificial ceremonies were held in that place (Hassanzadeh, Curtis 2021: 13).

**Ic:** we have not a clear report from this stage.

Qalaichi is a key site of the Mannaean kingdom because it has just one period and all Architectural phases belong to the Mannaeans, and also fine materials from this site such as glazed bricks, carved and glazed potteries give us a general documented idea about the archaeology of Mannaea.

#### *IV.6. Kul Tarikeh Graveyard (map 1, No. 22)*

Kul Tarikeh graveyard, located in Kurdistan one kilometer southwest of Yuzbash-Kandi village (five kilometers from the Karaftu cave and 50 kilometers north of Divandereh city), was excavated under the supervision of Hassan Rezvani during two seasons in 2001 and 2003 as part of the Karaftu project (Rezvani, Roustaei 2007). Unlike Iron Age burials at other sites, pits dug into a soft, powdery bedrock—possibly tufa—which closed with large stones were used, and often reused, for burial at Kul Tarikeh. Based on comparative studies with Ziwiye and Qalaichi, Rezvani has identified the ceramics found on this site as being related to those from Ziwiye, and of Mannaean origin. Neo-Assyrian cylinder seals were found here as well (Azarnoush, Helwing 2005: 221 and Fig 46-48).

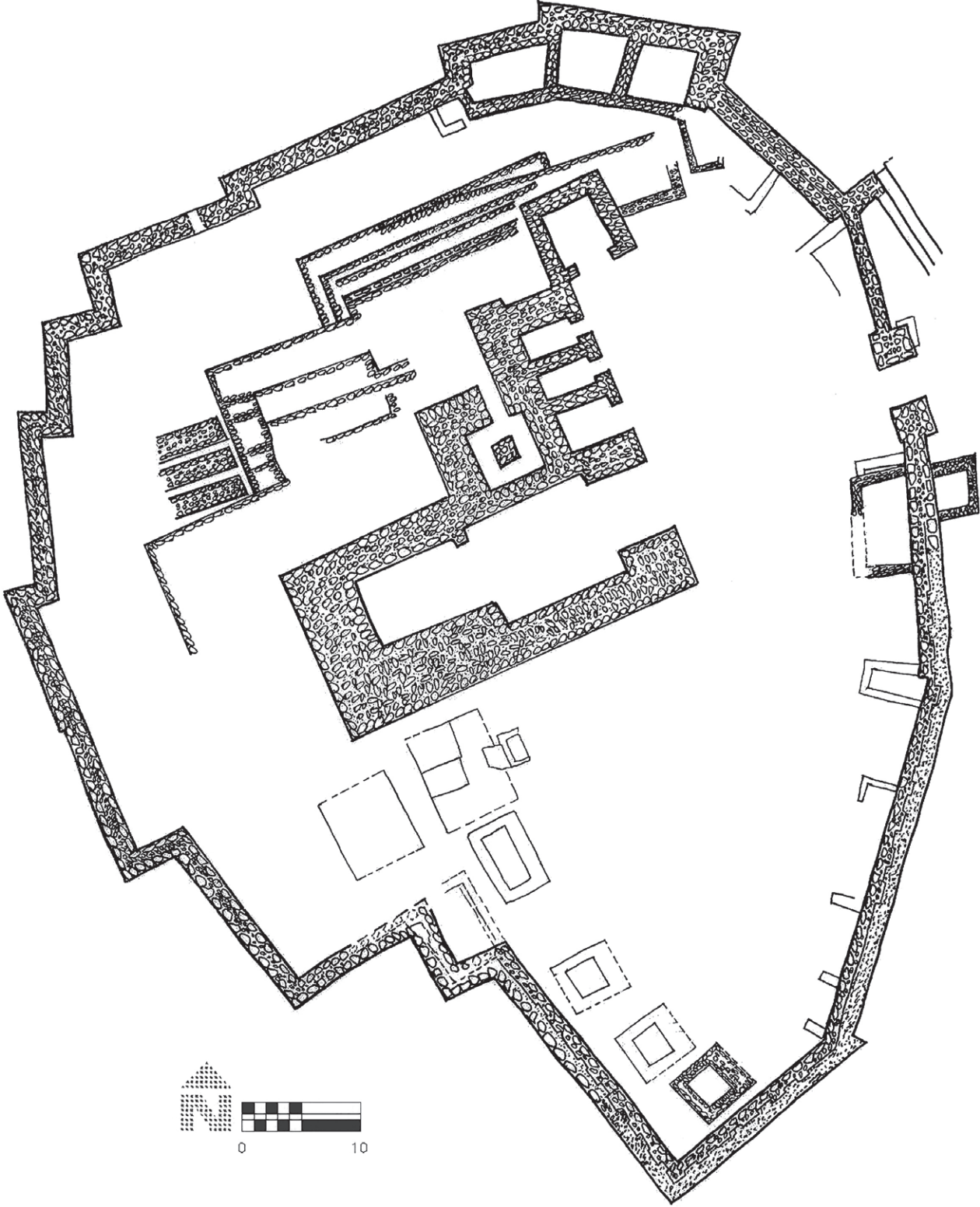


Fig. 2: Plan of Qalaichi Architecture remains (Kargar et al. 2021).

#### *IV.7. Rabat Tepe (map 1, No. 14)*

This hill is located next to the present-day city of Rabat, fifteen kilometers northeast of the city of Sardasht, not far from the Zagros passes to Assyria. Following the discovery of illicit excavations in the summer of 2004, an excavation team headed by Bahman Kargar was sent to the site during the summer of 2005 (Kargar, Binandeh 2009). The excavations were continued from 2006 under the supervision of Reza Heidari (Heidari 2010).

Since then, parts of a small palace have been uncovered, notably a courtyard with an Assyrian-style pebble mosaic pavement with a design predominantly of concentric circles which are most similar to those found at the Assyrian site of Ziyarat Tepe, Diyarbakir Province, Southern Turkey (Matney 2016). Excavators dated those features to the Iron III period, during the height of the Mannaeen kingdom in the eighth–seventh centuries BC. The most important finds include glazed clay crenellations, tiles, and bricks (Afifi and Heidari 2010). The tiles and crenellations show geometric, floral, and figural designs, some of them featuring composite creatures such as winged human-headed winged lions. Five of the latter are decorated with Assyrian cuneiform inscriptions, which mention a ruler “Ata” of a locale called “Arzizu,” both of which were mentioned in an inscription of Ashurnasirpal II in the ninth century BC (Grayson 1991, RIMA 2, page 207; Ashurnasirpal II: A.O.101.1, lines ii72b-76a). If “Ata” refers to the 9<sup>th</sup>- century ruler, these inscribed glazed bricks would be far older than the 8<sup>th</sup>-century pebble mosaic floor (Reade, Finkel 2014: 593), although it is possible that “Ata” was the name of a later polity in this region that was a vassal to Sargon II (Fuchs 1998).

While this paper considers Rabat to be a site influenced by Mannaeen culture, Lanfranchi, and later Radner, point out that the location of the Sardasht Plain aligns well with the kingdom the Assyrians called Hubuškia (Radner *et al.* 2016: 22). At the moment, it is mutually exclusive interpretations, for deciding about this ideas, we need more document and details, hopefully, come from future excavations.

#### *IV.8. Mala Mcha Graveyard (map 1, No. 19)*

This graveyard is located 200 meters from the Qaplantu village and about 4 kilometers from the Ziwiye site. During the summer of 2012, Abdolreza Mohajerinezhad conducted a rescue excavation on this site (Amelirad *et al.* 2017). Sixteen individual and multiple burials were excavated, most of which had been plundered. Excavators dated their remaining contents to the Iron III period, with ceramics similar to those found in other adjacent sites including Ziwiye, Changbar, and Kul Tarikheh.

#### *IV.9. Bardakonte (map 1, No. 4)*

Bardakonte is situated 7 kilometers from the city of Mahabad and on the road from Mahabad to Urmia. This site was excavated in 2012 under the supervision of Mohammad Ghorbani and with the collaboration of Abdolkarim Esmaili (Esmaili 2015: 90). The architecture and the ceramics unearthed at this site are similar to those of Qal’e Bardineh.

#### *IV.10. Qaplantu (map 1, No. 20)*

Qaplantu is situated near a village of the same name, four kilometers from Ziwiye and 200 meters from the Mala Mcha graveyard. Surveys were conducted at this site by Faegh Tohidi (1970’s), Saber Vafaei (1990s), Yousef Hassanzadeh and Sedigheh Ghodratabadi (2008) (Ghodratabadi, Hassanzadeh, 2009: 93-95). This site was once erroneously identified as ancient “Izirtu,” and like Ziwiye, numerous gold and silver objects emerging on the art market in the late 1940’s and 1950’s were claimed to have been from Qaplantu (Muscarella 1977: 210-211). Ceramics from this site resemble those from Ziwiye.



*IV.11. Bardineh Citadel (map 1, No. 8)*

This site is located 300 meters from the village of Aghjivan and 35 kilometers from the city of Bukan, on the axis of the road from Bukan-Shahindezh. This site was surveyed in 1976 by Javad Babak-Rad and Gholamali Shamlou and later by Yousef Hassanzadeh during the summer of 2002 (Hassanzadeh 2009b). Based on potteries found in the survey, Hassanzadeh has identified this site as Mannaeen.

*IV.12. Kul Tepe (map 1, No. 26)*

This site is located southwest of Zanjan and studies led by Swiny included it among sites with “Ziwiye-type”, or here Mannaeen, incised pottery (Swiny 1975; T6). Because of its distance from the Mannaeen heartland, this similarity in material culture might be better explained as showing a relationship with Mannaeans rather than a Mannaeen site.

