

Iron Age in western Iranian Plateau: a Long Debated Question

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عصر آهن در غرب فلات ایران: بحثی دامنه‌دار

برونو جنیتو، اسماعیل همتی اسندریانی و مانوئل کستلوجیا

چکیده: در باب باستان‌شناسی عصر آهن در غرب ایران اولویت‌های پژوهشی مختلفی وجود داشته که اغلب هم موضوعات پیچیده‌ای به شمار می‌روند. برای مثال موضوع ورود مردمان ایرانی‌زبان به شمال غرب ایران از منظر جغرافیایی، گاهنگاری و باستان‌شناختی هنوز حل نشده باقی مانده است. تفسیر منابع مکتوب مرتبط به این موضوع به دلایل مختلف هنوز نسبتاً دشوار است و نتایج قطعی به بار نیاورده است. از سوی دیگر انتساب افق‌های باستان‌شناختی مرتبط با عصر آهن به گروهی قومی خاصی از بین اقوام گوناگونی که بر اساس منابع مکتوب در شمال غرب می‌زیسته‌اند، از قبیل مادان، پارسیان، سکاییان، ماناتیان، اورارتوئیان و دیگر اقوام هم معمای لاینحلی شده است. در نهایت وجود گونه‌های خاصی از سفال در شمال غرب ایران با رنگ‌ها و شکل‌ها و تزئینات مختلف باعث باوجود دامنه وسیعی از پژوهش‌های انجام گرفته هنوز بتوان برداشت‌های مختلفی از این موضوع داشت. در این مقاله نویسندگان کوشیده‌اند برای روشن کردن تصویر پیچیده موجود از وضعیت باستان‌شناسی عصر آهن در غرب ایران سه موضوع اصلی را بررسی کنند: مفهوم عصر آهن و تاریخچه آن به طور عام در خاور نزدیک و به طور خاص در ایران، مروری بر شواهد حضور سیاسی و اجتماعی دو گروه قومی مهم از اقوام حاضر در شمال غرب ایران در عصر آهن، یعنی مادان و اورارتوئیان.

واژگان کلیدی: عصر آهن، شمال غرب ایران، سفال خاکستری، اورارتو، دژهای دفاعی، ماد، معماری.

Introduction

The priority topics in the western Iran for Iron Age have been and are differing and, in some way, often very complicated as well. As is well known e.g., to locate the Iranians' arrival into the north-western Plateau is still a problematic issue in both geographic, chronological and archaeological sense. The interpretation of western and oriental sources (Greek, Roman, neo-Babylonian, old Persian etc.) and Assyrian (Levine 1974; 1987; Dandamayev, and Grantovskii 1987) with regard to the same topics, remains rather difficult because it needs a very ample and direct philological knowledge and competences, not always found in the same scholar. The attribution, then, of the scanty archaeological horizons related to Iron I, Iron II

and Iron III ages to a specific ethnic group of the numerous peoples of north-western Iran, mentioned by the sources (as Medes, Persians, Scythians, Mannaens, Urartians, etc.) risk to remain an inextricable puzzle. Finally the spread over north-western Iran of particular classes of pottery (grey, red, buff ware, painted decorated, declined in different variants) and of various shapes and forms etc. (Young 1965), give, at last instance, confirmation both of an almost hopeless research activity and of an incredible rich interpretative potential in character. Naturally going more into the details there are many other specific archaeological issues, which also contribute to give a disconcerting picture of the Iron Age in Iran and the neighbouring geographical areas. It is the case of the

very poor archaeological in front of an incredibly ample historical, although semi legendary, documentation of the Medes (Genito 1986; Brown 1990; Genito 1995; 2005; Rossi 2017). In addition, is the case of the deep difficulties by scholars in recognizing a real archaeological presence of the Scythians, and of the still problematic issues related to the Mannaeans and Urartians in the north-western Iranian plateau. And finally we are still very dubious in attributing artistic productions of the time referred to differing political formations as if each of them should always correspond a figurative dimension according to the easy, though inevitably equation; ethnos, people, language, architecture and art (Muscarella 1995; 1998).

To choose a precise and unique topic in this occasion,¹ would have been probably both an easy and a rather un-useful option. That is why we prefer to propose our common paper, organized in rigorous chronological order, on 1. the meaning itself and on a short history of Iron Age in general, and in Iran in particular, dealt with by myself, and on two detailed overviews on two of the main different groups of people, 2. the Urartians and 3. the Medians, respectively dealt with by dr. Manuel Castelluccia² and dr. Esmail Hemati.³ We hope very much with this choice to have been able to give some answers to the requests of the organizers of this meeting to the light of different expertise of the three authors.

1. We take the opportunity to thank very much the organizers of this conference and in particular Yousef Hassanzadeh, who very kindly first invited me and accepted, then with two other colleagues to write a joint paper and to attend it.

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Historical meaning of Iron Age

by Bruno Genito

Iron Age according to the system of the three ages, indicates a period of the proto-history⁴ possibly characterized by the use of iron metallurgy, especially for the production of weapons and tools,⁵ and broadly encompasses a period ranging from end of the 2nd millennium to the entire 1st millennium BCE.⁶ The three-age system was introduced in the first half of the 19th century for the archaeology of Europe in particular (Collis 1984), and by the later 19th century expanded to the archaeology of the Ancient Near East (Finkelstein, Piasezky 2011). As an archaeological era, the definition was first introduced by the Scandinavian Christian Jürgensen Thomsen in the 1830s (1836) and has been considered caused by the collapse of Bronze Age cultural systems, due both to internal developments and, as somebody think, external influences.

The production of Iron and its related new technological systems often coincided with other cultural changes in the human social organization: differing agricultural practices, artisanship techniques and styles, and ideological religious beliefs as well. The duration of Iron Age has been considered variable depending on the region under consideration and defined by archaeological conventions and the mere presence of some cast or wrought iron. Concurrently, different stages of greater complexity in the human social organization of the period have not always left clear archaeological evidences of iron objects or iron related production. "Iron Age" begins when iron or steel production has

4. It is preceded by the Stone Age (Paleolithic, Mesolithic, Neolithic, and Chalcolithic) and the Bronze Age.

5. As its name suggests, Iron Age technology is characterized by ferrous metallurgy (ironworking), more specifically from carbon steel.

6. It generally begins around the 12th century BCE in the Mediterranean world and in the Near East between approximately the 9th, and 8th centuries BCE in northern Europe.

been brought to the point where iron tools and weapons, superior to their bronze equivalents, start to widespread.⁷

The characteristics of an Iron Age culture is given by a production of tools and weapons made from steel, typically alloys with a carbon content. Only with the capability of the production of carbon steel, does ferrous metallurgy result in tools or weapons that are equal or superior to Bronze. A range of techniques have been used to produce steel from smelted iron, including techniques such as case hardening and forge welding that were used to make cutting edges stronger.

7. The technology soon spread throughout the Mediterranean basin region and to South Asia. Its further spread to Central Asia, Eastern Europe, and Central Europe is somewhat delayed, and Northern Europe is reached still later, by about 500 BC. Iron Age is taken to end, also by convention, with the beginning of the historiographical record. This usually does not represent a clear break in the archaeological record; for the Ancient Near East the establishment of the Achaemenid political-imperial formation c. 550 BC is usually taken as a cut-off date, and in Central and Western Europe the Roman conquests of the 1st century BCE serve as marking for the end of Iron Age. The Germanic Iron Age of Scandinavia is taken to end c. AD 800, with the beginning of the Viking Age. In South Asia, Iron Age is taken to begin with the ironworking Painted Grey Ware culture and to end with the reign of Ashoka (3rd century BCE). The use of the term "Iron Age" in the archaeology of South, East and Southeast Asia is more recent, and less common, than for western Eurasia; at least in China prehistory had ended before iron-working arrived, so the term is infrequently used. Increasingly Iron Age in Europe is being seen as a part of the Bronze Age collapse in the ancient Near East, in ancient India (with the post-Rigvedic Vedic civilization), ancient Iran, and ancient Greece (with the Greek Dark Ages). In Central and Western Europe, the Iron Age is taken to last from c. 800 BCE to c. 100 BCE, in Northern Europe from c. 500 BCE to 800 AD. In other regions of Europe the Iron Age began in the 8th century BCE in Central Europe and the 6th century BCE in northern Europe. Iron Age as an archaeological period is roughly defined as that part of the prehistory of a culture or region during which ferrous metallurgy was the dominant technology of metalworking. The periodization is not strictly tied to the presence of ferrous metallurgy and is to some extent a matter of convention.

The earliest-known iron artefacts are small beads dated to 3200 BCE found in burials at Gerzeh, Lower Egypt, identified as meteoric iron shaped by careful hammering (Petrie, Wainwright, Mackay 1912; Stevenson 2006). Meteoric iron, a characteristic iron-nickel alloy, was used by various ancient peoples thousands of years before the Iron Age. Such iron, being in its native metallic state, required no smelting of ores (Jambon 2017).

Smelted iron appears sporadically in the archaeological record from the middle Bronze Age. In addition to specially designed furnaces, ancient iron production needed to develop complex procedures for the removal of impurities, for regulating the admixture of carbon in combination with hot-working to achieve a useful balance of hardness and strength and for adding alloys to prevent rust; see ferrous metallurgy.

Modern archaeological evidence identifies the start of large-scale iron production in around 1200 BCE, marking the end of the Bronze Age. Between 1200 BCE and 1000 BCE, diffusion in the understanding of iron metallurgy and use of iron objects was fast and far-flung.

