

This module covers some places that are important for our quest. There is no special systematics; I write this as places come up in my own research.

First a map. You may also want to look at a [map](#) of present-day countries in the general region or the various large-size maps [here](#)

Below we see a map of a large part of Iran with the present-day provinces *Gilan* and *Luristan* highlighted. Note that the term "Luristan" (or Lorestāb) in publications and Internet pages usually does not refer to the present-day province but to a more or less unspecified and usually larger area in the general region



Map of parts of present-day Iran and some neighbours
Scales and ancient city locations are approximate.

Source: Internet at large plus additions by me

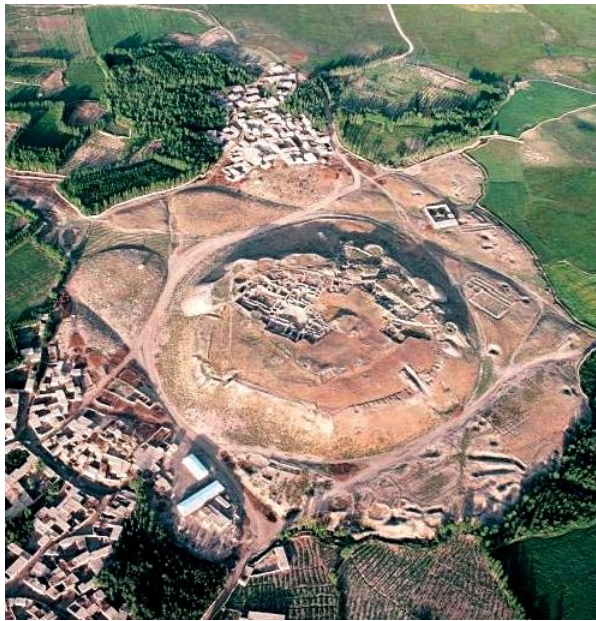
Hasanlu

Tepe *Hasanlu* is a rather famous ruin mound (also known as tepe or tell) in northwest Iran (in the province of West Azerbaijan), a short distance south of Lake Urmia, see the map above. The city was completely destroyed by somebody (possibly the [Uruartians](#)) in 806 BC or so, leaving a layer of debris with known age (up to a point).

The site was inhabited fairly continuously from the 6th millennium BCE to the 3rd century CE

"The nature of its destruction at the end of the 9th century BCE essentially froze one layer of the city in time, providing researchers with extremely well preserved buildings, artifacts, and skeletal remains from the victims and enemy combatants of the attack. Hasanlu Tepe is the largest site in the Gadar River valley and dominates the small plain known as Solduz. The site consists of a 25-m-high central "citadel" mound, with massive fortifications and paved streets, surrounded by a low outer town, 8 m above the surrounding plain. The entire site, once much larger but reduced in size by local agricultural and building activities, now measures about 600 m across, with the citadel having a diameter of about 200 m. The site was inhabited fairly continuously from the 6th millennium BCE to the 3rd century CE. It is famous for the Golden bowl of Hasanlu" knows Wikipedia

Hasanlu today is still a big tell or ruin mound in north Iran; see for example [this picture](#). It has been partially excavated (and most likely thoroughly looted) and now looks like this:



Hasanlu today

Some of the locals can go treasure hunting in their basements!

Source: A. H. Nobari, H. Davoudi, M. Mashkour;
 "Subsistence Economy During the Iron Age in
 Northwestern Iran: The Case Study of Tepe Hasanlu"
 Published 2016, Geography The International Journal of
 Humanities

Hasanlu is of prime importance for my topic here because:

1. It was completely destroyed (probably by Urartu) at 800 BC, give or take just a few years. The date is definite and that allows to date objects from the destruction layer rather precisely. They definitely existed around 800 BC or possibly earlier.
2. In the debris of this destruction a lot of iron, including iron daggers and swords were found.
3. We have a detailed description and analysis of these finds by top experts in the field: P. Thornton and Vincent C. Pigott published the paper: *Blade-type Weaponry of Hasanlu Period IVB*. [Here is the link to the paper](#). A short summary of the paper can be found [here](#).

Alas! None of the swords found matches *our* bi-metal "Leitfossilien" and *all* finds are badly corroded. Moreover, even so we know very precisely at what time the objects were abandoned (at the violent destruction close to 800 BC), we do *not* necessarily know where a sword comes from. It might have belonged to the defenders of the city or to one of the unknown (probably Urartian) invaders.

The objects might also be much older. For example, a quite remarkable (all bronze) sword was very likely a much older (several centuries) "heirloom" of probably Hittite origin.

While none of our "Leitfossilien" swords was found, some "**Assyrian type swords**" were found in Hasanlu. With "Assyrian type" swords I mean the long straight swords with a distinctive hilt depicted on many [Assyrian reliefs](#) (which are, however, at least 100 years younger than Hasanlu objects). More to that [here](#) and [here](#).

Last, it should be mentioned that V. Pigott considers the Hasanlu metal technology to be essentially adopted from the (Neo) Assyrians. That is interesting since we do not know much about the Assyrian metal technology from first-hand, i.e. from finds in the Assyrian core region..