*IV.13. Grda Qit (map 1, No. 11)*

Near the village of Hamamian, three kilometers northwest of the city of Bukan and twelve kilometers from Qalaichi site, local villagers found burials with ceramics similar to those found at Ziwiye and Qalaichi (Seifnejad 2009: 30).

*IV.14. Jan Agha Fortress (map 1, No. 5)*

This site is situated 45 kilometers from Miandoab and north of the village of Jan Agha on the road from Miandoab to Shahin-dezh. This fortress was studied by Kargar (Binandeh, Kargar 2008), who identified its structure, architecture as well its tiles as being of Mannaeen origin, although these findings have not been confirmed.

*IV.15. Jowšatu Citadel (map 1, No. 6)*

This citadel is situated on the steep slope of an isolated mountain twelve kilometers northeast of Shahin-dezh and adjacent to a village of the same name. The architectural remains include a well-built, massive fortification wall with round towers, mud brick walls with rubble bases, as well as smaller stone walls said to be like those found at Jan Agha and Zendan-e-Soleyman. Based on its architecture and excavated tiles and ceramics, the site was identified as having had Mannaeen (and later) occupation (Mollazadeh 2015). Stephan Kroll (personal communication) suggested from the stonework that this fort is not Urartian and not Mannaeen. I agree that it is likely later, perhaps Hellenistic Parthian or even later, as the stones are worked so carefully, as found in Parthian or Sasanian architecture but not in Urartian or Mannaeen buildings. The published pottery looks Iron Age (not necessarily Mannaeen) but also looks later (Mollazadeh, Binandeh 2021: 38-40).

*IV.16. Kani Zêrin (map 1, No. 16)*

This Mannaeen graveyard is located on a straight line one kilometer from the village of Aliabad, fourteen kilometers from Ziwiye, and 25 kilometers from the city of Saqez. It was excavated in August and September of 2015 under the supervision of Ali Hozhabri (2017). The excavators report finding Mannaeen ceramics there, as well as evidence for metallurgical production (Qanbari-Taheri *et al.* 2020).

*IV.17. Kani Kisal (map 1, No. 2)*

*Kani kisal* is located in a village with the same name 10km south-west of *Ushnaviye*, in western Azarbaijan Province. This site had been attributed to Urartian Period in the past (Pecorella, Salvini 1982: 28; Salvini *et al.* 1976: 21), as the result of civil works some Mannaean material culture including glazed pottery found in 2008. This material was studied and published by Ali Binandeh (2020).

*IV.18. Kani Koter (map 1, No. 21)*

Kani Koter cemetery is located in the south-west of Dere Pemeyan village, and 12.5 km from Ziwiyeh in the town of Saqez in the Kurdistan province. This site was illegally excavated and recovered artifacts were placed in the Sanandaj archaeological museum and published by Amelirad and Azizi (2019). Among the rich array of objects found at this site are ceramics, glazed beakers, metal vessels, and a decorated bronze belt with parallels at Ziwiyeh, thereby attributed to Mannaean culture.

*IV.19. Gargul (map 1, No. 3)*

In 2009, fragments of a bronze belt were found in the village of Gargul in the Lajan district of Piranshahr, in the Western Azerbaijan province of Iran. The belt, now housed in Urmia Museum, is ca. 95 cm. in length. Its body is 9.5 cm wide, and it has a 15 cm diameter medallion “buckle” (Cifarelli *et al.* 2018).

Authors suggested that “As a local product distinct from South Caucasian, Urartian and Assyrian traditions, this belt is a rare survivor of a culture (Mannaean?) that is not yet well understood” (Cifarelli *et al.* 2018: 8).

*IV.20. Sagzabad (map 1, No. 27)*

Tepe Sagzabad is situated close to Buin Zahra city in the Qazvin Plain of north-central Iran. This site has been excavated by teams from Tehran University since 1970. New seasons of excavation after 2016 under Mostafa Dehpahlavan focused on burials at the site. The grave goods are dated to Iron Age II-III and include ceramics, personal ornaments, and weapons that appear relatively contemporary to the material from graves of the eastern graveyard of Qara-Tappeh. The grave goods also include Mannaean incise? pottery (Dehpahlavan *et al.* 2019). I think the presence of Mannaean material culture here shows us “a site in relation with Mannaean’s”, not “a Mannaean site”.

*IV.21. Briefer publications and reports have indicated that the following sites have evidence of Mannaean culture:*

**IV.21a. Kaldageh (map 1, No. 9):** Bahman Kargar has identified the Sangar fortress on top of the Kaldageh/Kaltakeh mountain, situated 12 kilometers east of Bukan and 5 kilometers southeast of Qalaichi, as one of protecting locations of Tepe Qalaichi (Kargar 2004: 230, footnote 5);

**IV.21b. Shah-Moradan (map 1, No. 12):** Reports indicate that Qalaichi style glazed ceramic bricks and tiles were unearthed from the mountainous fortress of Shah-Moradan near the village of Sari-Ghamish (25 kilometers east of Bukan on the coast of Zarinah River (Kargar 2004: 230, footnote 6).

**IV.21c. Tbt Fortress (map 1, No. 13):** 3 kilometers south of Bukan and 15 kilometers from Qalaichi, the existence of a semi-circular solid tower has been reported as Mannaean style (Alizadeh, Firouzmandi 2013: 99); but they are more like Parthian – Sasanian towers, not Iron Age / Mannaean.

**IV.21d. Haji Soufi Fortress:** Excavators reported the discovery, 8 kilometers from Ziwiyeh and 3 kilometers from Qaplantu, of a Mannaean fortress surrounded by a wall made of mudbricks and rubble (Rezvani 2004: 84);

**IV.21e. Saheb Fortress (map 1, No. 15):** Rezvani has identified this fortress, located 18 kilometers southeast of Saqez, as being Mannaeen (Rezvani 2004: 84);

**IV.21f. Ghamchi-Khay Citadel (map 1, No. 24):** This citadel, also called Ghamchoghay, surrounded by a wall made up of semi-circular towers located near Bijar has also been described as Mannaeen according to survey studies (Babak-Rad 1969: 67-69); a plan published by Kleiss (1972: 165-168; Fig. 36-38) and he suggested the site as a Mannaeen site, too.

**IV.21g. Tepe Ghapan (map 1, No. 7):** Narges Mirzai outlined and performed stratigraphy on this site, situated at the center of the city of Shahin-Dezh, and discovered a layer comprising remains of Mannaeen tiles (Mirzayi, Abbas-zadeh, in press).

**IV.21h. Çala dêm Graveyard (map 1, No. 25):** Located in Shal Village in Khalkhal City, Ardebil Province. Rescue excavations during March 2019 turned up 140 artifacts, including some Mannaeen glazed pottery and pottery with incised motifs (Shayeghi, Ebrahimi 2021: 480, Fig. 9). Despite the presence of Mannaeen material culture, it is more likely “a site in relation with Mannaeans”, not “a Mannaeen site”.

## V. CHARACTERISTIC FINDS AT MANNAEAN SITES

Distinctively Mannaeen excavated materials can be assigned to three major categories: Architecture, pottery, and decorated portable objects. We will survey each of these fields in the following section:

### V.1. Architecture

Before examining architecture, it is important to point out that architecture at Mannaeen sites generally consists of mudbrick walls on stone foundations, in contrast to the rubble stone masonry characterizing Iron Age architecture of *Ellipsis* in Luristan. The Mannaeen architecture will be examined by type, below.

#### V.1a. Monumental / Religious Architecture

Architecture designated as “religious” is characterized by the presence of a platform for the purpose of prayer/offering/sacrifice inside roofed (covered) spaces, as well as in open spaces as reported in Qalaichi (Kargar 2004). In some cases, as at Rabat, platforms were paved with a pebble mosaic (Hejebri Nobari, Afifi 2009: 49), although other spaces are not paved. Bahman Kargar identifies these spaces as praying platforms, a notion endorsed by Julian Reade who refers to examples of elevated platforms for prayer in Assyria and Pasargadae (Reade, Finkel 2014). In any case, if we consider these empty spaces as platforms (which are numerous even in this limited area), we should also consider monumental purposes for some parts of the Rabat architectural structures (Kargar, Binandeh 2009: 117).

This religious function might be evidenced at Qalaichi by the more than 5600 fragments of animal bones discovered during the first excavation season underneath the engraved floor of the columned hall, as well as during the subsequent seasons inside the pit (Nezamabadi *et al.* 2011). These bones do not indicate any signs of butcher’s cuts, bites, or breakage for the purpose of using their marrow. It appears their flesh was not removed or consumed, suggesting they were placed under floors as votive/sacrificial offerings, while other pieces were put in a pit.

#### V.1b. Columned Halls

Although no clear plan has ever been published of the architecture of Ziwiye, this site is predominantly characterized by its columned hall, which is among the oldest columned halls in Iranian architecture. During the 1994



excavations, 8 stone column bases were discovered inside this columned hall (Motamedi 1995: 353), 85-93 centimeters in diameter, and placed within distances of 360 to 393 centimeters from one another (Motamedi 1995: 354). A 35 by 19-meter columned hall was also discovered in Qalaichi, with 5 column bases that measured 100 centimeters in diameter and 20 centimeters in height and were very similar to the examples in Ziwiye (Yaghmai 2017, Kargar 2004: 234). Also in Bukan region, Mollazadeh (2020) reported a column base made with the same method. In Hasanlu IV as well, other similar columned halls were discovered with similarities to the previously mentioned halls, although these halls are much older, having been initially erected during the Hasanlu Period V (1450-1250 BC) (Dyson 1983/1984: 302-303; Dyson, 1973c: 1; Danti 2013).

### *V.1c. Pavements*

Pavements of different materials also may characterize Mannaean architecture. An area of approximately one hectare of the floor of the Qalaichi site is paved with stone, while a band of one meter wide at the edge of the walls of the entrance at the columned hall has been paved with finer stones (Kargar 2004). Paved floors are also present in Hasanlu Levels V and IV, as well as Ziwiye.