Ancient Near East

By convention, Iron Age in ancient Near East is taken to last from c. 1200 BCE (Bronze Age collapse) to c. 550 BCE, taken as the beginning of historiography (Herodotus) or the end of the proto-historical period. The Near Eastern Iron Age is divided into two subsections, Iron I and Iron II. Iron I (1200-1000 BCE) illustrates both continuity and discontinuity with the previous Late Bronze Age. There is evidence, however, of strong continuity with Bronze Age culture, although as one moves later into Iron I, the culture begins to diverge more significantly from that of the late 2nd millennium.

The earliest tentative evidence for iron-making is a small number of iron fragments

with the appropriate amounts of carbon admixture found in the Proto-Hittite layers at Kaman-Kalehöyük in Turkey and dated to 2200-2000 BCE (Akanuma 2005). The combination of carbon dating, archaeological context, and archaeo-metallurgical examination indicates that it is likely that the use of iron-ware made of steel had already begun in the third millennium BCE in Central Anatolia.

Iron Age in the ancient Near East is believed to have begun with the discovery of iron smelting and smithing techniques in Anatolia or the Caucasus and Balkans in the late 2nd millennium BCE (c. 1300 BCE). The earliest bloomer smelting of iron has been found at Tell Hammeh, Jordan around 930 BCE (Bauvais 2008).

Early Iron Age artefacts found in Kültepe, in Azerbaijan, show that iron smelting was known and used in this region before the 2nd millennium BCE (as early as the 3rd millennium BCE) (Selimhanov, Torosjan 1969, 229-294; Courcier 2014).

In Mesopotamia, in Sumer, Akkad, and Assyria, the initial use of iron reaches far back, to perhaps 3000 BCE. One of the earliest smelted iron artefacts known was a dagger with an iron blade found in a Hattic tomb in Anatolia, dating from 2500 BCE (Muhly 2003). The widespread use of iron weapons which replaced bronze weapons rapidly disseminated throughout the Near East by the beginning of the 1st millennium BCE.

The development of iron smelting was once attributed to the Hittites of Anatolia during the Late Bronze Age. As part of the Late Bronze Age-Early Iron Age, the Bronze Age collapse saw the slow, comparatively continuous spread of iron-working technology in the region. It was long held that the success of the Hittite political-imperial formation during the Late Bronze Age had been based on the advantages entailed by the "monopoly" on iron-working at the time. Accordingly, the invading

Sea Peoples would have been responsible for spreading the knowledge through that region. The view of such a "Hittite monopoly" has come under scrutiny and no longer represents a scholarly consensus. While there are some iron objects from Bronze Age Anatolia, the number is comparable to iron objects found in Egypt and other places of the same time period; and only a small number of these objects are weapons.

Iran

When from the general issues above shortly described, we go into regional details as the Iranian plateau, you may find similarities and dissimilarities with the general overview. Iron Age in Iran means basically a cultural break occurred much time before the time accorded its use elsewhere in the Near East. Moreover, it does not give evidence always of the introduction of a new metal technology. Iron, in fact, was unknown in Iran until the 9th century BCE, and sites with levels dating to the Iron Age were first excavated in western Iran at Syalk (Cemetery A) (Ghirshman 1938) and Giyan (Level 1) (Contenau, Ghirshman 1933; Contenau, Ghirshman 1935). Later we have documentation in north-western Iran around the western, eastern, and southern shores of Urmia lake, close to the Zagros chains bordering Mesopotamia and Anatolia. These sites still now remain the best-documented Iron Age sites in western Iran (Medvedskaja 1982; Young 1985; Dittmann 1990; Muscarella 1994).

In the Urmia region, Hasanlu (Dyson 1968; Dyson, Voigt eds., 1989; Muscarella 1988), Dinkha Tepe (Muscarella 1974; 1978), Geoy (Burton Brown 1948; Crawford 1975), and Kordlar (Lippert 1979), present Bronze Age chronological sequences dating from the early to about the mid-2nd millennium BCE. At Hasanlu (Period VI) and Dinkha Tepe (Period V) there is evidence of architecture along

with a distinctive painted, geometric pottery known extensively to the west in Syria and northern Mesopotamia as Khabur Ware (Oguchi 1997). Directly over Bronze Age levels new forms of architectonic remains together with a new artefact repertory were identified. Cultural break was for that identified at Hasanlu (Period V) (Danti 2013), Dinkha Tepe (Period III), and Kordlar (Period IV) revealing stratigraphic horizons and changes. Hasanlu, Kordlar and Dinkha tepe has provided scholars with the most important and significant information for Iron Age in northern Iran with architectonic features, cemeteries. A cultural break, though chronologically not clear, after the Bronze Age also is documented in Godin area, near Kangāvar, differing anyway from that of Urmia area.

A particular building at Hasanlu present two columns, documented basically by stone bases, a bench along the internal walls, and a central fireplace. In addition, for the first time in the region burnished, monochrome, usually grey, sometimes red ceramics with highly characteristic shapes which are very significant for cultural and chronological identification come to light. The archaeological definition chosen by the archaeologist for this period was “Early Western Grey Ware” horizon, whose morphological characteristic in the pottery shapes mainly consist of a spout that does not connect to the rim, a shallow bowl with a small curved ridge in its internal side, and a one-handled and splay-footed goblet. These three forms occur together at several Urmia sites: Hasanlu, Dinkha Tepe, Kordlar, Hajji Firuz, Geoy, and Haftavān. One or two of the shape occur also in burials at Godin, Giyan I, and Sialk A, to the south, where they may have been imported or represent a limited southernmost extension of the culture. These forms are also found at sites farther to the east, south of the Caspian and close to Tehran as Mārlik, Khurvin (Vanden Berghe 1964),

Gheytyaryeh (Kambaxsh-Fard, S. (1969). At least two of the Hasanlu V buildings keep evidence of burnings; and at contemporary Kordlar (Period IV), a multi-roomed elite architectural feature with a column was also destroyed by fire. These burnings occurred sometime around 1200 and certainly may indicate military conflicts; still is unknown if these cultural events were local or due to external influences, also because the grey ware ceramic assemblage seems to continue without any interruption.

The origin of this apparently new culture and its people is still a long debated question. Some scholars think about an origin in north-eastern Iran and beyond, as e.g. in Gorgān Province to southeast of the Caspian Sea, because of the presence of monochrome grey pottery and unbridged spouted vessels; the presence of this pottery in sites located south of the Caspian Sea is taken for supporting an east-west migration path. The site suitable for defining the next architectural level is Hasanlu Period IV which is the main site in all western Iran with full archaeological documentation of the period, including architectural, artefacts, and burials. Immediately after we can consider Kordlar (Period I), and the cemetery at Dinkha Tepe (Period II). The architecture built directly over the Period V ruins at Hasanlu consist of several buildings monumental in size and furnishings, forming a compound of 1000 sq.m. embellished with courtyards, gates, and storage rooms. The buildings present a central hall with double rows of wooden columns whose bases were still evident during the excavation. There were also benches along the walls, a central fireplace - repeating the features from the earlier Period V. Building II, the largest and the richest, was probably either a palace or ideological-religious building, where the distinction between the two socio-political areas of reference for the time is still not very clear. All

these columned halls constitute particular architectural features by a powerful ruling class in its process of proto-state realization, where also the ideological-religious sphere could find its own place. These columned-hall buildings at Hasanlu are the earliest in Iran largely outdated in qualities later only at Persepolis, Pasargadae and Susa. They are rightly considered to have been the early origin for the large columned-halls built in the late 8th and 7th centuries BCE to the southeast at the probably Median period sites of Nush-i Jan (Stronach, Roaf 2007) and Godin II in Hamadan province (Young 1969; Young, Levine 1974; Gopnik, Rothman 2011) and Baba Jan in Luristan (Goff 1970; 1978). These halls most likely begin to materialize in such an architectonic space new social and political functions, made of assemblies, meetings or reception of guests to whom those chiefdom, proto-state and, subsequently, imperial formations in their process of being defined, should probably have joined. At Dinkha Tepe and Hasanlu in the cemeteries and the destroyed architectural features many artefacts, most locally made, and some imported were collected. The local are made of bronze, iron, gold, silver, ivory, glass, stone, shell, and so forth, demonstrating the great wealth and power of the polity; iron artefacts - a great many, in fact - appear for the first time in this period. Monochrome grey ware pottery of Period V continued in use in Period IV, the spouted beaker are now realized with a bridge to the vessel's rim. Hence the period was originally called "Late Western Grey Ware," horizon.

Hasanlu IV saw a major destruction and complete rebuilding directly upon the original structures' foundation walls about 100 years after the initial construction. In about 800 BCE a violent, total destruction occurred that left hundreds dead in the ruins and thousands of artefacts buried under the collapsed walls of the architec-

tural structures. Kordlar saw many other destructive phases as well.

The destroyers of Hasanlu IV probably arrive from northwest in the 8th century BCE and built a walled settlement over the ruins - Hasanlu IIIB; Dinkha Tepe was abandoned. The Urartians first built a fortified settlement at Qalatgāh (Muscarella 1971; Hipp 2014), near Dinkha Tepe, where an inscription of ca. 800 BCE was found; another, slightly later, inscription was found at Tash Tepe, east of Hasanlu. Hasanlu IIIB apparently survived, even if later, in the second half of the 7th century, and was destroyed together with the Urartian fort at Agrāb Tepe (Muscarella 1973). The subsequent settlement at Hasanlu was labelled Hasanlu IIIA. This definition is due to the introduction of painted pottery, appearing for the first time. Qalatgāh, Hasanlu IIIB, and Agrāb Tepe may represent the southernmost area of Urartian cultural influence.

