

First Iron Swords

About the Modules accessible via this Module Hub

Link Hub

The questions I want to address in these modules are very personal and deceptively simple:

Who made the first **complex iron objects?
When and where?**

The emphasis is on "**complex**". Implications are that these complex objects were made from **smelted** iron - as opposed to **meteoritic iron** - and that they represent the top technology of the times. I'm essentially talking swords, in other words, and not objects like rings, needles, small knife blades, and so on. I exclude thus all the stuff mentioned in the Module "**10.2.1 Early Iron**". I'm also not interested in arrow and spear heads - too simple.

Let's be clear about this. The early history of iron (before 1000 BC let's say) is the history of small and simple stuff. The **Alaca Höyük Dagger** from around 1800 BC or the **iron Dagger of Pharaoh Tutankhamun** may be seen as the master pieces of this "simple" stuff; and both of them are most likely made from meteoritic iron. We know far less than I would like about this early phase of iron technology - but we do know a lot. Once more, read the **relevant part** of this hyperscript or look into the scientific literature, e.g.:

- **Nathaniel L. Erb-Satullo**: "**The Innovation and Adoption of Iron in the Ancient Near East**"; Journal of Archaeological Research, published on-line **2019**. **Here** is a copy.
- **Radomir Pleiner**: "**Iron in Archaeology - Early European Blacksmiths**"; A book, published in Praha **2006**

Again, complex iron "high-tech" objects, by my **own definition**, are mostly swords or (large) daggers. My idea was to take a few very characteristic early iron swords and look at the scientific literature to see if one can put a definite date (and possibly a place) on their origin.

That is not as easy as it sounds for a number of reasons Here are the two most important ones:

**1. Many (if not all) of these swords
are from unscientific digs and thus
come without trustworthy data**

**2. Don't trust the data from scientific digs
as reported by archaeologists.**

The second statement may appear outrageous. I base it on the simple fact that papers about some relevant dig more often than not spends quite some space to doubt and "correct" the data of its pre-decessors. Try **this link** for a taste treat.

I will comment on this here and there in the modules to this topic. Firstly, however, I will outline what this module hub contains.

As I'm writing this (beginning of 2021) I have no particular clear idea of what I will find. I started the modules described below, hoping that I can bring them to life as I read papers, acquire data, and learn new things. First we will consider some general modules

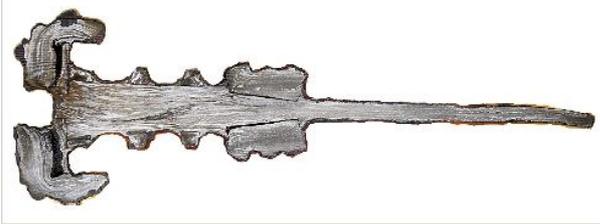
General Modules	
<u>Provenance Problems</u>	<p>Don't trust the reports of archaeologists? This module says why.</p> <p>Can arbitrary iron objects with unknown provenance (i.e. unearthed by commercial interest) be dated?</p> <p>Do objects unearthed by archaeologists "automatically" have a precise date?</p> <p>If not - what's the problem?</p> <p>What precise dates do we have?</p> <p>Are unprovenanced objects of any value?</p>
<u>Places</u>	<p>Short overview of major "tepes" like Hasanlu or Marlik plus a list of some other places to get an idea of the geography.</p>
<u>Literature Digest</u>	<p>Listing of relevant literature.</p> <p>Short discussion of key papers.</p>
<u>Sculptures / Reliefs</u>	<p>Pictures of ancient artwork like sculptures / reliefs showing swords and daggers</p>
<u>Large Pictures</u>	<p>Large-size pictures of, for example, maps, landscapes, finds, ...</p>

- Let me set the stage right here. The "*Leitfossilien*" (type, index fossil) swords shown below most likely come from an area that contains not only [Luristan](#) but the area below the Ural plus parts of present day Turkey, Iraq and possibly Azerbaidjan, Syria; Georgia and Armenia. Here is a map showing the approximate present political structure. Approximate because I omit disputed areas in Georgia, Azerbeidjan and Armenia. I have highlighted Luristan and "[Hasanlu](#)", an important place in the context of these modules.