Vast paved areas made from pebble mosaics were also discovered in Rabat (Fig. 3). The mosaic design of these pavements consists of seven concentric circles in square frames of 160 × 160 centimeters (Heidari 2007: 205; Hejebri - Nobari, Afifi 2009: 49), as well as 170 × 150 or 170 × 180 centimeters (Kargar, Binandeh 2009: 116). In certain cases at Rabat, on the surface of the pavement, simple square bricks of various dimensions were installed (Hejebri - Nobari, Afifi 2009: 50; Kargar and Binandeh 2009: 115-116).

### *V.1d. Architectural Decorations*

Perhaps the most distinctive aspect of Mannaean architecture is the use of glazed and unglazed ceramic decorative elements, including ceramic wall tiles, knobs, and knob plaques of the types below:

1. Simple wall pegs inserted into the wall, with a glazed, rounded head were found at Ziwiye and Qalaichi (Fig. 4:1).

2. Knob plaques, similar to the wall knobs or pegs, but surrounded by a lozenge or square plaque that lies flush on the wall. All of the exposed surfaces on these plaques, including the knob, are generally glazed. This type was found at Ziwiye and Hasanlu (Fig. 4.2).

3. A type of ceramic decorative plaque without the wall insertion, but with a square plate with an animal head protome. The head was hollow, probably to allow a bar to be placed by which it could hang on a wall. In this model, the lozenge/square-shaped head and the animal head are glazed. Examples of this category were found in Hasanlu (Fig. 4.3).

4. Small ceramic decorative whorl-shaped bosses, some convex and some flat. These are perforated to allow metal nails to fasten them to walls, their average diameter is 9 to 10 centimeters and the diameter of the holes in the middle of these wall bosses are 1.5 to 2.8 cm (Heidari 2007: 210; Hejebri - Nobari, Afifi 2009: 53), and are glazed and decorated with rosettes (Kargar, Binandeh 2009: 118). This type is mainly found in the site of Rabat (Fig. 4.4).

#### *V.1d.1. Glazed Bricks*

Glazed bricks are one of the most essential and distinctive finds from Mannaean sites. These bricks are made and used in a variety of sizes. In Ziwiye, bricks were made in the form of isosceles triangles with a 7 cm length, 10.5 cm height, and 2 cm thickness and glazed (Motamedi 1995: 328). Glazed bricks were also found at Shah-Mardan of Bukan (Kargar 2004: 230, footnote 6). However, the glazed bricks from Qalaichi (Fig. 5) in



**Fig. 3:** Rabat pavements were discovered in the 2006 excavation season (courtesy of R. Heidari).

Bukan (Yaghmai 2017; Kargar 2004; Hassanzadeh 2006; Hassanzadeh, Mollasalehi 2011) and Rabat (Afifi, Heidari 2010) are exceptional with respect to their variety in size and pattern as well as abundance compared to other sites.

Bricks from the sites of Rabat and Qalaichi are generally 33-35 cm square, with some half- (almost 15 to 17 × 33 to 35 cm) and quarter- (approximately 15 × 15 to 17 × 17 cm) sized. Glazed imagery includes geometric, vegetal, or geometrical/vegetal composite motifs, human and animal composite motifs, and human motifs. A group of five glazed bricks from Rabat, originally in one or more horizontal courses, were decorated with a fragmentary Assyrian cuneiform inscription (Heidari 2010, 339-41, Tab. LII.2-LIV).

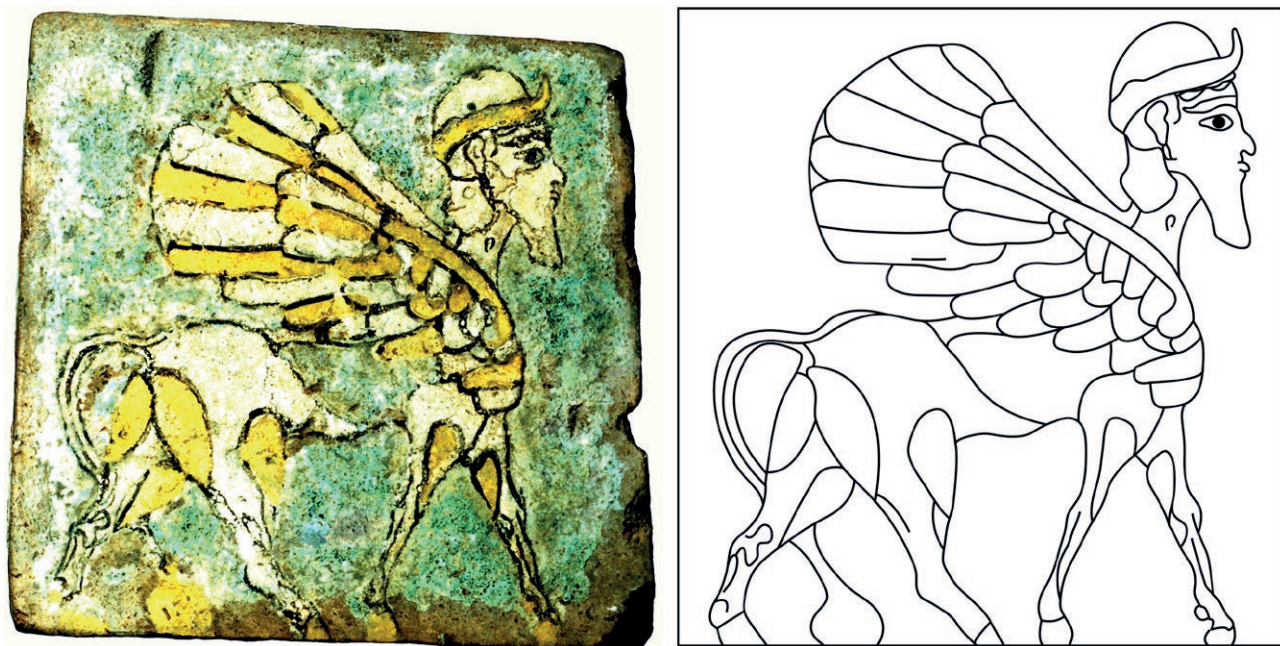
### *V.1d.2. Rock/ Stone Carving Architecture*

Evidence for stone carving technology is found at a few sites whose ceramics place them within the Mannaeen sphere. These include the Bardineh Fortress in Bukan where, on top of a high mountain, the necessary space for settlements, surrounding and fortification walls, seating platforms, and large reservoirs for storing water were carved out of living rock (Hassanzadeh 2009b). Similarly, at Bardakonte in Mahabad, massive stones were used in the construction of architecture, which includes architectural, burial, and worship. In addition, rubble stone





**Fig. 4:** Glazed decorative pegs from Manneans sites. 4.1; Glazed decorative peg from Ziwiyeh, housed in Iran National Museum, Museum No. 2904, L. 28.5 cm, Maximum D.: 8 cm, Hassanzadeh 2016b: 100, picture 60. (©Iran National Museum). 4.2; Glazed decorative peg from Ziwiyeh, housed in Iran National Museum, Museum No. 2725, L. 29 cm, Maximum D.: 10.1 cm, square plate D.: 18 cm, Th.: 2.1 cm, Hassanzadeh 2016b: 101, picture 61 (©Iran National Museum). 4.3; glazed plaque with Lion head from Hasanlu, housed in Iran National Museum, Museum No. 8744, Square plate D.: 22 cm, Lion Head H.: 15 cm, Lion Neck D.: 12.1 cm, Excavation No: Has-64-450 (bB31 ⑤ □2 Δ87) Hassanzadeh 2016b: 103, picture 62 (©Iran National Museum). 4.4; glazed clay pegs from Rabat excavation, 2005; D.: 9-10 cm, Th.: 1.5-2.8 cm (Kargar, Binandeh 2009: 129, Pl. 14).



**Fig. 5:** A glazed brick from Qalaichi, housed in Iran National Museum, Museum No. 13653, D.: 34×34×9cm, Hassanzadeh, Mollasalehi 2017: 119, fig. 100 and 127, Drawing 55 (©Iran National Museum).

masonry walls with large and massive rocks (Mollazadeh 2015) were reported from various investigations, although the validity of some has not yet been approved.

### *V.2. Burial*

Of the five burial sites reported from the Mannaeen geographical territory, four (namely Changbar, Mala Mcha, Kul-Tarikh and Kani-Zêrin) have been scientifically excavated, some of them for more than one season (Changbar and Kul-Tarikh). Reports, in general, do not establish a specific pattern of Mannaeen burials that is distinct from burials of the Iron Age in the Iranian Plateau. These cemeteries are assigned to the Mannaeen culture based primarily on grave goods, particularly ceramics. Most of these burials are stone-lined chambers covered by large flat stones on top. Rare are the Assyrian-style bronze coffin from Ziwiye and pottery from Mala Mcha.

### *V.3. Ivory Carving*

Carved ivories, much like glazed bricks, are one of the types of artifacts strongly identified with Mannaeen sites, although many examples attributed to them are not from scientific excavations. Many ivories “said to be from” Ziwiye are in the Louvre Museum, the National Museum of Iran (Charlesworth 2019, Mazzoni 1977), the British Museum, and the Metropolitan Museum (Wilkinson 1975). Recently Sheler Amelirad published a group of well-carved ivories excavated at Ziwiye in 1997 at the Sanandaj Museum (Amelirad 2019), concluding that while the local artisans who made them were familiar with Assyrian and perhaps Urartian subject matter and style but “adapted them to serve their own purposes and meanings” (Amelirad 2019: 20). Hundreds of carved ivory fragments were also found during excavations at Hasanlu (Muscarella 1980), some imported from regions to Hasanlu’s west, and some locally produced. These ivories are generally decorated in a wide range of styles, and feature animals, composite creatures, human beings, floral, and vegetal motifs (Fig. 6).