The terms Iron Age I and II basically relate to cultures in north-western Iran and central Caspian Sea area. Nevertheless, Urmi terminology and chronology have been adapted for the Bronze-Iron Age (Iron Age I-III) cultural divisions elsewhere in western Iran. This was not always uniform or successful - for example, attempts to define a correct chronology, beginning and termination, Iron Age II or III, at the cemetery sites of Sialk B where painted pottery existed, and the chronology of related wares at Giyan. There are arguments about the division to be assigned to sites such as Bābā Jān and its painted "genre Luristan" pottery - Iron Age II or (early?) III. In Luristan (Muscarella 1988), which has its own distinct culture and technical and stylistic characteristics across time, there are a good number of late second and first millennium BCE sites. These are primarily cemeteries, but one important Iron Age site is documented at Surkh Dum (Schmidt,

van Loon, Curvers 1989). The main issues relate whether sites dated ca. 1400-1350 and later, or only those dated after ca. 1200 BCE, should be labelled as Iron Age I, or whether the earlier date should be considered as Late Bronze Age. In the latter situation, Late Bronze Age in Luristan would chronologically be equivalent to Iron Age I in Urmia, and Iron Age I in Luristan would be chronologically equivalent to Iron Age II in Urmia (Overlaet 2003; Schmidt, van Loon, Curvers 1989, 486 ff.). Iron Age III period is dated throughout western Iran after 800 to ca. 600 BCE - here in natural relationship with Urmia chronology and terminology. Important sites such as Nush-i Jan, Godin II, Bābā Jān, and the excavated site of Ziwiye flourished during this time (Dyson 1963; Muscarella 1977). Characteristic of the Iron III period in western Iran is the presence of much local ceramics consisting of both plain and painted wares, indicating a variety of regional developments, and perhaps discrete polities.

Finally the term Iron IV was introduced to define plain pottery in central western Iran of what seems to be pre-Parthian, Achaemenid period and later it came to include painted pottery in the Urmia area (Hasanlu IIIB) suggesting that the earlier IIIB period alone equals Iron Age III.

In the controversial issue of the Iron III age on the north-western Iran, as we have seen, the references to the numerous peoples indicated by direct and indirect sources remain still important, and among these stand out for their historiographical importance certainly the Urartians and the Medes. Now, regardless of their respective historical role - the former are also attested by numerous inscriptions written in Urartian, while the latter are, according to most of the scholars, totally devoid of direct written evidence - it is appropriate to try to investigate the most important cultural aspects of these two peoples, as can

be seen from the fieldwork. And once again after decades of discussions and scientific debates, many questions still remain open. The very identity of the Medes has recently been questioned and among scholars in the scientific literature it is preferable to use rather the more aseptic expression of "median period", just as the very presence on the north-western plateau of the Urartians does not seem so decisive as it appears only a few decades ago.

NW Iran from the beginning of Iron Age to the Urartian period

by Manuel Castelluccia

Historical developments in the northwestern part of the Iranian plateau are mostly related to those occurred in the Lake Urmia basin and the fertile valleys near its northern, western and southern shores. Around the lake and at the eastern foot of the Zagros range are the large and fertile regions of Khoy, Salmas, Urmia and Ushnu-Solduz valleys.

There are several, although not very easy, routes crossing the Zagros toward Anatolia and northern Mesopotamia. The most direct link connecting Van and Urmia regions practically follows the modern road between Turkey and Iran. The road going toward the southern Caucasus runs through the river Aras valley. To the south, another route passes through the Kelishin Pass and leads towards the region of Rowanduz, in Iraq. The importance of this road is marked by the presence of the well-known Urartian-Assyrian bilingual stele (CTU 2008, A 3-11).

The economy of this area was based in ancient times - as it is partially today - both on agriculture and livestock. The pasturages of the highlands were particularly suitable for breeding animals and horse-breeding in particular was one of the most exploited economical resources of Urmia basin and its surroundings plains and uplands.

Lake Urmia is a heavily salted lake and

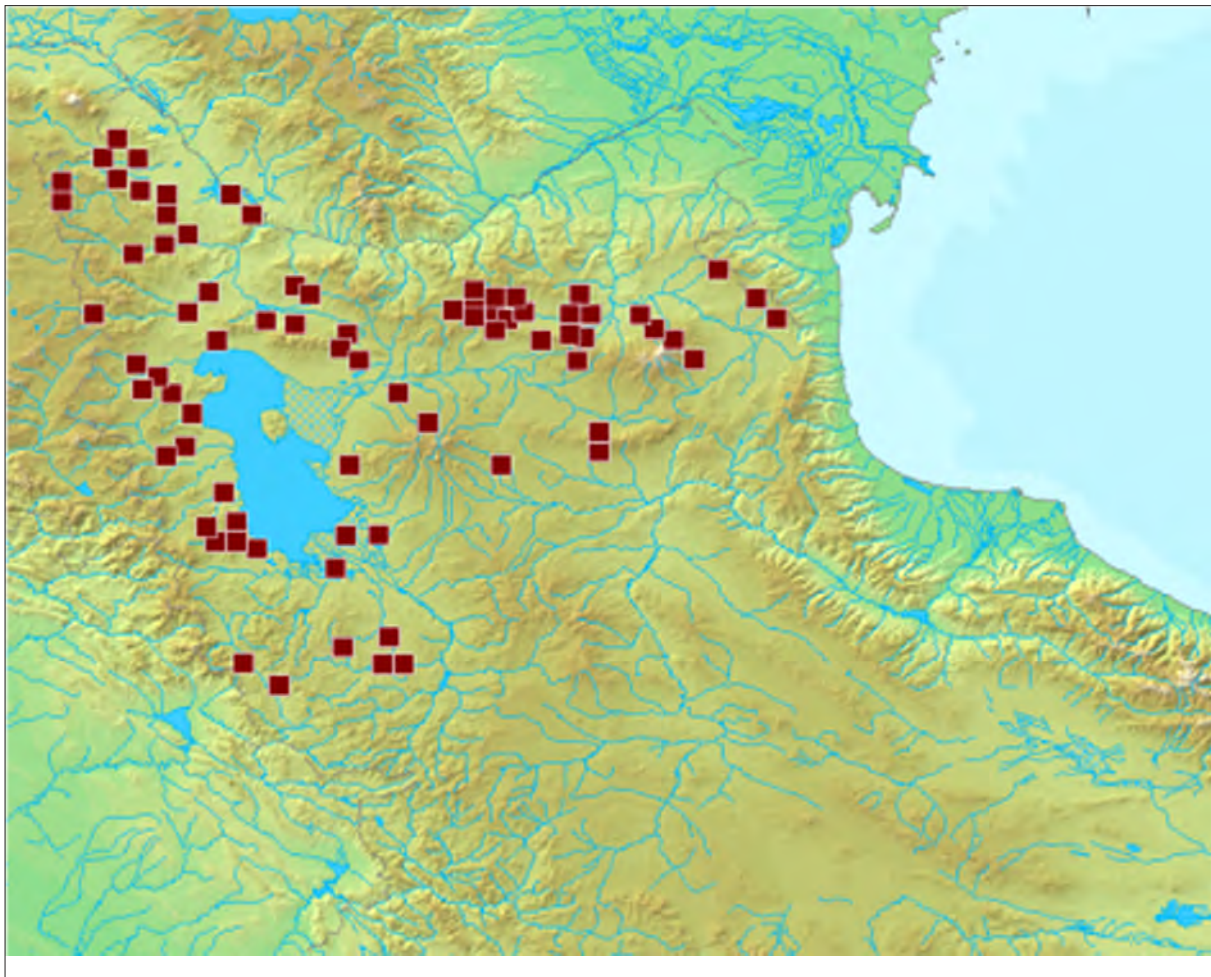


Fig 1. Distribution of Early Iron Age hillforts in northwestern Iran.

the surrounding plains can be irrigated by perennial water courses flowing down from the Zagros range. There are detailed Assyrian and Urartian sources, as well as several archaeological evidences, recording the exploitation of agriculture by the Urartians thanks to the construction of an advanced network of canals.

It is on the contrary more difficult to establish the importance of raw materials. Several places of ancient mining are known, but they have not been scientifically investigated. Only in the Ahar region, Weisgerber was able to prove the existence of an ancient mining district of the Early Iron Age at Sunghun (Weisgerber *et al.* 1990).

Lastly, northwestern Iran was certainly

crossed by several trade routes connecting Eastern Iran, southern Caucasus, Eastern Anatolia and Northern Mesopotamia.

The archaeological landscape in Northern Iran at the beginning of the Iron Age can be sufficiently well reconstructed thanks to a combination of textual and archaeological evidences.

