

## 11.1.4 Swords of Major Near East Powers in the 1st Millennium BC

### What's It About

You know that I'm not an expert for swords. I do know a thing or two about semiconductors, and I also know something about the Materials Science and Engineering of metals. I know a sword if I see one and I have some idea about how it is made and what - mechanically - it can do. But I did not know about *akinakai* (singular is *akinaka* or *akinaces*), for example, until I had finished the preceding module and found out about these things more or less by accident. I also just recently run across the Moroccan [Nimcha sabre](#). I'm sure I don't know a lot of other sword-related specifics and I can thus not go into the swords of the early Afghanistanis, Albanians, Algerians, ... (add 190 more member states of the UN), nor do I feel a necessity to do so - *except* if I come across something of interest with regard to iron and steel technology in this context.

This applies to *akinakes* but not to *Nimcha sabres*. What I found out about *akinakes* is: an *akinakes* is a kind of double-edged straight dagger or short sword, made from bronze or *iron*. It was mainly used in the *first millennium BC* in the eastern Mediterranean region or *Near East*. They are also connected to the Scythians and possibly to the [Luristani stuff](#) in some not-so-clear way. *Now I'm interested*.

● But not all that much. Most *akinakes*, it seems, are "found" in the antiquities trade and that means four things:

1. They may be fakes.
2. Even if they are genuine, the data (if given at all) about where and when they have been found may be wrong. Illegal finders lie. Dealers lie. Even innocent mistakes do happen.
3. A lot of the scientific literature is hard to get and often in Russian or in other languages not open to me.
4. Not counting one exception: They have never been metallurgically examined.

Many *akinakes*, I'm sure, rest in some museums, particularly in the former Soviet Union, Iran, etc. - and I'm not aware of them. The ones I am aware of, while supposedly genuine, are usually not all that well described either. And the number of museums that give a minimum of correct metallurgical information appears to be presently zero.

▶ The point I'm trying to make is: This Hyperscript is about Materials Science (you must have noted that by now). It places special emphasis on iron and steel, including the history of these metals. Swords are the paradigmatic embodiments of iron and steel, and that's what makes them interesting to me. I'm also interested in many of the [other aspects of swords](#) but my priority is with Materials Science.

It follows that some arbitrary iron sword from the first millennium BC is of some interest to me - but not of much interest if I learn nothing about its metallurgy and how it was made.

● Iron making in bulk did start in the East Mediterranean or Near East, and it is thus straight forward to assume that sword making also started in this region. The [Luristani iron swords](#) bear witness to this. That's why in this module I look a bit into the swords of the [major powers](#) that were present in this region in the first Millennium BC. However, when I looked more closely into the matter, it came to me as a surprise that [only a few swords](#) seem to be known from before 700 BC, say. Let's look at what we have.

### Akinakai

▶ Here are some [akinakai](#) according to the description given by their sources. As you see, they come in bronze only, iron only, iron with bronze or gold hilts, and solid gold. You can classify them as short swords, dirks, or daggers. Take whatever pleases you; I don't care.

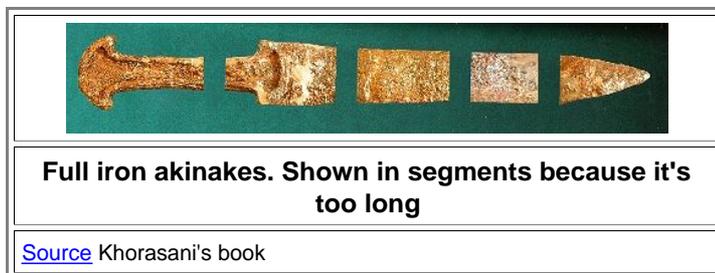


The gold betrays Scythian influence and dates the objects to 600 BC - 650 BC, as stated by the Russian museum and fitting to the **Scythian** conquest of "the West" including what's now Iran. The Medes were able to kick them out to some extent, while the Scythians were able to fend off an invasion by Darius the Great of Persia's Achaemenid Empire in 513 BC. The Scythians are still rather mysterious, but we do know that they were nomadic living people with horses, and that they had achieved an amazing mastery of gold metallurgy if not metallurgy at large - [just like the Luristanis](#). "Scythian gold" is a well-known entity but they might also have mastered iron as shown by their very special [akenakai](#). That's why I decided to add a "Scythian Special" in 2020.