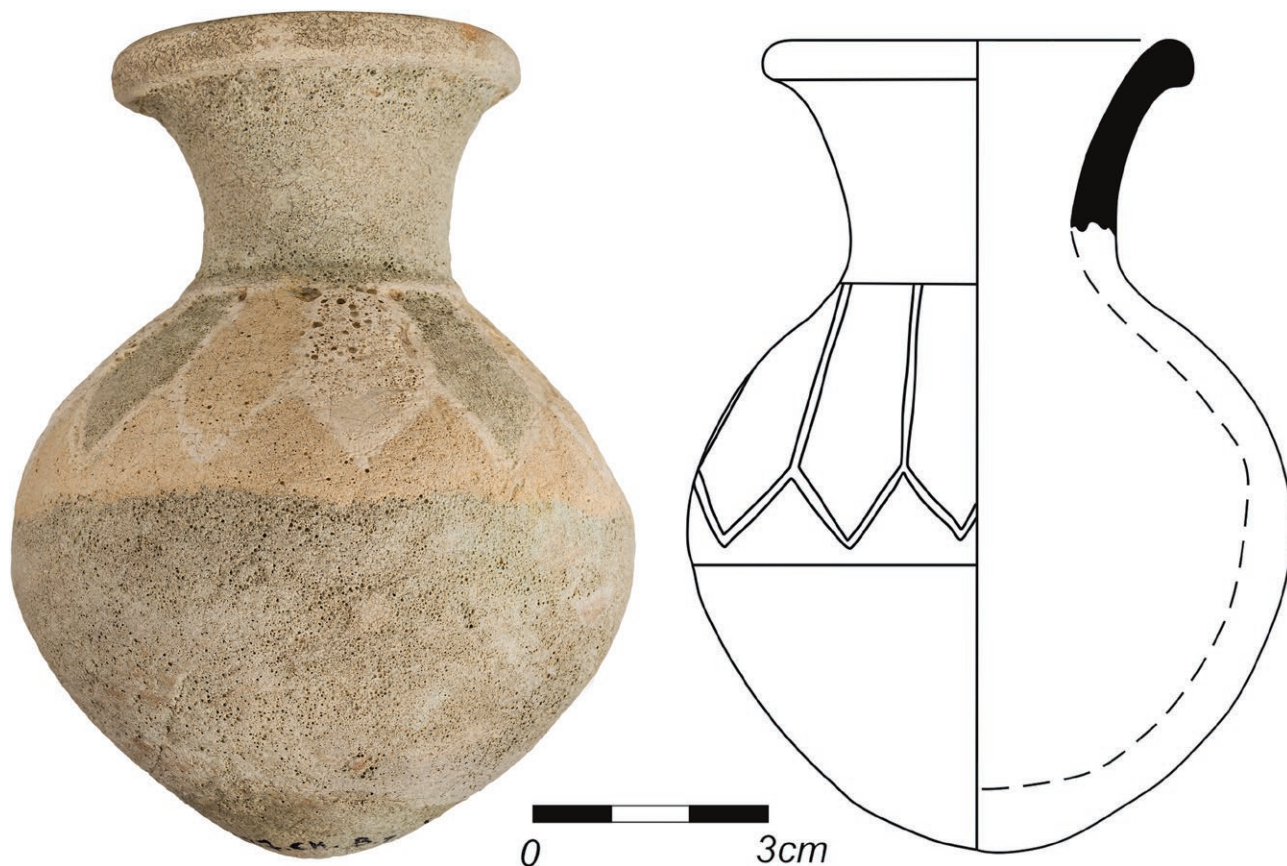
**Fig. 6:** An Ivory from Ziwiye, housed in Iran National Museum, Museum No. 5436, L.: 12.8 cm, W.: 4.8 cm, Th.: 4 mm; Charlesworth 2019: 132 (©Iran National Museum).

#### *V.4. Pottery*

At the sites discussed above, among the common types of Iron Age pottery, two classes of ceramics are categorized as specifically indicating Mannaean occupation: Small, globular glazed jars with rounded bases, and pottery with incised decoration.

#### *V.4a. Glazed Pottery*

Glazed pottery, particularly (mostly small) globular jars with rounded bases, and shapes featuring an ovoid base are reported from the sites of Hasanlu (Danti, Cifarelli 2016), Ziwiye, Changbar, Kul-Traikheh, Qalaichi, and Rabat (fig. 7). While these are a type of pottery associated with Assyria, even appearing on Assyrian relief images,



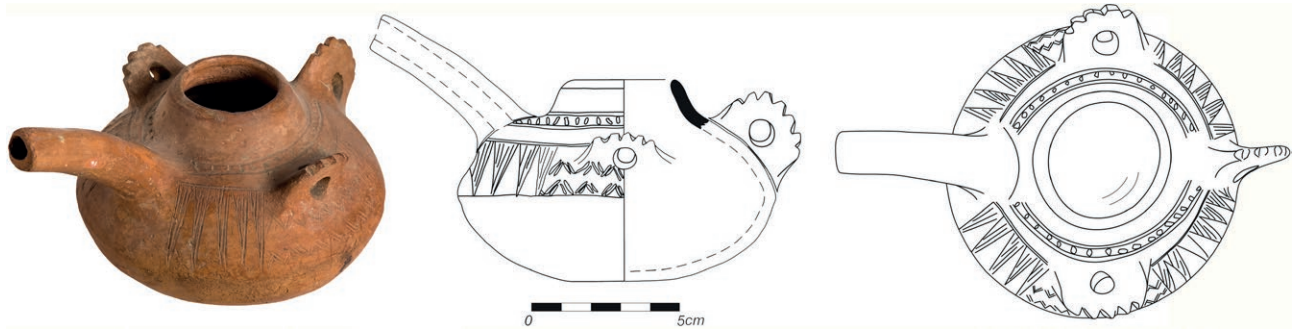
**Fig. 7:** Glazed pottery from Changbar Cemetery, housed in Iran National Museum, Museum No. 10583, Rim Diam.: 4.1 cm, H.: 10.7 cm, max. Body Diam.: 7.7 cm, Hassanzadeh 2016b, 55 (©Iran National Museum).

recent research suggests that they are not all necessarily imported to the Zagros region from Assyria. The presence of glazed pottery fragments under Iron II (Period IVb) floors at Hasanlu suggests that glazed pottery production in northwestern Iran starts well before the first millennium BC, and analysis of the distribution of these vessels suggests that they may have originated in Mannaeen lands (Hassanzadeh 2016a). They represent a relatively early stage in Mannaeen history in the mid-ninth to mid-eighth centuries.

#### *V.4b. Pottery with incised motifs*

Pottery decorated with incised, inverted triangles was excavated at Ziwiye, as well as Zendan-e-Soleiman, Qalaichi, Kul-Tariekh, and Mala Mcha. In the collection of pottery from Zendan-e-Soleiman, among other examples of Iron Age ceramics, those with incised motifs have been considered Mannaeen (Boehmer 1988, Thomalsky 2006). Pottery with incised motifs was also reported from Ziwiye (fig. 8) (Young 1965: 61; Dyson 1963c: 35; Mo'tamedi 1997), Qalaichi (Mollazadeh 2008, Kargar 2004: 242-245), Kul-Tarique (Rezvani 2004: 101, fig. 10: 2; p. 104: fig. 5: 10; p.109, fig. 10: 6; p.110, fig. 11: 8), Mala Mcha graveyard (Amelirad *et al.* 2017), as well as from the ruins of the Grda Qit graveyard (Seifinejad 2009: 30). This style of pottery appears to date to the 8<sup>th</sup> century BC and may be slightly later than the globular glazed jugs although that has not been confirmed archaeologically. The use of incisions to create the inverted triangles, according to Boehmer's analysis of the ceramics at Zenden-e-Solaiman, is characteristic of the Mannaeans (Boehmer 1988) While similar designs are associated with later Urartian and Achaemenid ceramics, they are generally painted (Kroll 1975: 73-74; 1976: 164-65; 1977: 105, and n. 177, Dyson 1999).





**Fig. 8:** Incised pottery type from Ziwiye, Housed in Iran National Museum, Museum No. 2905, Rim Diam.: 3.3 cm, H.: 7.2 cm, Base Diam.: 4.4 cm; Hassanzadeh 2016b, 70-71 (©Iran National Museum).

## VI. MANNAEAN ARTISTIC MOTIFS

Given the paucity of Mannaeen sites excavated and thoroughly published, and the prevalence of unexcavated objects in discussions about Mannaeen cultural production, it is difficult to provide a comprehensive description of Mannaeen Art.

As was the case for Urartu to some extent, Mannaeen visual arts bear a strong relationship to the contemporary artistic production from Assyria, particularly as transmitted through portable objects, such as seals, ivories, metal objects, and perhaps textiles. Nevertheless, it is clear that artists working at Mannaeen sites, or whose work found its way to Mannaeen sites, were not simply copying the art of Assyria, but were integrating local preferences and traditions with those imported from Mesopotamia to the west, Elam to the South, the Iranian peoples to the east, and the Urartians and South Caucasian people from the north. For example, the beautifully decorated copper alloy belt found at Gargul, discussed above, demonstrates knowledge of the regional artistic traditions that are otherwise only known from Hasanlu (Cifarelli *et al.* 2018). The execution of the decorative motifs on the glazed bricks found at Mannaeen sites show astonishing freedom compared to Assyrian examples, which tend to be more regular and rigid in design (Hassanzadeh, Mollasalehi 2011: 47). Similarly, a comparison of the motif of concentric circles surrounded by semi-circles on decorated Mannaeen bricks are quite different from the manner in which those motifs are articulated in Urartian art (Hejebri - Nobari, Afifi 2009: 55). In sum, the abundance of ceramics with incised motifs at Mannaeen sites, the presence of ivories, the use of glazed bricks and wall tiles as architectural decoration, architecture that features paved floors, stone foundations and brick walls, platforms for offerings, and columned halls, all characterize the cultural production of the Mannaeen people, and help distinguish it from neighboring peoples. By beginning to describe and distinguish the archaeological evidence for Mannaeen cultural production in the 8<sup>th</sup> and 7<sup>th</sup> centuries BC, we can begin to appreciate this important civilization as a significant contributor to Iranian history, and not simply as a satellite of the Assyrian or Urartian Empire.