The Assyrian king Ashurnasirpal I (1049-1031 BCE) reports to have received horses as a tribute during a military campaign in the land of Gilzani (Fuchs 2004, 131), which probably was located in the Solduz plain. Later at the time of Tukulti Ninurta II (890-884 BCE) Gilzani is again mentioned in connection with Hubushkia (Fuchs 2004, 334). Ashurnasirpal II also (883-859 BCE) launches several raids

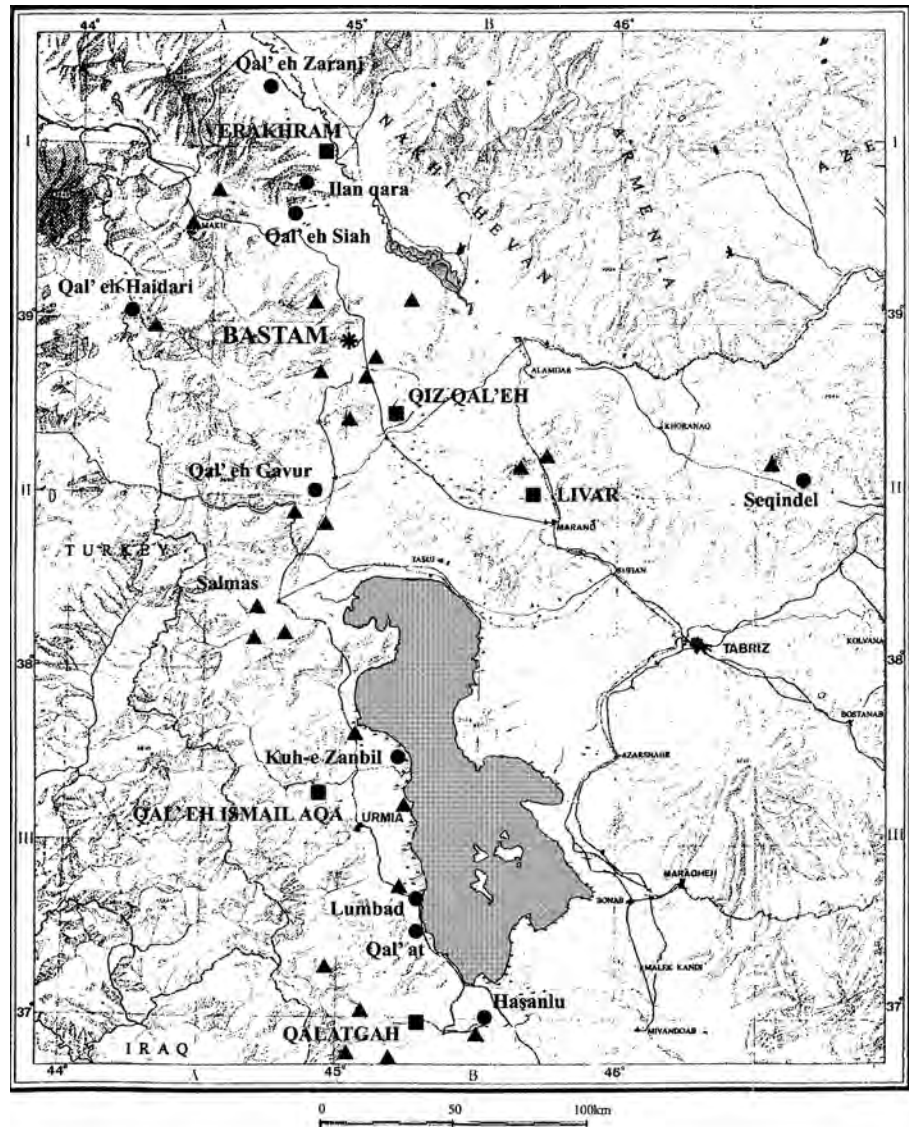


Fig 2. Major Urartian sites in northwestern Iran (Biscione 2012, 78, fig. 5).

into the Zagros mountains and receives tribute from Hubushkia and Gilzani again.

Additional information is provided by Assyrian sources of the time of Shalmaneser III (858-824 BCE) as his first and third campaigns are directed against Urartian possessions in Northern Iran. He mentions the “sea of Nairi” which is nowadays identified with the Urmia lake, and not with Van as previously thought (Salvini 1995; Fuchs 2004).

Therefore, Assyrian sources mentions the presence of several pre-Urartian independent policies located in Lake Urmia basin at the

beginning of the Iron Age. Later on, these will be gradually defeated and incorporated into a unified control under Urartian rule.

Archaeological evidences confirm Assyrian mentions. In the Early Iron Age there are sites which may be considered representative of different regional political powers, such as Geoy B, Gijlar, Haftavan IV, Kordlar II-I, Hasanlu IV, Dinkha III, just to mention those in which excavations have been carried out (Kroll 2011, 151). They are typical tepe, with long stratigraphic sequences, and mainly located in the fertile plains surrounding Lake Urmia.



Fig 3. Urartian bronze quiver case from Grave 24 at Tul-e Talesh (Piller 2010 pl. 13).

All these sites fall within the “Late Grey Ware horizon” as defined by T.C. Young decades ago and valid until today (Young 1965).

Apart from the tepe, the landscape of northern Iran is characterized by the large presence of hillforts, which, at the beginning of the Iron Age, strongly increase both in number and complexity. This settlement pattern is clearly attested also in southern Caucasus and eastern Anatolia during the same period.

At least 57 fortified sites can be safely attributed to this period and possibly two more

belong to it (Biscione 2009, 132). These heavily fortified sites, built with large use of stone-blocks, are located in the uplands surrounding the plain, on strategic position and are not associated with tepes. They represent the most significant form of settlement in the highlands throughout most of first half of the Iron Age (Fig 1). They clearly represent the seat of some local political entities, expression of nonurban, proto-state societies with strong social differentiation and extremely unequal distribution of wealth, ruled by military aristocracies with

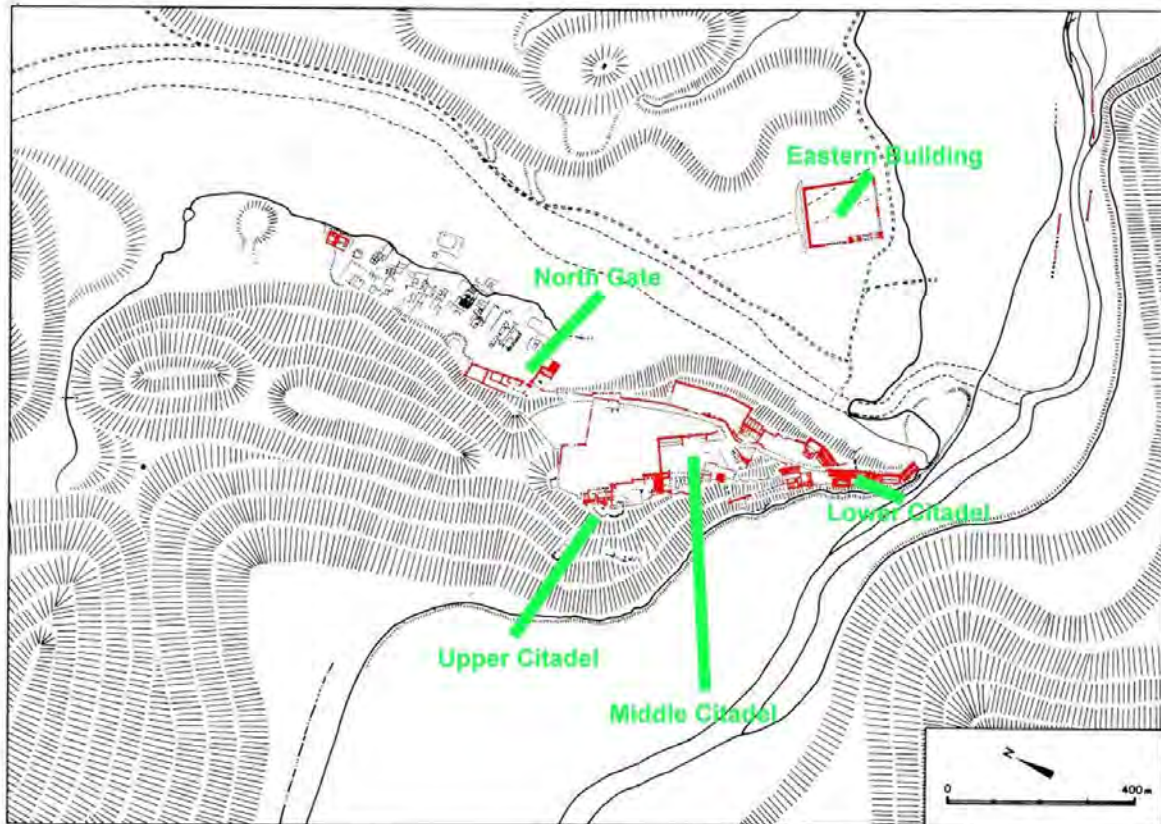


Fig 4. The fortress of Bastam (<http://www.biainili-urartu.de/Iran/Bastam/architecture/Bastam-area.jpg>).

a great capacity for accumulating wealth and organizing labor and manpower.

The Iron III period in northern Iran is largely marked by the Urartian penetrations and the subsequent acquisition and transformation of the human landscape according to a centralized plan. Urartian possession of these strategic areas attracted Assyrian response, clearly and violently expressed by Sargon's eight campaign (Zimansky 1990).

The northern area of the Iranian plateau was extensively surveyed until the outbreak of the Islamic Revolution, while after this only limited projects were carried out. The main results have certainly been achieved by German expeditions guided by W. Kleiss and S. Kroll, but also other missions have provided important evidences (Gropp, Najmabadi, 1970; Swiny, 1975; Pecorella, Salvini, 1984;

Biscione, Khatib-Shahidi, 2006, 2007). These surveys offer a good picture of the human landscape and its organization for the first half of the Iron Age. Sites have been dated mainly thanks to surface pottery and, in the case of hill-forts, partially on the base of their architectural features.