[Advanced Link Hub](#)  
  
**Scythian Special**

The golden akinake is dated to the [Achaemenid Empire](#), the first Persian empire founded by **Cyrus the Great**, ca. 550 BC – 330 BC. There was a cultural interchange in other words (like plundering the cities, killing the men, raping the women,...., as well as taking over the metallurgy knowledge) and that's probably how Scythians skills made it to the Achaemenids.

All these objects (except possibly the Russian one) come from illegal digging: Their historical value is thus limited.



The rusty thing above looks far less fetching than the pieces one can buy. It is far superior, however: it was dug up by archaeologists in **Persepolis**, the capital of the Achaemenid Empire. That allows us to conclude that around 500 BC somebody in the large Achaemenid Empire knew how to forge a 65 cm long sword in one piece. That's almost impossible without fire welding. Unfortunately nothing else seems to be known about the iron /steel used for akinakes. We will have to wait.

The Scythians might have "invented" the akinake and used them as weapons *and* as ceremonial objects. The other cultures, especially the Persians (and that includes Luristan) adopted the design and akinakes became popular in the Mediterranean region and Near East. One might even see akinakes as the forerunner of the Chinese "jinglu sword", the Greek [xiphos](#), and the Roman [Gladius](#).

Akinakes were primarily a thrusting / stabbing weapon. I would tend to believe that they could not have been the main weapon for people living and fighting mostly on horse backs like the Scythians and Parthians.

### Assyrian, Babylonian, Elamite, Achaemenid, and Parthian Swords

In the larger Eastern Mediterranean around 1200 BC iron gradually became a less precious item (in some places) and appeared in larger quantities. However, what we have found so far, tends to be small and relatively simple stuff. [The "first" full iron swords](#) might be from Luristan, a hard-to-get-to highland area of apparently no historic consequence then or ever. Areas of consequence were empires or became parts of empires, like it or not. The important empires between 1200 BC and roughly 250 BC are the ones relating to the names in the head line. In addition, we have the (usually not-so-innocent) bystanders like the Scythians, Greeks, Egyptians, Cimmerians, Lydians, Phrygians, Luwians, Urarturians...., and, not to forget, the Jews, Philistines, and so on. King David, one of the more unsavory characters of the Old Testament / Tanakh lived around 1000 BC - if he lived at all.

It is a complex and possibly close to impossible undertaking to unravel exactly who made big progress in iron technology where and when. However, we may state with some reliability that major iron use, including the [forging of complex objects](#) did not take place before, roughly, the 8th century BC

All these names relate to the Eastern part of the Mediterranean or Near East. On the West we had the Etruscians, Phoenicians, Romans, and so on. To the North we had the Celts (and some proto-Germanic people). All of them (except the North, maybe) had some iron industry in the first millennium BC and, at the latest after 500 BC or so, made iron swords.

I have already looked at the iron production in the "West" ([Etruscans, Romans](#)) and the North-West (Celts) after 500 BC.

The question is what we know about the Assyrians, Babylonians, and so on. The answer is: Next to nothing. At least I couldn't easily find much that is worthwhile to be mentioned here. And I did spend some time in looking around.

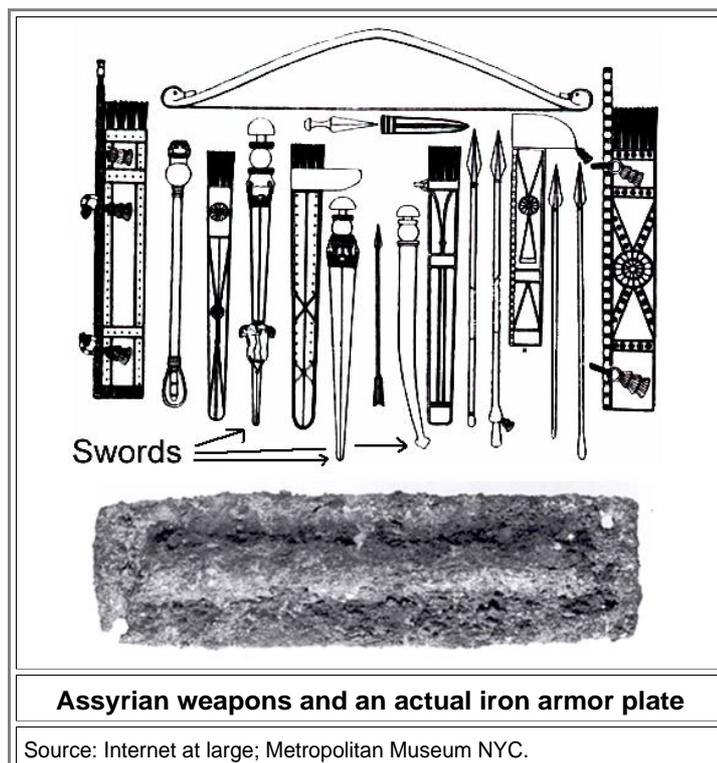
Just so you know what I'm talking about, I give you a quick list of the relevant empires with maps and a few facts in the link.