## VII. CONCLUSION

Compiling an archaeological study on the Mannaeen kingdom for the first time, with a focus on the findings of excavations of sites attributed to this first millennium BC culture, is challenging, as there has been no serious discussion about this material culture and it is difficult to determine which cultural material items can be attributed to Mannaeans. The first issue is that there are no finds with inscriptions to help us prove that the associated materials are Mannaeen in origin; therefore, in order to reach a preliminary conclusion, we need to base our hypotheses on some assumptions.

In the sites thought to be within “Mannaeen Territories” based on historical geographic resources and Assyrian and Urartian texts, certain Iron Age cultural materials are distributed in other Iron Age sites in the adjacent

regions and even wider on the Iranian Plateau. To assign a site to the Mannaeen culture, we have also used architectural styles; Thus, in the region south of Lake Urmia and north of Zaribar Lake, considered Mannaeen territory, an Iron Age settlement with a hypostyle hall, flagged floor, stone foundations, adobe walls decorated on the outer surface with red ochre and glazed bricks, in addition to glazed ware, incised decoration ware and ivory items among its cultural materials, could be considered as a distinctive Mannaeen site.

Not all of these materials should be expected to appear at every site; however, each of the above items suggests the possibility that the site is Mannaeen. It is hoped that the criteria introduced in this paper initiate a serious discussion among archaeologists to look at cultural materials recovered through excavations in this region in a more refined way, with constructive scientific criticism to develop the current ideas and concepts. The goal is to have a more accurate constraint on the chronology of these cultural materials/features in order to differentiate between the finds related to the beginnings of the Mannaeen period from those materials related to the time-span when the Mannaeans were part of the Median society, taking into account the cultural interactions with their Assyrian and Urartian neighbors. By providing this general overview of the structures and materials found through excavation, this paper is a general overview of these cultural materials in the context of the archaeological sites studied, and a first attempt to rigorously classify and study these so-called Mannaeen materials.

#### ACKNOWLEDGEMENTS

I would like to express my most sincere gratitude to my friends and colleagues Dr. John Curtis, Dr. Stephan Kroll, Dr. Marina Pucci and Dr Sebastiano Soldi who read the text; Dr. Ali Mousavi who help me in editing, Dr. Megan Cifarelli who help me in editing the text—I'm deeply indebted to her; and Dr Karen Radner who gave me some sources of this research. I also thank Dr J. Nokandeh, General Director of Iran National Museum, Mr. Mohsen Alavi and Mr. Eghbal Azizi in Sanandaj Museum who gave me access to study some collections in their Museum storage and Mr. Reza Heidari for permission of use one of his figures in this article. The last, but not least, I owe Ali Piroti, who is teaching me to make better maps in GIS and Google Earth.

#### BIBLIOGRAPHY

- Abdi, K.  
2012 Conservation and Research at Ziwiye, Kurdistan, 2008, *Abstracts of the 11<sup>th</sup> Annual Symposium of Iranian Archaeology*, Tehran, Research Center of Iranian Cultural Heritage, Handicrafts and Tourism Organization: 312 – 314 (in Persian).
- Adamec, L.W.,  
1976 *Historical Gazetteer of Iran*, 1: Teheran and northwestern Iran, Graz.
- Affi, R., Heidari, R.  
2010 Reflections on glazed bricks from Rabat Tepe II, Iran, *Aramazd Armenian Journal of Near Eastern Studies, Vol. 2 (Urartu and its Neighbors)*, Edited by: Aram Kosyan, Armen Petrosyan and Yervand Grekyan): 152-187.
- Alizadeh, H., Firouzmandi, B.  
2013 Military Architecture of Mannaeen Period, *Payam-e Bastanshenas*, Vol. 10, No. 19: 93-106 [in Persian].
- Amelirad, Sh.,  
2019 A study of ivory and bone plaques from Ziwiye in the Sanandaj Museum, *Iraq* 81: 11 – 21.
- Amelirad, Sh., Azizi, E.  
2019 Kani Koter, Iron Age Cemetery From Iranian Kurdistan, Iran, *Iran*, Online access at: <https://doi.org/10.1080/05786967.2019.1633240>



- Amelirad, Sh., Mohajerynezhad, A., Javidkhah, M.  
2017 A Report on the Excavation at the Mala Mcha Graveyard, Kurdistan, Iran, *Iran* 55.2: 171-207.
- Arutyunyan (Harutyunyan), N.V.  
1985 *Toponimika Urartu*, Erevan.
- Ascalone, E., Baseri, Z.  
2014 New Archaeological Finds from Ziwiye. Preliminary Notes on the Ziwiye Seals Corpus, in *Proceedings of the 9<sup>th</sup> International Congress of the Archaeology of the Ancient Near East (ICANE), Basel 2014*, 1: 31-41.
- Azarnoush, M., Helwing, B.  
2005 Recent archaeological research in Iran – Prehistory to Iron Age, *Archäologische Mitteilungen aus Iran* 37: 189-246.
- Babak-rad, J.  
1969 Ghamchi-Khay Citadel, *Archaeology and Art* 3: 64-71 [in Persian].
- Baker, H.  
2017 *The Prosopography of the Neo-Assyrian Empire*, Neo-Assyrian Text Corpus Project, Helsinki.
- Balatti, S.  
2017 *Mountain Peoples in the Ancient Near East: The Case of the Zagros in the First Millennium BC*, Harrassowitz Verlag, Wiesbaden.
- Binandeh, A.  
2020 The Evidence of Mannaeen in Western Hasanlu, in K. Niknami, A. Hozhabri (eds), *Archaeology of Iran in the Historical Period*, Switzerland, Springer: 105-115.
- Binandeh, A., Kargar, B.  
2008 Ghour Ghaleh Jan Aqa: a Mannaeen fortress in north-western Iran, *Antiquity* 82/315. Online access at: <http://antiquity.ac.uk/ProjGall/315.html>.
- Binandeh, A., Kargar, B., Khanmohamadi, B.,  
2017 Mannaeen Art: Some Glazed Bricks from Qalaichi, Iran, *Aula Orientalis* 35/2: 213 – 222.
- Boehmer, R.M.  
1964 Volkstum und Städte der Mannäer, *Baghdader Milleilungen* III: 11-24.  
1967 Forschungen am Zendan-I Suleiman in Persisch Aserbidischen 1958-1964, *Archäologischer Anzeiger, Beiblatt: Archäologische Gesellschaft zu Berlin* 1966, 573-585.  
1988 Ritzverzierte keramik aus dem Mannäischen (?) Bereich, *Archäologische Mitteilungen aus Iran*, N19 (1986): 95-115.
- Borger, R.,  
1996 *Beiträge zum Inschriftenwerk Assurbanipals, Die Prismenklassen A, B, C = K, D, E, F, G, H, J und T sowie andere Inschriften, Mit einem Beitrag von Andreas Fuchs*, Wiesbaden.
- Burney, C., Lang, D.  
1971 *People of the Hills: Ancient Ararat and Caucasus*, London.
- Charlesworth, M.  
2019 *Ivories from Ziwiye in National Museum of Iran*, [in Persian and english], translated to Persian: N. Dehghan, Tehran, IranNegar.
- Cifarelli, M.  
2019 The Iron Age at Hasanlu, Iran: New Perspectives, in Y. Hassanzadeh, A.A. Vahdati, Z. Karimi (eds), *Proceeding of the International Conference on the Iron Age in Western Iran and Neighbouring regions*, Vol. 2: 21-44; Tehran and Sanandaj, RICHT, National Museum of Iran and Kurdistan ICHTO.
- Cifarelli, M., Mollazadeh, K., Binandeh, A.  
2018 A Decorative Bronze Belt from Gargul, Iran, *Iran* 57.2, Online access at: <https://doi.org/10.1080/05786967.2018.1505441>.