However, a clear gap between Late Bronze and Early Iron is not possible to properly define. It is a well-known that, due to the strong cultural continuity, it is not easy to distinguish between the Iron I/ Hasanlu V and Iron II/ Hasanlu IV pottery and therefore a great amount of surface pottery cannot be surely dated yet. For this reason the two periods should be merged together under the definition "Early Iron" (Kroll, 2005, p. 65-66). The most remarkable Urartian intervention is the well-planned creation of an organized system

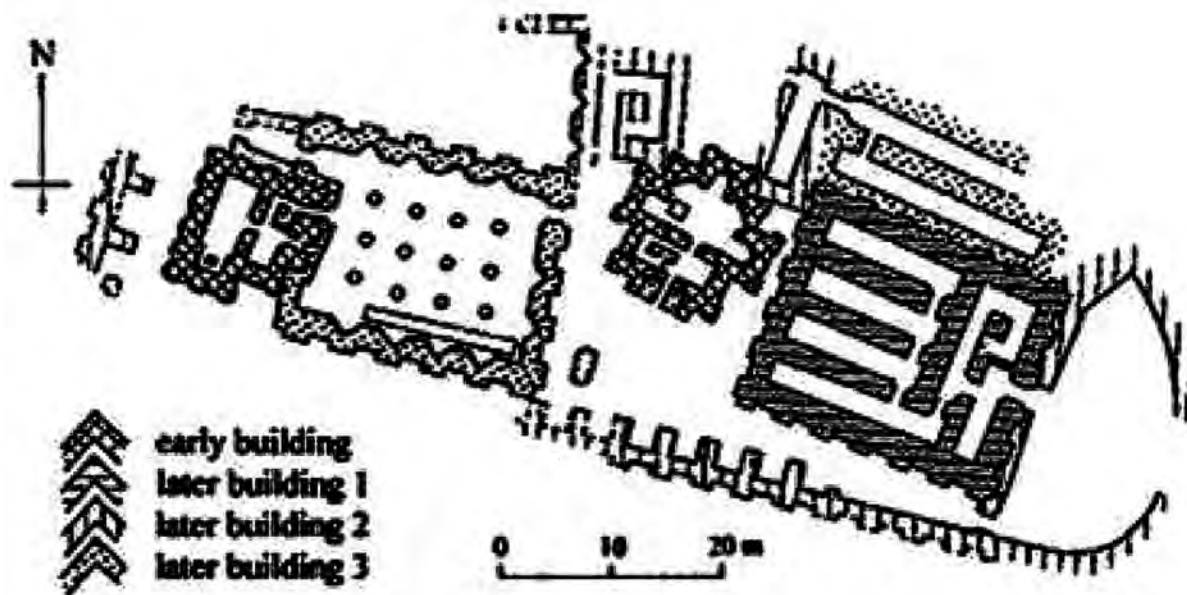


Fig 5. Nush-i Jan Tepe, plan (Roaf 1995).

of military settlements (Fig 2). Main sites are located in the fertile plains, thus establishing a direct control over the agricultural exploitation, whereas minor sites are positioned along the connection routes or around the principal fortresses.

Clear Urartian evidences are represented by typical architectural features, where buildings show carefully laid foundations of stone walls, on which mud brick walls were set. Fortification walls show buttresses and towers (Kleiss 1976). Another typical sign of the Urartian evidence is the presence of the so-called "Urartian Palace Pottery" or *Biainili*, characterized by its fine paste and red surface. Furthermore, Urartian control is also expressed by a central storage system: hundreds of huge storage vessels, *pithoi*, whose volumes are given, can be found in these fortresses.

Most of sites fall within a three-rank system according to their size and importance. Apart from Bastam, which represent a real royal residence, the most remarkable fortresses in Iran are Verachram, Livar, Qal'eh Ismail Aqa, Qiz Qal'eh and Qalatgah, all with a perimeter of fortification comprised be-

tween 1600 to 2390 meters (Biscione 2012, 79). All these sites controlled an area with a large amount of irrigable land: Verakhram controlled the Aras valley; Livar the Marand plain; Qal'eh Ismail Aqa, the Urmia plain; Qiz Qal'eh and Bastam occupied the whole Khoy region; Qalatgah was the main site in Solduz plain.

Moreover, there are at least 10 smaller fortresses, generally placed around the abovementioned fortresses, probably serving as a protective ring, or located in smaller areas, far from the bigger ones.

Furthermore, a network of about 28 small forts comprise the third rank of settlements. They are mainly situated around the connection routes.

Urartian presence in northern Iran can be reconstructed thanks to numerous inscribed documents.

The most important written source is represented by Kelishin stele, which describes a pilgrimage by king Ispuini and his son Minua around 810 BCE to the temple of Haldi in Musasir (CTU 2008, A 3-11). Lacking any reference of military campaigns and conquest, it

essentially proves that the city-state of Musasir and his important temple were firmly under the Urartian control around 820-810; therefore, the acquisition of these lands must be dated decades back.

Another inscription by both Ispuini and Minua from Qalatgah (CTU 2008, A 3-10), located 20 km east of Ushnaviyeh along the road to Nagadeh, highlights how the fertile valley of Gadar river was also controlled by the Urartians at the same time. The presence in this valley of the strong fortress of Qalatgah, probably founded at the end of the 9th century, is a clear marker of Urartian domination.

Another important document is the Karagunduz stele (CTU 2008, A 3-9) of Ispuini and Minua, in Van Museum. It records a single military campaign against the cities of Mesta, Qua, Saritu and Nigibi, and the land of Parsua. Subsequent inscriptions, both Urartian (CTU 2008, A 8-3 III 12-13) and Assyrian,⁸ located the land of Parsua much further south. Such presence in the north might be linked with the progressive movement southwards of Persian tribes along the Zagros. The Urartian expedition might have met just a last remain of them (Salvini 1995, 42).

From these areas, the Urartians, under king Minua, undertook the acquisition of surrounding territories; several inscriptions report his royal activities. One comes from Qalatgah, and celebrates building activities (CTU 2008, A 5-61); another was carved in the rock at Ain-e Rum, 29 km. north of Ushnaviyeh, along the road to Urmia and celebrate the erection of a royal fountain (CTU 2008, A 5-59), whereas a fragmentary one (CTU 2008, A 5-97) was found near Siyah Cheshme, south of Maku. They all celebrated peaceful activities, therefore highlighting how these areas were under Urartian control for a long time.

The most important document south of the lake is the rock inscription at Taštepe (CTU 2008, A 5-10), located in the plain of Sol-
8. See <http://www.iranicaonline.org/articles/assyria-i>.

duz about 40 km east of Hasanlu; it records the building of a small fortress. Inscriptions and edification of fortresses shows that Urartian military power was strongly based, in Minua's time, on dominion over the valleys south of the lake. This area remained firmly under the Urartian control for more than a century. Subsequent campaigns were undertaken by Argišti I (ca 785-756) and Sarduri II (755- ca 730) against Mana and Bustu (CTU 2008, A 8 1-3, A 9 1-3).

It is on the contrary more difficult to reconstruct Urartian evidences in East Azerbaijan province, towards the Caspian sea.

A rock inscription in Seqendel (Salvini 1982) and the Annals of Sarduri (CTU 2008, A 9-3 D 8-13) describes a military campaign in the land of Puluadi and its capital Libliuni (CTU 2008, A 9-8), east of Lake Urmia, where the king erected a fortress and left an inscription. The easternmost cuneiform documents of the Urartian Kingdom are the rock inscriptions of Argišti II in Razliq, Nashteban and Shisheh in East Azerbaijan (CTU 2008, A 11-4; 11-5; 11-6). Urartian expansion thus reached the area of Mount Sabalan around 700BCE. They established garrisons in the region, but evidences for a firm and long-lasting control are hard to highlight. (Piller 2010, 67). There are not evidences for a further eastward movement of Urartian expansion. It is highly possible that they never reached the western flanks of the Talesh mountains, where a flourishing Iron Age culture existed during that period (Piller 2010; Castelluccia 2016), neither they saw the Caspian sea (Salvini 1995, 102).

Nevertheless, Urartian traces have been recorded so far. An inscribed bronze bracelet was recovered in Dolmen 1 at Tul-e Talesh necropolis. This object was interpreted by the excavator as a royal gift and a clear proof for direct contacts between Urartu and Talesh. However, a detailed analysis of this object revealed how it was made from a fragmented

Uartian bronze artefact (Piller 2010, 61-62). Apart from the bracelet, in the same burial ground a bronze quiver was found within Grave 24 (Fig 3); it represents the only definite Uartian object from north-eastern Iran.

Despite the abovementioned campaigns, Uartian interests were mainly directed in the region south of the lake, where traditionally is located the Mannaeen territory.

We are informed by Assyrian sources that the Uartians, at the time of king Rusa (ca. 730-713 BCE), had a strong influence – if not control – over the northern Mannaeen territories (Pecorella-Salvini 1984, 35-51). This sort of protectorate was probably one of the reasons that provoked Assyrian intervention. The Uartian control in the area south of Lake Urmia was dramatically put to an end during the Rusa's reign by external interventions: the Cimmerian raids and Sargon's Eighth Campaign (714 BCE).