[Advanced Link](#)  
**Empires**

### Swords of the Assyrian Empire

The Assyrians ruled with the proverbial "iron fist", meaning that they wielded iron weapons that were superior to the weapons of their opponents and that they were rather brutal in using their iron. That they did have a large iron industry (or took over a large industry of vassal states) is proven by the huge hoard of iron (160.000 kg!) found in the remains of the [palace in Khorsabad](#).

Here is all I initially could find about Assyrian iron / steel weapons:



● All I found besides the [iron piece from the Khorsabad hoard](#) is an old drawing depicting Assyrian weapons that somebody I don't know made some time ago, and an actual iron plate from some Assyrian armor. The Metropolitan Museum in NYC has many of these sorry things but nothing else the ancient Assyrians made from iron.

● Well, several years later (it is now March 2020) I have to correct that statement to some extent. I found **1. John Curtis'** book: "An Examination of Late Assyrian Metal Work with Special Reference to Nimrud" (Oxford press, 2013). In this book many iron objects are shown and discussed. But it's typically iron spearheads, arrowheads, armor scales and other small stuff. There is a kind of large saw blade but there are still *no (good) swords!* All we have is the sorry lot [shown here](#). One of the objects shows some similarity to what I have called the [Luristan type 2 sword](#).

**2.** The article "IF I HAD KNOWN THAT MY LORD WANTED IRON. The beginning of the common use of iron in Assyria" from **Caroline van der Brugge**. [Here is the link](#). The article is most illuminating and makes for good reading. Caroline argues that no iron ore is found in the Mesopotamian plane and that the Assyrians thus depended on others to supply iron or iron ore. She make a convincing case that large scale iron use in the Assyrian empire did not start before the end of the 8th century BC.

▶ How do we know that Assyrian swords looked like the ones shown in the drawing? From numerous large stone reliefs these guys left all over the place, in particular in [Khorsabad](#) .

Here is Sargon II, fingering his sword (not necessarily made from iron!)



**Sargon II fondling his sword**

[Large pictures](#) of more Assyrian sword carriers

Source: North palace Ninivah; 645 BC; Internet

● However, these guys weren't just fondling their swords. They defeated about any other power around by then, [the list](#) is quite impressive. The following picture shows parts of the taking of a Mannean fortress in 715 BC, as depicted on a now lost relief from room 14 (slab 2) of Sargon II's palace at Khorsabad. Nobody has ever heard from the Mannean kingdom ever since.



**Sword fight! Note also the wheeled siege engine on the right.**

[Link to full relief](#)

Source: Internet article: Mannea, a forgotten kingdom of Iran. Karen Radner, 'Mannea, a forgotten kingdom of Iran', Assyrian empire builders, University College London, 2013  
 Drawing from P.-É. Botta and E. Flandin, Monument de Ninive, vol. 2, Paris: Imprimerie Nationale, 1850, pl. 145.

- However! There is some evidence that the Assyrians did not really use swords in battle. Maybe the cavalry (if they has that) but not the infantry. The guys up their doing a sword fight actually use rather short swords (akinakai?), if you look closely.  
 Whenever the Assyrian (fighting) nobility became bored of killing people, they went out to kill some lions. *With their sword!*



**[Assyrian Noble stabbing a lion with his sword](#)**

Source: Khorsabad (I believe); Internet at large

- There are many more picture like that, especially on seals.  
 Those pictures makes me almost a liar. [I wrote](#): "Even hunting animals with just a sword doesn't make much sense." Well. I do believe that even the most dedicated hunters out there today would be reluctant to hunt lions Assyrian style. Except, of course, [the Romans](#). Sometimes they lost. But seriously now: You can't stop a charging lion like that. A grown lion weighs up to 820 pounds or 375 kg, the equivalent of 4 big people. Even if you manage to stab him as shown, he would throw you down quite forcefully and live long enough to take your head or damage you substantially in other ways. It is impossible for mere mortals - and thus only the king could do it as shown.