Marik

Marlik today is another tepe or ruin hill, partially excavated, and roughly comparable to Hasanlu (see above). It is of huge interest for the general early history of the area but not so much for us. Some swords of interest to us might have been unearthed during its long history of excavation but I could not find any relevant picture or other specific information.

Marlik is nevertheless listed here for 2 reasons:

1. It illustrates nicely one of the many dating problems, see the paper of A. A. Vahdani, Ali: "[Marlik and Toul-E Talish: A Dating Problem](#)" from 2007; it is discussed [here](#).
2. Christian Konrad Piller in his 2008 [Ph.D. work](#) "Untersuchungen zur relativen Chronologie der Nekropole

von Marlik", gives a short but highly interesting account of what really happened during all this allegedly illegal digging in Iran. Look [here](#) for that..



General Modules

▀ Sensational things were found in Marlik, here are examples:



Gold human-bust Marlik, Gilan 13th-12th centuries BC



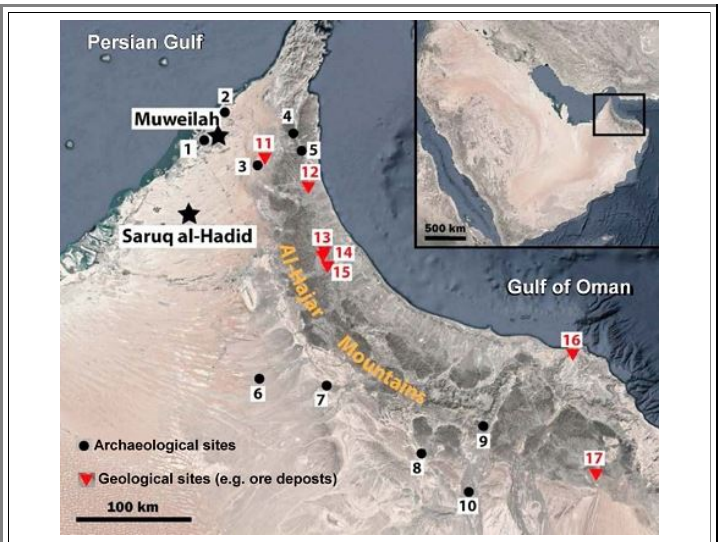
Gold beaker with representation of graceful horses or stylized bulls. Marlik, Gilan, 11th-10th centuries BC

Source: Marlik: Glory of the Iron Age Culture of Gilan
 Ali A. Vahdati, Christian K. Piller
 Publishers National Museum of Iran Rasht Museum, 2018

● Wonderful things but not what we are after here.

Saruq al-Hadid

▀ Saruq al-Hadid is located 40 km inland from the coast of the Emirate of Dubai. It's right in the desert and there seems to be nothing there except a lot of metal debris dispersed in the sand, dating to ca. 1250 BC - 800 BC. Besides plenty of copper, bronze and silver pieces, there are 200 kg of ferrous remains, including a few complete *Luristan type 2 swords* plus innumerable broken parts. The map below displays the position:



Location of Saruq al-Hadid (and some other places of interest)

Source:

● Saruq al-Hadid was discovered about 30 years ago and the local elite loved that. All of a sudden the area had a tangible history with remains of sophisticated technologies from times long begone. Dubai built a big museum for all that stuff and is proud of it.

▸ Now to the good and bad news. The bad news first:
Unfortunately the ferrous remains consist almost entirely of rust. Moreover, no good dating of the artifacts was possible; there are even indications of recycling, making old iron look younger. The picture below gives an idea of what the ferrous objects looked like.

▸ Now to the good news:
A large group of researchers did wonders with what was found. In particular an Australian group, centered around **Prof. Lloyd Weeks** and **Ivan Stepanov** from the University of New England used state-of-the-art analytics to unravel some of the secrets of those pieces of rust. They used, for example, neutron beam tomography, necessitating a running nuclear reactor plus some expensive hardware, for looking inside the specimens. Their major papers are listed and commented [here](#). From all their work two results emerged that are of large interest to us :

1. The iron was *not* produced locally at Saruq al-Hadid. The swords etc. most likely were imports from *Luristan*.
2. The swords were forged employing *faggoting / piling techniques* !

I'll comment on that in various other modules so I stop right here.

Various Places

▸ Here are some places in alphabetical order with short explanations

● **Amlash** (also called Gilan or Gilan).
Today Amlash is a county in the Gilan (or better Gilan) province of Iran, see the map above. However, in papers or in the antiquities trade, you find often references to "Amlash" for the provenance of objects and then the meaning is more general. Here is Wikipedia:
"The term *Amlash* culture refers to an assortment of historic materials and periods in *Gilan and west of Mazandaran*, in north of Iran. Amlash refers to the geographical region from which some archeological objects of certain types come. It does not have *any real archeological meaning* when used with the word culture. These objects which are attributed to Amlash have been shown in many exhibitions in Europe and the United States and may often be seen in catalogues. "
Here is a collection of "Amlash" objects:



"Amlash" objects from an auctions catalogue

Source: Auction catalogue.

● **Gilan** or Gilan
Today one of the 31 provinces of Iran. It lies along the Caspian Sea (see the map above).