- Crawford, V.E.  
1961 Hasanlu 1960, *Bulletin of the Metropolitan Museum of Art* 20: 85-94.
- Curtis, J.  
2019 More Thoughts on the Destruction of Hasanlu IVB, in Y. Hassanzadeh, A.A. Vahdati, Z. Karimi (eds), *Proceeding of the International Conference on the Iron Age in Western Iran and Neighbouring regions*, Vol. 2, Tehran and Sanandaj, RICHT, National Museum of Iran and Kurdistan ICHTO: 9-20.
- Danti, M.D.  
2013 *Hasanlu V: The Late Bronze and Iron I Periods*. Hasanlu Excavation Reports III. University Museum Monograph. University of Pennsylvania Press.
- Danti, M.D., Cifarelli, M.  
2016 Assyrianizing Contexts at Hasanlu IVb?: Materiality and Identity in Iron II Northwest, in J. MacGinnis, D. Wicke, T. Greenfield (eds), *The Provincial Archaeology of the Assyrian Empire*, Cambridge: McDonald Institute for Archaeological Research: 357-69.
- Dehpahlavan, M., Jahed, M., Tazik, A., Mohammadkhani, K., Farnam, E.  
2019 A Newly Found Iron II-II Western Graveyard of Qara-Tappeh, Sagzabad, in Y. Hassanzadeh, A.A. Vahdati, Z. Karimi (eds), *Proceeding of the International Conference on the Iron Age in Western Iran and Neighbouring regions*, Vol. 1, Tehran and Sanandaj, RICHT, National Museum of Iran and Kurdistan ICHTO: 370-391.
- Diakonoff, I.M.,  
1985 Medi”, Chapter 3 in G. Gershevitch (ed.), *The Cambridge history of Iran 2: The Median and Achaemenian periods*, London: 36-148.
- Diakonoff, I.M., Kashkai, S.M.  
1979 *Geographical names according to Urartian texts*. RGTC 9, Weisbaden.
- Dyson, R.H.,  
1960a Hasanlu and Early Iran. *Archaeology* 13: 118-29.  
1960b Where the Golden Bowl of Hasanlu Was Found: Excavations near Lake Urmia Which Throw New Light on the Little-Known Mannaeans-Part I. *Illustrated London News* 236, January 23: 132-34.  
1961a Excavating the Mannaeen Citadel of Hasanlu and New Light on Several Millennia of Azerbaidjan, *Illustrated London News*, 30 September 1961: 534-537.  
1961b Hasanlu, 1960 Campaign, *Archaeology* 14: 63-64.  
1962 The Hasanlu Project, *Science* 135/3504: 637-47.  
1963a Expedition News, *Expedition* 5/2: 33.  
1963b Hasanlu Discoveries, 1962, *Archaeology* 16: 131-33.  
1963c Archaeological Scrap: Glimpses of history at Ziwiye, *Expedition* 5: 32-37.  
1964 In the City of the Golden Bowl: New Excavations at Hasanlu in Persian Azerbaijan, *Illustrated London News* 245, September 12: 372-74.  
1965a Hasanlu Excavations, 1964, *Archaeology* 18: 157-59.  
1965b Problems of Protohistoric Iran as Seen from Hasanlu, *Journal of Near Eastern Studies* 24: 193-217.  
1966 The Hasanlu Project, Pp. 413-35 in J. R. Caldwell (ed.), *New Roads to Yesterday*, New York: Basic.  
1967 Early Cultures of Solduz, Azerbaijan, in A.U. Pope (ed.), *A Survey of Persian Art* 14, London: Oxford University : 2951-70.  
1968 Hasanlu and the Solduz and Ushnu Valleys: Twelve Years of Exploration, *Archaeologia Viva* 1: 83-101.  
1973c Hasanlu 1972, F. Bagherzadeh (ed.), *Proceedings of the 1<sup>st</sup> Annual Symposium on Archaeological Research in Iran*, Teheran: Iranian Centre for Archaeological Research (paper published as separate fascicle).  
1977 Architecture of the Iron I Period at Hasanlu in Western Iran, and Its Implications for Theories of Migration on the Iranian Plateau, 155-69, in J. Deshayes (ed.), *Le plateau iranien et l'Asie centrale des origines a la conquete islamique*, Paris: Editions du Centre national de La recherche scientifique.

- 1983/1984 Summary of Work at Hasanlu and Hissar, 1970-1980, *Archiv fur Orientforschung* 29-30: 302-4.
- 1989 Rediscovering Hasanlu, *Expedition* 31: 3-11.
- 1999 The Achaemenid Painted Pottery of Hasanlu IIIA, *Anatolian Studies* 49: 101-10.
- Dyson, R.H., Muscarella, O.W.
- 1989 Constructing the Chronology and Historical Implications of Hasanlu IV, *Iran* 27: 1-27.
- Eph'al, I.,
- 1999 The Bukan Aramaic Inscription: Historical Considerations, *Israel Exploration Journal* 49: 116-121.
- Esmaili, A.K.,
- 2015 Excavation at the Mannaeian site of BardaKonta in Mahabad County, *Journal of Zagros Research*, Vol. 2, No. 2-3: 87-96 [in Persian].
- Everett, G. H.,
- 2018 *The Book of Jeremiah*.
- Fales, F.M.
- 2003 Evidence for West-East Contacts in the 8<sup>th</sup> Century BC: The Bukan Stele, in G.B. Lanfranchi, M. Roaf, R. Rollinger (eds), *Continuity of Empire(?): Assyria, Media, Persia*, Padova: 131-147.
- Fales, F.M., Postgate, J.N.
- 1995 Imperial administrative records, Part 2, *Provincial and military administration*, SAA 11, Helsinki University press.
- Frame, G., Fuchs, A.
- 2020 *The Royal Inscriptions of Sargon II, King of Assyria (721-705 BC)*, the Royal Inscriptions of the Neo-Assyrian Period (RINAP) Series, Vol. 2, Eisenbrauns, University Park, Pennsylvania.
- Fuchs, A.,
- 1994 *Die Inschriften Sargons II aus khorsabad*, Gottingen.
- 1998 Ada, in K. Radner (ed.), *the Prosopography of the Neo-Assyrian Empire*, Vol. 1, Part 1, Helsinki: 20-21.
- Fuchs, A., Schmitt, R.
- 1998 Azâ, in K. Radner (ed.), *the Prosopography of the Neo-Assyrian Empire*, Edited by K. Radner, Vol. 1, Part 1, Helsinki: 238.
- Ghodratbadi, S., Hassanzadeh, Y.
- 2009 Qaplantu: A poorly-known site in the heart of Mannaeian territory, *Bastanpazhubi*, Vol. 4, No. 7: 93-99 (in Persian).
- Godard, A.
- 1950 *Le Tresor de Ziwiye*, Haarlem.
- Grayson, A.K.,
- 1991 *Assyrian Rulers of the Early First Millennium BC I (114-859 BC)*, The Royal Inscriptions of Mesopotamia, Assyrian Periods (RIMA) 2, Toronto.
- 1996 *Assyrian rulers of the first millennium BC II (858-745 BC)*, The Royal Inscriptions of Mesopotamia, Assyrian Periods (RIMA) 3, Toronto.
- Hassanzadeh, Y.
- 2006 The glazed bricks from Bukan (Iran): new insight into Mannaeian art, *Antiquity* Vol. 80, No.307. <http://antiquity.ac.uk/ProjGall/307.html>
- 2009a An introduction to Mannaeian archaeology, history and culture, *Bastanpazhubi*, Vol. 4, No. 7: 54 – 63 [in Persian].
- 2009b Qal'e Bardine, a Mannaeian Local Chiefdom in the Boukan Area, North-Western Iran, *Archäologische Mitteilungen Aus Iran Und Turan (AMIT)* 41: 269-282.
- 2012 Reviewing the archaeological researches in Ziwiye, in Y. Hassanzadeh, S. Miri (eds), *Proceeding of Eighty years of Iranian Archaeology*, Vol. 1, Tehran, Pazineh Press with contribution of National Museum of Iran [in Persian]: 435-457.

- 2016a A survey on an 'Assyrian' glazed pottery type in the Zagros mountains, in *The provincial archaeology of the Assyrian empire*, edited by John MacGinnis, Dirk Wicke and Tina Greenfield, 371-383, Cambridge, McDonald Institute for Archaeological Research, University of Cambridge.
- 2016b *A Survey of Mannaeen Art and Culture*, Tehran and Sanandaj, Kurdistan ICHTO, Iran National Museum and Iran Negrar press center with contribution of Ziwiye ICHO base.
- Hassanzadeh, Y., Curtis, J.
- 2018 Western Iran in the Iron Age, in G. Brereton (ed.), *I am Ashurbanipal, king of the world, king of Assyria* (Catalogue of British Museum exhibition), 166-179, London, British Museum Publication.
- 2021 *The Catalog Exhibition of the Repatriated Boukan Glazed Brick Collection from Switzerland*, Tehran: Iran National Museum, 2021.
- Hassanzadeh, Y., Mollasalehi, H.
- 2011 New Evidence for Mannaeen Art: An Assessment of Three Glazed Tiles from Qalaichi (Izirtu), in J. Alvarez-Mon, M. B. Garrison (eds), *Elam and Persia*, Eisenbrauns, USA: 407-417.
- 2017 *An Archaeological Exploration of the Mannaeen Site of Qalaichi on the basis of analyses of glazed bricks from National Museum of Iran and other collections*, Tehran: RICHT press center and National Museum of Iran [In Persian].
- Heidari, R.
- 2007 Result of 2<sup>nd</sup> archaeological research in Rabat-e Sardasht, Nov. – Dec. 2006, *Proceedings of the 9<sup>th</sup> Annual Symposium on Archaeological Research in Iran*, Vol. 1: 201 – 229, Tehran, Iranian centre for archaeological research [in Persian].
- 2010 Hidden aspects of the Mannean rule in northwest Iran, *Aramazd Armenian Journal of Near Eastern Studies*, Vol. 2 (*Urartu and its Neighbors*, Edited by: Aram Kosyan, Armen Petrosyan and Yervand Grekyan): 147-151/table XLVIII-LIV.
- Herzfeld, E.,
- 1938 Bronzener 'Freibrief' eines königs von Abdadana, *Archäologische Mitteilungen Aus Iran* 9: 159-177.
- Hozhabri, A.,
- 2017 Rescue excavation at Kani Zêrin around Ziwiye, Saqiz, Kurdistan, in H. Chubak (ed.), *Proceedings of the 15<sup>th</sup> Annual Symposium on the Iranian Archaeology*, Tehran, Research Center of Iranian Cultural Heritage, Handicrafts and Tourism Organization: 765 – 769 [in Persian].
- Hejebri-Nobari, A.R., Affi, R.
- 2009 Study and descriptions of glazed bricks discovered from 3 season of Rabat 2 excavation, *Payam-e Bastanshenas*, Vol. 6, No. 11: 47 – 68 [in Persian].
- Hejebri-Nobari, A.R., Mollazadeh, K.
- 2004 A Comprehensive View of History and Historical Geography of Mannea, *The International Journal of Humanities* (Tarbiat Modares University Journal), Vol. 11, No. 1: 81 – 92.
- Ivanchik, A.I.
- 2001 *Kimmerier und Skythen, Steppenvölker Eurasiens 2*. Moscow: Eurasien-Abteilung des Deutschen Archäologischen Instituts.
- Kargar, B.
- 2004 Qalaichi / Zirtu: a Mannean Center, Period Ib, in M. Azarnoush (ed.), *Proceedings of the International Symposium on Iranian Archaeology: North-Western Region*, Tehran, Iranian Center for Archaeological Research: 229-245 [in Persian].
- Kargar, B., Binandeh, A.
- 2009 A Preliminary Report of Excavations at Rabat Tepe, Northwestern Iran, *Iranica Antiqua* XLIV: 113-129.
- Kargar, B., Binandeh, A., Khanmohammadi, B.
- 2020 Excavations at Tepe Qalaychi, a Mannaeen site in western Azerbaijan, Iran, *Studia Iranica* 49: 33 – 55.
- 2021 *Qalaichi Architecture*, Tehran, Iran National Museum Publication (In Persian).