The last Uartian remarkable interventions in northern Iran dated to the time of Rusa II (c. 680-655), the son of Argišti II, who erected (over a previous smaller Uartian outpost) the great fortress of Bastam, located 50 km north of Khoy. The site was largely investigated between 1969 and 1978 by a German team directed by W. Kleiss (Kleiss 1979; 1988). The fortress controls the fertile plain of Qara Zin Eddin, as well as one of the main important routes connecting Urmia basin with Tushpa, the Uartian capital. The plain was heavily exploited, thanks to the construction of several channels which diverted the water of the river Aq Çay. The fortress is divided into a lower, a middle and an upper citadel (Fig 4). Massive defensive walls are marked by towers and buttresses. The main residence was located in the upper citadel around 150 m above the plain. The middle citadel contained large storehouses with huge *pithoi* to store grain, wine and oil. Other buildings contained the burnt bone remains of more than 1500 ani-

mal carcasses. Together with the burnt bones about 1500 clay-bullae with seal impressions of the king himself and other high-ranking officials were found. The lower citadel is characterized by the presence of the garrison, horse-stable, a mill, a bakery and small magazines, small finds comprised cuneiform clay tablets, cylinder seals and typical *Biainili* red pottery. In the plain at the foot of the fortress, private houses and some public buildings were found.

According to the excavators, the end of the fortress at Bastam must have come suddenly sometime in autumn, since all the store-rooms were stocked up. As no victims have been found, the fortress probably surrendered after a siege. After the capitulation, all the buildings were looted and set afire. Several Scythian-style arrowheads were found in the destruction levels, therefore providing a possible identification of the aggressors. For the post-Uartian period, there are few traces of a squatter occupation for some time in the settlement.

The fall of Bastam is connected with the fall of the kingdom itself and it provides the best evidence available of the collapse of Uartian authority in northern Iran; it was the outcome of internal conflicts, draught or the invasion of nomads.

Unfortunately, in northern Iran there are few sites providing evidences dating to the 7th century. Few data comes from Hasanlu period IIIC, where a strong fortification wall was started and never completed (Kroll 2010). No Uartian city or garrison ever was set up there. In period IIIB mainly squatter occupation is attested. A bulla with the seal impression of Rusa son of Argišti was found in the destruction level of Ziwiye (Seidl 1988, 150).

Much more documentation comes from Armenia and Eastern Anatolia. All the Uartian major centers during or shortly after the reign of Rusa Argišti were affected (Hellwag 2011). Horom was abandoned by its inhabitants (Kohl

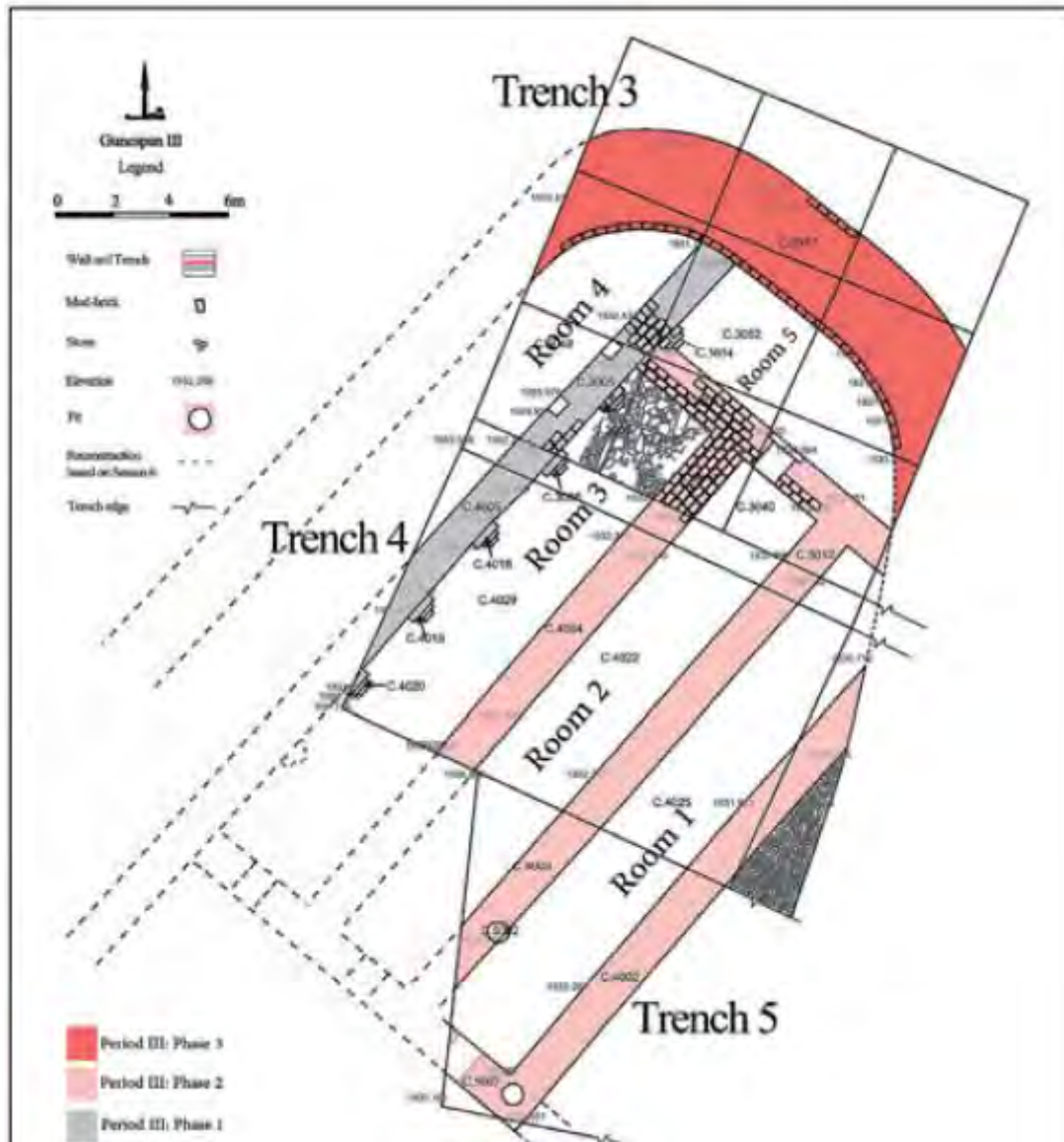


Fig 6. Gunespan Tepe, final plan (Nasari *et al.* 2016).

and Kroll 1999). In Mannaea Qalaichi or Ziwiye were burnt down (Kroll 2000). Zendan-i Suleiman was destroyed too (Thomalsky 2006: 223). As Bastam, other Urartian strongholds such as Karmir blur, Armavir, Altuntepe, Ayanis, Toprak-kale were destroyed by groups of invaders that used primarily socketed bronze arrowheads instead of the tanged iron arrowheads used by the Urartians. Such type of arrowheads is clearly linked with nomadic people coming from the

north - generally considered being Scythian and Cimmerians - as largely demonstrated by a wide archaeological evidence (Ünal 1982; Esajan, Pogrebova 1985; Motzenbacker 2000: Abb.4-5; Ivantichik 2001). Apart from these socketed arrowheads, Scythian evidences in northern Iran are completely missing so far.

The archaeological landscape of northern Iran at the end of the Iron Age III period appears to be characterized by violent tumults

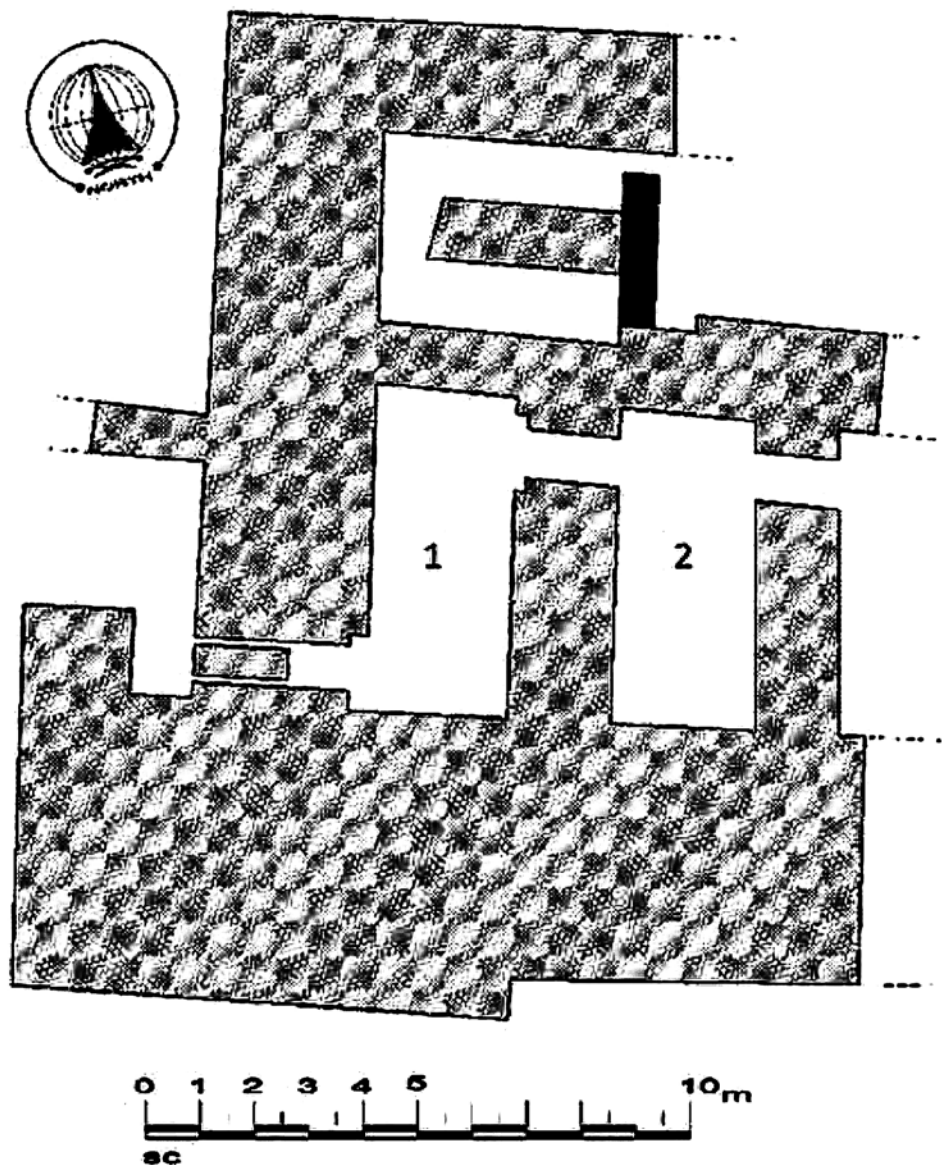


Fig 7. Moush Tepe, final plan (Mohamadifar *et al.* 2015).

that somehow contributed to ending the Urartian kingdom. Most sites were abandoned, the proto-urban system established by the Urartian fell down and the social structure went back to an agro-pastoral and semi-nomadic society. This eventually, may explain how the Iron IV period - which traditionally belong to the Median and Achaemenid time - is scarcely attested in northern Iran.