What did we learn about Assyrian swords? Not much. Essentially we can only state:

- They had swords, very likely iron swords but we can't be sure. And that applies possibly only to the upper crust and not to commoners including soldiers.
- They (the nobility) carried their swords, embellished them, and showed them off.
- They (the nobility) trusted their swords - or the liked to take very high risks in hunting lions. But, maybe, the trusted more in the naivete of their underlings
- Given the quality of the iron hoard in Khorsabad, their iron swords couldn't have been too good. They are probably no better than Celtic swords
- There is no way of telling if Assyrian smiths knew anything about the iron / steel issue and about hardening by quenching.
- They may not have used long swords in (infantry) warfare. Too expensive and not good in close-up fighting. However, if they had a cavalry (I don't know) these elite guys might have had long swords.
- We never found long Assyrian swords so far.

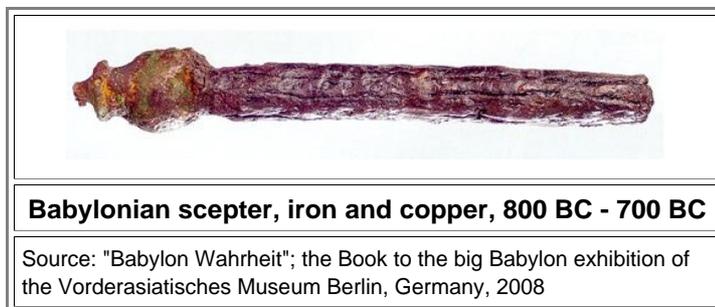
A bit more about Assyrians and their contemporaries can be found [here](#)

### Swords of the Neo Babylonian Empire

You are never too old to learn a new trick! Putting "babylon sword" into Google, gives unexpected and possibly exciting results; try it.

Otherwise nothing. Nada

Here is all I could find otherwise:



The two books going with the exhibition mentioned in the figure source contain about 900 pages and more than 1000 pictures. The one above is the only one showing some iron. Maybe the Babylonian kings didn't use a sword to demonstrate who has is the biggest but a scepter instead. There is a likeness Babylonian art, e.g. the famous pictures made from glazed tiles, does show soldiers but none with a sword. One relief showing a guy with a sword is assigned to Babylonians or Assyrians, depending on which source you read. So forget it.

**The end.** Sorry.

### Swords of the Elamite Empire

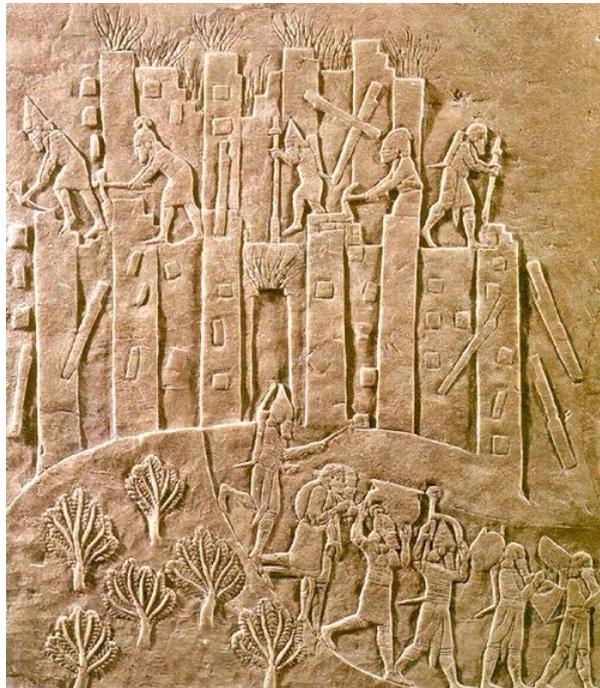
We know the Elamites from way before as the makers of [amazing silver and gold objects](#) already around 3000 BC. [Here](#) is another example. One might assume that they must have been pretty good at bronze and iron, too. Bronze - yes. Iron - we don't know. Here is just one example for excellence with the three metals mentioned:



The Elamite area is East of the Sumerians and Babylonians, containing mountainous regions of what today is Iran. [This map](#) gives a rough idea. The so-called proto Elamites who made the good stuff were around in 2700 BC. Even then they were having constant fights with the powers down in the valley like the Sumerians; many of which they lost, leading to occupation and so on. Just a few highlights.