Khatib Shahidi, H.

2004 Recent Investigations at Hasanlu and Reconsideration of its Upper Strata, in M. Azarnoush (ed.), *Proceedings of the International Symposium on Iranian Archaeology: North-Western Region*, Tehran, Iranian Center for Archaeological Research: 71-80 (in Persian).

Kleiss, W.

1972 Bericht Über Erkundungsfahrten in Iran im Jahre 1971, *Archaeologische Mitteilungen aus Iran* (AMI), Band 5: 135-242.

1977 Burganlagen und Befestigungen in Iran, *Archaeologische Mitteilungen aus Iran* 10: 23-52.

Kroll, S.

1975 Ein Schüssel der Triangle Ware aus Azarbaidshan, *Archaeologische Mitteilungen aus Iran* 8: 71-74.

1976 Keramik urartaischer Festungen in Iran, *Archaeologische Mitteilungen aus Iran*, Ergänzungs band 2. Berlin: Reimer.

1977 [Urartaische Plätze in Iran]. B: die Oberfächensfunde des Urartu-Surveys 1976, *Archaeologische Mitteilungen aus Iran* 10: 83-118.

2005 The Southern Urmia Basin in the Early Iron Age, *Iranica Antiqua* 40: 65–85.

2010 Urartu and Hasanlu, in *Aramazd Armenian Journal of Near Eastern Studies V.2*, Yerevan: Association for Near Eastern and Caucasian Studies: 21–35.

Lanfranchi, G.B., Parpola, S.

1990 *The correspondence of Sargon II*, Part 2: Letters from the northern and northeastern provinces, SAA 5, Helsinki.

Lemaire, A.

1988 Une Inscription Araméenne du VIIIe S. AV. J.-C. trouvée à Bukân (Azerbaïdjan Iranien), *Studia Iranica* 27: 15-30.

1998 L'inscription araméenne de Bukân et son intérêt historique, *Comptes rendus l'Academie des Inscriptions & Belles-lettres* 11: 293-301.

Levine, L.D.

1972 *Two Neo-Assyrian Stele from Iran*, Toronto.

1974 Geographical Studies in Neo Assyrian Zagros, *Iran* 12: 99-124.

1977 Sargon's eight campaign, in T.C. Young, L.D. Levine (eds.), *Mountains and Lowlands: Essays in archaeology of greater Mesopotamia*, BiMes 7, Malibu: 135-151.

1989 K.4675+ - The Zamua Itinerary, *State Archives of Assyria Bulletin* III/2: pp. 75-92.

Luckenbill, D.D.

1926-27 *Ancient records of Assyrian and Babylonia*, Vol. (1) 1926-Vol. (2) 1927, the University of Chicago Press.

Malekzadeh, M.

1994 Andia: A Petty Kingdom in Grand Media and Metalworks of Marlik *Bastan shenasi va tarikh* [Archaeology and History Journal], Vol. 8, No. 2, Pp: 12-18 (in Persian).

Marf, D.A.

2019 The Aramaean Presence in the Northern Zagros during the Middle and Neo-Assyrian Periods, in J. Dušek, J. Myraro (eds), *Aramaean Borders. Defining Aramaean Territories in the 10<sup>th</sup>-8<sup>th</sup> Centuries BC*, Brill: 78–91.

<https://doi.org/10.16309/j.cnki.issn.1007-1776.2003.03.004>

Matney, T.

2016 The Assyrian Social Landscape in the Upper Tigris river valley: a view from Ziyaret Tepe (ancient Tushan), in J. MacGinnis, D. Wicke (eds), *The provincial archaeology of the Assyrian empire*, Cambridge, McDonald Institute for Archaeological Research, University of Cambridge: 335-342.

Mayer, W.

1984 *Sargon Feldzug Gegen Urart: 714 V.Chr.*, Berlin : Deutsche Orient-Gesellschaft, 132 pages.

- Mazzoni, S.  
1977 *Studi Sugli avori di Ziwiye*, Serie Studi Semitici, 49, 281p., XXXIV Pl., Rome.
- Medvedskaya, I.  
2000 Zamua, Inner Zamua and Mazamua, in R. Dittmann, B. Hrouda, U. Low, P. Matthiae, R. Mayer-Opificius, S. Thurwachter (eds), *Variatio Delectat Iran Und Der Westen: Gedenkschrift Fur Peter Calmeyer (Alter Orient Und Altes Testament)*, Ugarit-Verlag, Munster: Pp: 429-445.
- Melikisvili, G.A.,  
1971 Urartskie Klinoobraznie nadpisi I, *VDI* 1971/3: 229-255.
- Millard, A. R.,  
1994 *The eponyms of the Assyrian empire 910-612 BC*, SAAS 2, Helsinki.
- Mirzayi, N., Abbas-zadeh, M.  
in press Stratigraphy excavation at Teppe Qapan, *Proceedings of the 10<sup>th</sup> International Symposium on Iranian Archaeology*, Tehran, Iranian Center for Archaeological Research [in press and in Persian].
- Mohajeri-Nejad, A., Soraghi, N., Javidkhah, M.  
2014 Prospect the ground and surroundings of Ziwiye, *Proceedings of the 12<sup>th</sup> Annual Symposium on the Iranian Archaeology*, Tehran, ICHTO, 416-418 [in Persian].
- Mollazadeh, K.,  
2008 The pottery from the Mannean site of Qalaichi, Bukan (NW-Iran), *Iranica Antiqua* XLIII: 107-125.  
2009 Mannaeen Kingdom: a view on the cultural, Social and Political structures of Mannea on the basis of archaeological and historical geography information, *Bastanpazhubi*, Vol. 4, No. 7: 45 – 53 (in Persian)  
2015 Study and dating of the JOWSATU fort: The largest Mannaeen fortress in northwestern Iran?, *International Journal of the Society of Iranian Archaeologists*, Vol. 1, No. 2: 55-72.  
2020 A Decorative Column Base from Bukan Region (NW-Iran) and Some Remarks on its Dating's and artistic tradition, in K. Niknami, A. Hozhabri (eds), *Archaeology of Iran in the Historical Period*, Switzerland, Springer: 95-103.
- Mollazadeh, K., Binandeh, A.  
2021 Survey and Excavation at the Jowšātū Fort (Šāhīndezh, West Āzerbāyjān, Northwest Iran), *Iranian Journal of Archaeological Studies* (University of Sistan and Baluchestan), Vol. 11, No. 2: 31-43.
- Mo'tamedi, N.,  
1995 Ziwiye: a Mannaeen-Median fortress, in *Proceeding of Iranian Architecture and city Building congress*, B. Shirazi (ed.), Vol. 1, Tehran, ICHO: 320-357 [In Persian].  
1996 Ziwiye 2, Excavation in 1995, *Cultural Heritage* 16: 32-37 [in Persian].  
1997 Ziwiye 1995 , Excavations: Architecture and pottery, *Archaeological Reports of Iran*, Vol. 1, Pp.: 143-170 (in Persian).
- Mousavi, A.,  
1994 Une brique a décor polychrome de l'Iran occidental (VIIIe-VIIe av.J.C.), *Studia Iranica* 23: 7-18.
- Muscarella, O.W.,  
1971 Hasanlu in the Ninth Century BC and its Relations with Other Cultural Centers of the Near East, *American Journal of Archaeology* 75: 263-66.  
1977 Ziwiye and Ziwiye: The forgery of a provenience, *Journal of Field Archaeology*, Vol. IV: 197-219.  
1980 *The Catalogue of Ivories from Hasanlu, Iran*. University Museum Monograph 40; Hasanlu Special Studies 2. Philadelphia: University Museum, University of Pennsylvania.  
1987 Review of *Problèmes concernant les Hurrites*, Vol. 2, ed. M.-T. Barrelet. *Journal of the American Oriental Society* 107: 135-37.  
2017 ZIWIYE, *Encyclopædia Iranica*, online edition, 2017, available at: <http://www.iranicaonline.org/articles/ziwiye> (accessed on 26 June 2017).