Median period and Iron III

by Esmail Hemati Azandaryani

Due to the geographical conditions and characteristics of western Iran, so far limited areas of Iron Age III have been identified, including Nush-i Jan Tepe, Godin Tepe, Baba Jan Tepe, Gunespan Tepe, Moush Tepe, Yalfan Tepe and Haji Khan Tepe. And so on, they have been the subject of archaeological excavation, each of

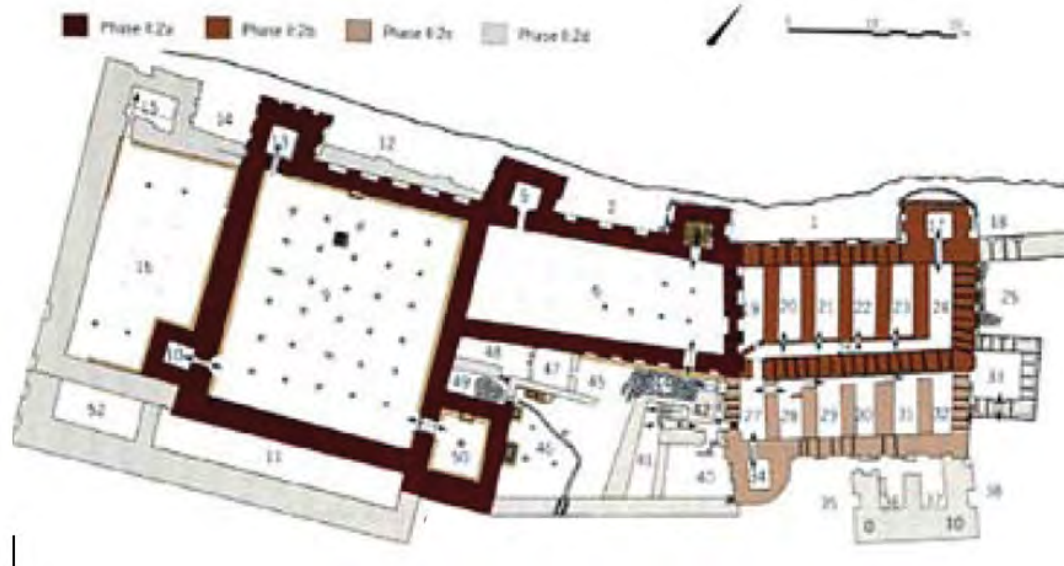


Fig 8. Godin Tepe, plan (Gopnik 2011).

which is briefly described below:

Nush-i Jan Tepe. Nush-i Jan Tepe is located in Malayer plain, 60 km south of Hamedan and 3.5 km from Malayer-Hamedan road. The site was identified in 1965 and was excavated between 1967 and 1977 by a team led by David Stronach; the work activities there conducted led to the identification of layers of Median, Achaemenid, and Parthian period. In total, the architecture and artefacts of the Median period include and were collected in a central ideological-religious building, in the old western building, a fortress or warehouse complex, in the northern monuments, a columned hall and spaces covered by arches (Stronach 1967) (Fig 5).

Gunespan Tepe. Gunespan Tepe is located 30 km southeast of the Malayer town in Hamedan province also, and is currently placed within the Kalan Dam. The site has been excavated for six seasons and has led to the identification of Islamic, Parthian, Achaemenid traces and materials, and Bronze Age levels that are important in the Zagros Mountains areas. According to excavations

in this area, the Median period consist of five parallel-walled walls similar to other sites in western Iran (Naseri *et al.*, 2016) (Fig 6).

Moush Tepe. Moush Tepe is located to the north of Hamedan and in a straight line, 5 km north of Hegmataneh Tepe. In the year 1988 with the beginning of the realization of the Maadani Town, this site fell into the urban context and was severely damaged. The remaining dimensions of the tepe, about 900 square m., were, then, excavated. The excavation began in 2002 and continued for four seasons until 2005, when a clay building that closely resembles the warehouse of Nush-i Jan tepe was excavated. The main and important differentiation of Moush tepe complex is its location on the plain. However, other settlements are formed on high tepe (Mohamadifar *et al.*, 2015) (Fig 7).

Yalphan. The site is located 16 km south-east of Hamedan, in the middle part of the Ekbatana Dam. In 2006 and 2007, a rescue excavation led by Abbas Motarjem led to the identification of architectural relics and remnants of the Median period and a short-term



Fig 9. Haji Khan, an aerial picture (Hemati 2016).

settlement, from Parthian and Islamic periods. In addition to architectural works, pottery fragments with varieties of Iron Age III or Median period were also identified (Mollazadeh 2014).

Godin Tepe. Godin Tepe is located 12 km from the town of Kangavar and adjacent to a small village with the same name. The Tepe was identified during a 1961 survey, excavated by Cuyler Young and sponsored by the Royal Ontario Museum of Canada; the work activities continued until 1973. In this area and from the Iron Age III or Median period, valuable buildings including columned halls, warehouses, towers, barracks, service spaces and possibly residential spaces were also identified and they appear to have been built in the 9th-8th century BCE. Its original establishment was abandoned around 650 BCE (Young 1968; Gopnik 2011) (Fig 8).

Baba Jan tepe. Baba Jan tepe is located near the city of Nour Abad in Delfan plain in

Luristan. The site was identified during 1963 and 1964 surveys and excavated during 1966 and 1969 by Clare Goff of the Archaeological Institute of the University of London (1969). Due to the similarity of the 3rd period architecture in Nush-i Jan tepe, various scholars have doubtfully identified the material obtained from this period (Mollazadeh 2014, 202).

Haji Khan Tepe. Haji Khan Tepe is located to east of Hamedan province, 17 km from Famenin city. This area is located 2 km from Zaraghan village and in the enclosed area of Ibn Sina Petrochemical Company. The first season of archaeological excavations in the area in 2017 was led by Esmail Hemati Azandariany as a rescue excavation, leading to the discovery of a new ideological-religious building from the Median period with a cruciform plan very similar to the central Nush-i Jan building, also whether it has a larger scale and function (Hemati Azandariany 2017) (Fig 9).

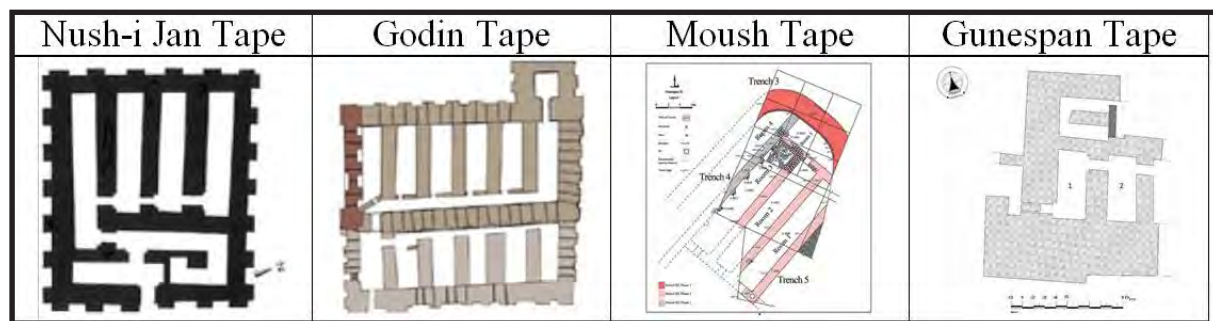


Fig 10. Comparisons of parallel rooms and spaces in Iron III in different sizes.

Given the information provided and the extent of western Iran, the location and significance of the Iron Age III (Median period) as well as the cultural links of this region with other neighbouring regions indicate that our knowledge and understanding of the Iron Age III (and the Median period) is very limited, inadequate and incomplete.

Now I will discuss the most important archaeological evidences (architectural and pottery remains) in western Iran related to the Iron Age III (Median Period).

Architectural remains

All the sites listed present large architectural feature with thick and high walls probably reflecting their religious, political and social functions, whilst adjacent to these buildings there are ordinary structures and buildings. And it is not usual for us to get information of the living conditions of common people in the social organization of this period. Therefore, our understanding of Iron Age and Median period is not complete and we cannot interpret much on those sites, only basically on the basis of interpretative and relative hypotheses. The following architectural features are similar to the architecture in the whole western Iran.