- Shulgi of the 3rd dynasty of **Ur** (around 2050 BC) conquers Elam.
- Babylonian Hammurabi (around 1770 BC) crushes Elam in 1764 BC.
- Elam King Kutir-Nahhunte I attacks Samsuiluna, Hammurabi's son, around 1730 BC and deals so serious a defeat to the Babylonians that the event was still remembered more than 1000 years later.
- Tukulti-Ninurta I of Assyria (around 1230 BC) campaigns in the mountains north of Elam. The Elamites under Kidin-Khutran, second king after Untash-Gal, countered with a successful and devastating raid on Babylonia.
- Shutruk-Nahhunte (ca. 1160 BC) makes Elam powerful again. Two equally powerful and two rather less impressive kings followed, together they made Elam one of the great military powers of the Middle East. One Shutruk-Nahhunte captures Babylon and carries off to Susa the stela on which was inscribed the famous law code of Hammurabi.
- Nebuchadrezzar I of Babylon (1124 - 1103 BC) attacks Elam and is just barely beaten off. A second Babylonian attack succeeds, Elam is overrun, and that's the end for a while.
- The Elamite King Shutruk-Nakhkhunte II (716–699 BC), was routed by Sargon's troops during an expedition in 710, and another Elamite defeat by Sargon's troops is recorded for 708.
- Assyrian King Ashurbanipal takes Elam and destroys Susa in 627 BC. THE END, it seems

There is not much we have from the "iron age" Elamites. They appear rather in not-so-nice reliefs of the Assyrians:



**Destruction of Susa in 627 BC by Assyrian King Ashurbanipal**

Source: Internet / Wikipedia



**Assyrian scribes doing a head count.  
The heads are probably from Elamites.**

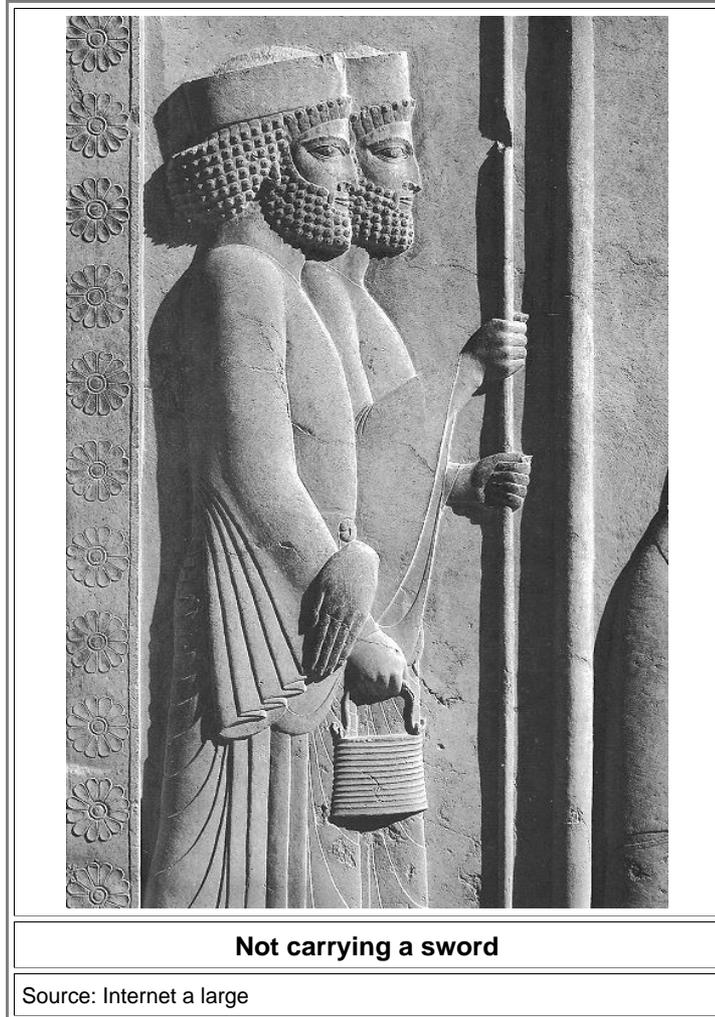
Source: Internet.