- Naghshineh, A.S., Talaei, H., Niknami, K.  
2012 Changbar Iron Age Cemetery, *Pazhobesh-ha-ye Bastanshenasi Iran (Namaye Bastan shenasi)*, Vol. 1, No. 1: 105-122 [in Persian].
- Nauman, R.,  
1967 Takht-i-Suleiman and Zindan-i-Suleiman, *A Survey of Persian Art* (Edited by: A.U. Pope and P. Ackerman), Vol. XIV, London and New York, pp. 3050-3060.
- Nezamabadi, M., Mashkour, M., Kargar, B.  
2011 Mannaeen Faunal remains from Tepe Qalaichi; Northwestern Iran (9<sup>th</sup>-7<sup>th</sup> B. C.), *Iranian Archaeology* 2: 33-40.
- Novotny, J., Jeffers, J.  
2018 *The Royal Inscriptions of Ashurbanipal (668-631 BC), Aššur-etel-ilāni (630-627 BC), and Sîn-Šarra-iskun (626-612 BC), Kings of Assyria*, Part 1, The Royal Inscriptions of the Neo-Assyrian Period (RINAP) Series, Vol. 5.1, Winona Lake, Indiana, Eisenbrauns.
- Oates, J.,  
1991 The fall of Assyria (635-609 BC), *Cambridge Ancient History* 3, Pt. 2 (Edited by: J. Boardman et al.), Cambridge: 162-189.
- Parpola, S.,  
1970 *Neo-Assyrian toponyms*, AOAT 6, Neukirchen-Vluyn.
- Pecorella, P., Salvini, M.,  
1982 Research in the Region between the Zagros Mountains and Urmia Lake, *Persica* 10: 1-35.
- Piepkorn, A.C.,  
1933 *Historical prism inscriptions of Ashurbanipal* 1: Editions E, B, D and K, AS5, Chicago.
- Porada, E.,  
1965 *The Art of Ancient Iran: Pre-Islamic Cultures*, New York: Crown.
- Postgate, J.N.,  
1987-90 Mannaer, *Reallexikon der Assyriologie und Vorderasiatischen Archäologie* VII/5-6: 340-342.
- Qanbari-Taheri, N., Karimy, A.H., Holakooei, P., Kobarfard, F.  
2020 Organic residue analysis of Iron Age ceramics from the archaeological site of Kani Zerín, western Iran, *Archaeometry* 62: 1-14.
- Radner, K.,  
1999 *Ein neuassyrisches privatarhiv der Goldschmiede von Assur*, Saarbrücken.  
2003 An Assyrian View on the Medes, in G.B. Lanfranchi, M. Roaf, R. Rollinger (eds), *Continuity of Empire: Assyria, Media, Persia*, History of the Ancient Near East Monographs 5, Padova: 37-64.  
2013 Assyria and the Medes, in D.T. Potts (ed.), *The Oxford Handbook of Ancient Iran*, New York: Oxford University Press: 442-56.
- Radner, K., Kreppner, J. Squitieri, A.  
2016 *Exploring the Neo-Assyrian Frontier with Western Iran*, Gladbeck: PeWe-Verlag.
- Reade, J.,  
1979 Hasanlu, Gilzanu, and Related Considerations, *Archaeologische Mitteilungen aus Iran* 12: 175-81.
- Reade, J., Finkel, I.  
2014 Between Carchemish and Pasargade: recent Iranian discoveries at Rabat, in S. Gaspa, A. Greco, D. Morandi Bonacossi, S. Ponchia, R. Rollinger (eds), *From source to History studies on ancient Near Eastern worlds and beyond*, edited by Salvatore Gaspa, Alessandro Greco, Daniele Morandi Bonacossi, Simonetta Ponchia and Robert Rollinger, Alter Orient und Altes Testament, Band 412, Ugarit-Verlag, Münster: 581-596 and 806-810.
- Rezvani, H.,  
2004 A Preliminary Report on Two Seasons of Excavations at Kul Taríke Cemetery, Kurdistan, in M. Azarnoush (ed.), *Proceedings of the International Symposium on Iranian Archaeology: North-Western Region*, Tehran, Iranian Center for Archaeological Research: 81-111 [in Persian]

- Rezvani, H., Roustaei, K.  
 2007 A Preliminary Report on Two Seasons of Excavations at Kul Tarike Cemetery, Kurdistan, Iran, *Iranica Antiqua*, Vol. XLII: 139-184.
- Salvini, M.  
 1995 *Geschichte und Kultur der Urartaer*, Darmstadt: Wissenschaftliche Buchgesellschaft.  
 2005 Archaeology and Philology: Reconstructing the History of Northwest Iran in the Urartian Period (9<sup>th</sup>-7<sup>th</sup> Centuries BC), in M. Azarnoush (ed.), *Proceedings of the International Symposium on Iranian Archaeology: Northwestern Region*, 65-76. Tehran: Iranian Center for Archaeological Research.
- Salvini, M.P., Emilio, P., Khatib Shahidi, H.  
 1976 *Raport sur le voyag reconnaissance en Azerbidjan Iranian Effectue En 1976* (unpublished).
- Seifnejad, H.,  
 2009 Endangered heritage Mannaeen Cemetery of Grda Qit, *Bastanpazhubi*, Vol. 4, No. 7: 30 (in Persian).
- Shayeghi Moghanlu, R. Ebrahimi, Q.  
 2021 First season of rescue excavation reort of Çala Dêm Graveyard, Shal, Khalkhal, Ardebil: some documents of expansion Mannaeen Area to Alborz Mountains, in R. Shirazi (ed.), *Proceeding of 18<sup>th</sup> Annual Iranian Archaeology Symposium*, Tehran: RICHT: 473-480 (in Persian).
- Sokoloff, M.  
 1999 The Old Aramaic Inscription from Bukan: A Revised Interpretation, *Israel Exploration Journal* 49:105-115.
- Streck, M.  
 1898/1899 Das Gebiet der heutigen Landschaften Armenien, Kurdistan und West Persien nach den Babylonisch-Assyrischen keilschriften, *Zeitschrift für Assyriologie und Vorderasiatische Archäologie (ZA)* 13: 57-110; *ZA* 14: 103-172.
- Swiny, S.,  
 1975 Survey in north-west Iran, 1975, *East and West* 1 and 2: 77-97.
- Tadmor, H.,  
 1994 *The inscriptions of Tiglath-Pileasar III King of Assyria*, Jerusalem.
- Tadmor, H., Yamada, Sh.  
 2011 *The Royal Inscriptions of Tiglath-pileser III (744-727 BC), and Shalmaneser V (726-722 BC), Kings of Assyria*, The Royal Inscriptions of the Neo-Assyrian Period (RINAP) Series, Vol. 1, Winona Lake, Indiana, Eisenbrauns.
- Teixidor, J.  
 1999 L'inscription arameenne de Bukan, relecture, *Semitica* 49:117-121.
- Thomalsky, J.  
 2006 Die eisenzeitliche keramik von Zendan-e Soleiman in Iranisch - Azarbaijan, *Archaologische Mitteilungen aus Iran und Turan*, Vol. 38: 219-289.  
 2011 Zendan-e Solaiman, in B. Helwing, P. Rahempour (eds), *Tehran 50: Ein Halbes Jahrhundert deutsche Archäologen in Iran*, Berlin, Deutsches Archäologisches Institut, Eurasien – Abteilung: 104-107.
- Thureau-Dangin, F.  
 1912 *Une relation de la huitieme champagne de Sargon*, *TCL* 3, Paris.
- Tropper, J.  
 1998 Orthographische und Linguistische Anmerkungen zur aramaischen Inschrift von Bukan, *Nouvelles Assyriologiques Brèves et Utilitaires (Nabu)* 4: 97-98.
- Wilkinson, C.K.  
 1975 *Ivories from Ziwiye and Items of Ceramic and Gold*, Abegg-Stiftung, Bern, Switzerland.
- Winter, I.J.,  
 1989 The 'Hasanlu Gold Bowl': Thirty Years Later, *Expedition* 31/2-3: 87-106.



Yaghmaci, E.

- 2015 A special funeral in Qalaichi of Boukan, in Sh. Aryamanesh (ed.), *Proceeding of Arje Varjavand, in honour of Parviz Varjavand*, Tehran, Sahamiye Enteshar: 191-208 [in Persian].
- 2017 A note on first season of archaeological excavation in Qalaichi of Boukan, in Y. Hassanzadeh and H. Mollasalehi (ed.), *Proceeding of An Archaeological exploration of the Mannaeen site of Qalaichi: on the basis of analyses of glazed bricks from the national museum of Iran and other collections*, Tehran, RICHT and National Museum of Iran: 55-69 [in Persian].

Yamada, Sh.

- 2000 *The Construction of the Assyrian Empire: A Historical Study of the Inscriptions of Shalmaneser III (859-824 BC) Relating to his Campaigns to the West*, Leiden and Boston: Brill.

Young, T.C.Jr.

- 1965 A Comparative Ceramic Chronology for Western Iran, 1500-500 BC, *Iran* 3: 53-85.
- 1985 Early Iron Age Iran Revisited: Preliminary Suggestions for the Re-analysis of Old Constructs, in J.-L. Huot, M. Yon, Y. Calvet (eds), *De l'Indus aux Balkans: Recueil a la memoire de Jean Deshayes*, Paris: Recherche sur les Civilisations: 361-378.
- 1988 The early history of the Medes and the Persians and the Achaemenid Empire to the death of Cambyses, *Cambridge Ancient History*, Vol.4 (Edited by: J. Boardman et al.), Cambridge, pp. 1-23.

Zadok, R.,

- 1979 On some foreign population groups in first-millennium Babylonia, *TelAviv* 6: 164-181.
- 2001 On the location of NA Parsua, *Nouvelles Assyriologiques Brèves et Utilitaires (Nabu)* 2/28: 30-33.
- 2002 *The ethno-linguistic Character of Northwestern Iran and Kurdistan in the Neo-Assyrian Period*, Archaeological center Publications, Jerusalem.
- 2012 MANNEA, *Encyclopædia Iranica*, online edition, 2012, available at: <http://www.iranicaonline.org/articles/mannea> (accessed on 30 December 2012).

Zawadzki, S.,

- 1988 *The fall of Assyria and Median, Babylonian Relations in Light of Nobopolassar Chronicle*, Puznan.