Parallel rooms. One of the most repetitive plans in the architecture of the Median period, consist of four parallel rooms and spaces, with high walls, referring to storerooms or fortresses. This kind of plans has been rep-

licated in Nush-i Jan (Stronach, Roaf 2007), Godin Tepe (Young 1969), Moush tepe (Mohamadifar *et al.*, 2015, 232), Gunespan (42cm × 25cm × 12cm) (Naseri *et al.*, 2016, 108), Godin Tepe (41cm × 25cm × 13cm) (Young 1969, 7-24) and Haji Khan Tappeh (42cm × 25cm × 12cm).

Clay architectural features. In all these areas there are large and ample architectonic structures with mud bricks of similar dimensions in Nush-i Jan (40cm × 25cm × 12cm) (Stronach, Roaf 2007, 181), Moush Tepe (42cm × 24cm × 11cm) (Mohamadifar *et al.*, 2015, 232), Gunespan (42cm × 25cm × 12cm) (Naseri *et al.*, 2016, 108), Godin Tepe (41cm × 25cm × 13cm) (Young 1969, 7-24) and Haji Khan Tappeh (42cm × 25cm × 12cm).

Arc Coverings. One of the most common architectural feature in Iron III or Median period is also the presence of arches in most of these areas with similarities between them, examples of which can be found in the area of Nush-i Jan Tepe (Stronach 1967, pl. VIb), Godin tepe (Gopnik 2011, 320), Moush Tepe (Mohamadifar *et al.*, 2015, 241, pl. 4) and Haji Khan Tepe.

Niches. One of the most important architectural decorations within the buildings of Iron Age III or Median Period are similar features as niches that can be found in Nush-i Jan (Stronach, Roaf 2007, 99, fig. 3.6, 103, fig. 3.8), Gunespan tepe (Naseri *et al.* 2016, 124. pl.8), Godin Tepe (in Room 21) (Young, Levine 1974, 32; pl. 28), Baba Jan (Goff 1977, fig. 5) and Haji Khan Tepe (Hemati Azadaryani 1986).

Filling. One of the others prominent features of Iron Age III or Median period is the type of filling the rooms, which can be found in Nush-i Jan (Stronach 1967), Moush Tepe (Mohamadifar *et al.* 2015) and Haji Khan Tepe. (Hemati Azandaryani 2017).

Pottery findings. The identified pottery remains from the aforementioned sites are mainly wheel made, with good manufacturing and cooking and all have sufficient polishing and surface treatment, whilst very few hand-made specimens have been found. The pottery shapes present in these sites are of the simple reddish-yellow variety in different colours and the fabrics are often of the highest quality. In general, the shapes of pottery containers of these areas can be divided into the following groups:

1. bowls with everted rim present in Godin tepe (Gopnik *et al.*, 2011, fig. 7. 54, 46), Baba Jan (Goff 1985, fig. 3: 9), Moush Tepe (Mohamadifar *et al.* 2015, 246, pl. 11a), Yalfan Tepe (Almasi *et al.* 2017) and Nush-i Jan (Stronach 1978) and Haji Khan (Hemati Azandaryani 2017);

2. bowls with one or two horizontal bands clinging to the edges spread in Nush-i Jan (Stronach 1978, pl. 5a, 5b), Godin (Gopnik *et al.*, 2011, fig. 7, 56, 81), in Baba Jan Tepe (Goff 1985, fig. 2, 32-33), Moush Tepe (Mohamadifar *et al.*, 205, 248, pl. 14) and Haji Khan (Hemati 2017);

3. jars with the spout' heads with two vertical rows and horned appendages, present in Nush-i Jan (Stronach 1978, 18), Godin (Gopnik 2011, 359-362), Moush Tepe (Mohamadifar *et al.* 2015, 248, pl. 15), Yalfan (Almasi *et al.*

2017), Baba Jan (Goff 1985, 20) and Haji Khan (Hemati 2017);

4. vessels with rims with addition small call with fractured extensions occurred in Nush- Jan (Stronach 1968, 186), Godin (Gopnik *et al.*, 2011), Yalphan (Almasi *et al.* 2017), Baba Jan (Goff 1985), and Haji Khan (Hemati Azandaryani 2017);

5. vessels with loose mouth and vertical handle have been found in Nush-i Jan (Stronach 1978, pl. 5c, 5d), Baba Jan (Goff 1985, 15), and Haji Khan (Hemati Azandaryani 2017).

There are also examples of vessels with trefoil-shaped spout in the form of Nush-i Jan clamshell (Stronach 1978, 18), Godin (Gopnik 2011, 359-362), Yalphan (Almasi *et al.*, 2017), Baba Jan (Goff 1985, 18) and Haji Khan (Hemati Azandaryani 2017).

Results: Given that few sites have been identified and explored since the Median period, archaeological evidence and architectural findings provide a relatively good knowledge for Iron Age III, or Median period. During this period, the elements of architectural features (parallel chambers, adobe structures, arched roofs, ceilings, and fillings) resemble those in most material areas, and these architectural features are common in material areas. It is possible, however, that the same architectural features were repeated in the post-Median (i.e. Achaemenian) tradition of the material architectural tradition, leading us to attribute this architecture built in the Achaemenid period to the Median period, in which case Carbon 14 data can be helpful. It should be noted that, like the remains of the architecture, clayey findings with typological similarities have been found in these sites that warrant further research.

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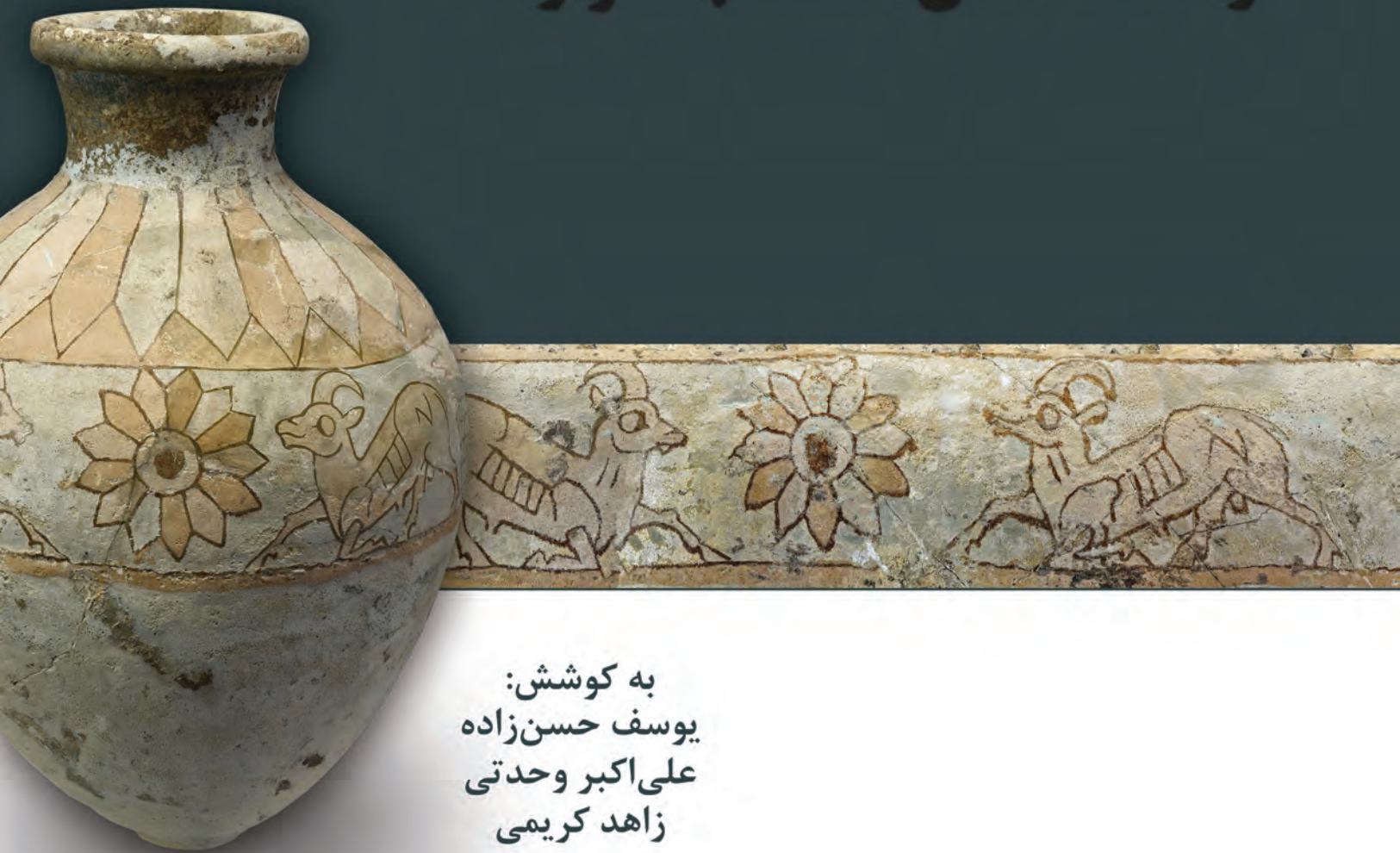
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عصر آهن در غرب ایران و مناطق همجوار



به کوشش:
یوسف حسن‌زاده
علی‌اکبر وحدتی
زاهد کریمی



موزه ملی ایران

استان کردستان

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The international Conference on
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