The "theatre"
 From the West coast of Georgia (ancient "Colchis" to below Luristan (Elamite empire)
 The distance from Hasanlu to Luristan is roughly 500 km

Now let's look at the sword types I have chosen as "**Leitfossilien**" or Index fossils:

<p>Luristan type 1 iron sword Our by now well-known iron mask sword, the epitom of "complex". Maybe not quite as old as type 2, and never, so far, unearthed by an archaeologist.</p>	
	
<div style="border: 1px solid black; padding: 5px; width: 80%; margin: 0 auto;"> <p><u>Luristan 1 Swords</u></p> </div>	<p>Summarizes all the stuff already covered elsewhere in this hyperscript Gives a few new data and pictures</p>

<p>Luristan type 2 iron sword Unearthed by archeologists in Luristan (and elsewhere). Quite old and with distinctive features</p>	
	
<div style="border: 1px solid black; padding: 5px; width: 80%; margin: 0 auto;"> <p><u>Luristan 2 Swords</u></p> </div>	<p>Summarizes all the stuff already covered elsewhere in this hyperscript. Looks at possible sources outside of Luristan. Details about this type of sword found in the literature.</p>

Bi-metal Swords

Most likely not from Luristan but from Northern Iran; Aserbaidjan Georgia, East Anatolia,... and certainly quite old



[Bi-metal swords Introduction](#)

Defines the term "bi-metal sword".
Looks at the great "bronze swords with an iron core" scam.
Discusses the paradox why we see so few of them while they should be ubiquitous.

[Bi-metal swords Details](#)

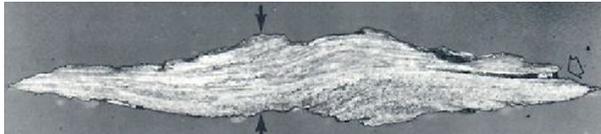
Mostly details about the "pastiche" scam.

[Bi-metal swords collections](#)

My collection of bi-metal sword pictures

Celtic "Hallstatt" swords

From around 800 BC. The cross-section shows similarities to the Luristan 1 swords and others form above.
Accidental?



[Hallstatt swords](#)

Why do I include Hallstatt sword here?
A few general remarks.
Details of some swords.

Miscellaneous

Interesting swords / daggers as they come up, for example this iron double-disc-pommel dagger:



[Double-Disc Pommel Sword](#)

Why do I include double.-disc pommel swords here?
What do we know about them?

<p>Misc. Objects</p>	<p>Hasanlu iron quiver Hasanlu Swords with "Assyrian" hilts</p>
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▶ I'm going to survey the *availably* scientific literature for hard data about these objects. Available means: as far as I can find it in the Net *without charge*. I draw the line at paying good money for often not-so-good papers and I will not descend into dusty old libraries to hunt for printed-only documents. Nor will I consider stuff written in strange languages like French or Russian.

These modules thus are experimental. Right now I have just started and I don't know what I will find.

Let me give you a positive and a negative example of what is out there:

- **Oscar Muscarella** in his book "Bronze and Iron", shows a Luristan type 2 sword, excavated at *Hasanlu* (North Iran), and dated to "Iron age IV". The sword now lives in the [Metropolitan Museum](#) in New York City. Whatever that implies, we know for certain that Hasanlu was completely destroyed in BC 804 and that means that Luristan type 2 swords existed around 800 BC or even earlier.
Hard data! Of course, it now behooves me to dig for more reports about Hasanalu finds.
- Starting 1992 Iranian archaeologists excavated graves from the Iron age I-III in the Talesh region of North Iran. They must have found bi-metallic swords but everything they published (not a lot, it seems) is challenged by other authors. Not much appears to be unambiguously clear.
That is a pity since the general region is supposed to be the "home" of the bi-metal swords, which are seen by some as the link between bronze and iron technology. While I do not yet subscribe to this view, it makes a closer look at this area mandatory.