I gave you all this because everything I have to say about *Elamite swords* you can find in [this link](#)!

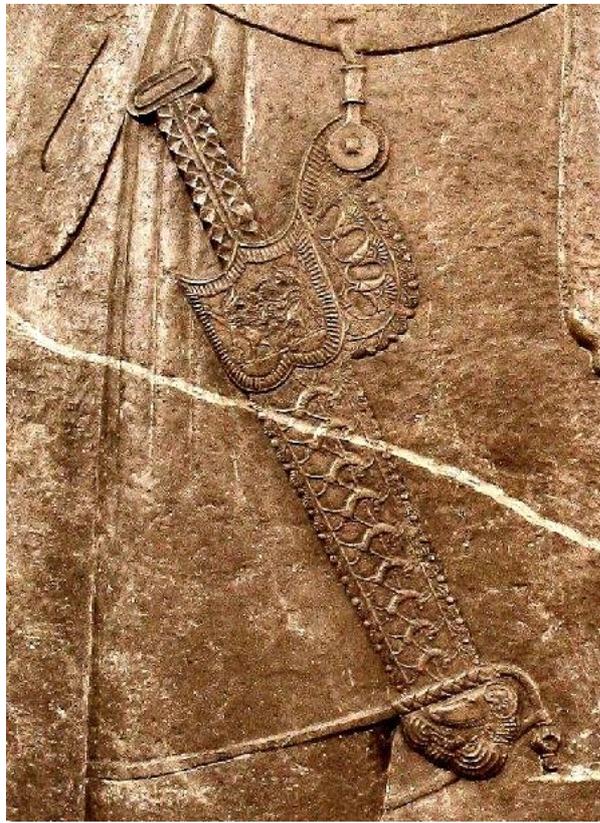
### Swords of the [Achaemenid Empire](#)

Let's not waste time and space this time. Cyrus the Great conquered almost all there was to conquer (except the Greek), and he did that seemingly without swords. Even [Khorasani's wonderful book](#) doesn't offer a single picture and has very little to say. There seems to be one frieze or whatever showing a guy with a long straight sword and one with a kind of [kopis](#). If those things were made from bronze or iron is unknown

In Persepolis, Cyrus' capital, we have many reliefs showing all kinds of people including soldiers. Almost none seems to be carrying a sword, Some preferred pretty handbags, it seems:



The exception is King Cyrus' weapon bearer who is shown on a large mural / frieze / relief, whatever you like to call that. Here is the important part:



**The weapon bearer of King Cyrus he Great**

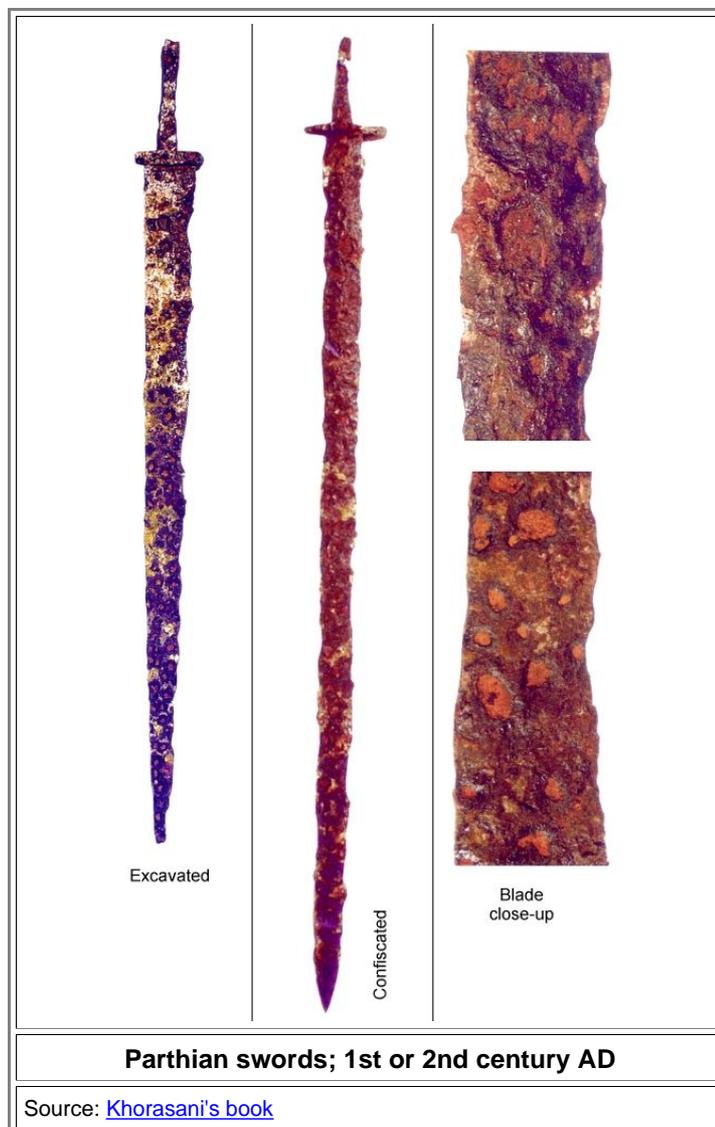
Source: Internet a large

- Big deal. It's an [akinake](#) !  
Sorry - but that's it. We have no idea what Cyrus' smiths could do with iron.

### **Swords of the [Parthian Empire](#)**

▶ The Parthian Empire (247 BC – 224 AD) came about because one Arsaces I of Parthia, original a tribe chief, took the region of Parthia from the Seleucid Empire, the sequel to Alexander the Great's masterpiece. That's why it is also known as the Arsacid empire. King Mithridates I of Parthia (ca. 171 BC – 138 BC) greatly expanded the empire to what is [shown here](#). The Parthians were essentially Persians and a clash with the Romans who were running a huge empire of their own by then, was unavoidable.

- Why do I mention Parthian swords here and not, for example, the "[xiphos](#)", the regular sword of the Greeks, swords from the empire of [Alexander the Great](#), and so on. Because there is absolutely nothing to learn about *iron* swords from these guys. We simply do not have many, if any. In contrast to the Parthians!  
Here are Parthian iron swords:



Nothing to get very excited about. But at least those things were swords. The left one was 67 cm long, the right one 87 cm. There is no big difference to the blades of the Celts or to any "Spatha" between 500 BC and 1500 AD. It is hard to say but the blades appear to have neither a ridge nor a fuller, possibly just the basic lenticular cross-section. No seams due to insufficient welding are visible, but also no indication of conscientious piling of different iron / steel grades. And of course there is no way of telling if these swords were hardened by quenching. There is also no way of telling if those swords are perhaps of Celtic origin. After all, my [forebears](#) were roaming the area already in 279 BC and even hung around for a few 100 years in Anatolia.

- So, sorry, but the Mediterranean and the Near East is a bit disappointing, sword-lore wise. It is time to move to the more exciting West and North - but not before a closing paragraph.

### Weird Swords

Museums own a lot of weird stuff. You just will not see it because it is usually stored in the basement and locked up. Somebody sometime had dug up something weird, and it wasn't clear what it was or it looked very unassuming. You can't throw it away, and you can't admit defeat either, so it goes into a box and into the basement. And that's where it belongs because most of the time it is just random debris, indeed. But not always. Look up the "machine of Antikythera", for example.

It goes without saying that there many weird metal artifacts, including weird swords, had been dug up and confined to the basement

- Khorasani, in his magnificent [book](#), shows one weird sword. It is actually displayed in the Teheran Museum but nobody seems to have taken notice. Others turned up in auction catalogues. Here are a few:



#### Weird swords

Left: [Auction catalogue](#); identified as Luristani, 1000 BC.

Middle: Teheran Museum, dated to probably 1000 BC.

Right: Auction Catalogue "Hermann Historica" 2015, supposedly Celtic

- The sword on the left, believed to come from Luristan, is 91 cm long. It looks like it has a cast-on bronze hilt of a quite unusual shape since it has no pommel or lobes or other enlargements ensuring that the hand doesn't slip. The Teheran sword was confiscated; its length is 104 cm; the blade alone measures 75 cm. What at a first glance looks like a long rusty tang is actually a cast-on slender bronze hilt that tapers to a point instead of having a pommel of some kind. Its design and the way it is fixed to the blade seems to be unique. It is definitely very unusual.

Both swords are of the "bi-metal" type with an iron blade and a bronze hilt. More to those sword [here](#).

The "Hermann Historica" sword is described as: "Eisernes Griffzungenschwert" (Naue II), South-East Europe, 8th century BC. It is an exact copy of a bronze sword, a rather unusual thing. [Here](#) is a rather similar one.

- ▶ Both swords have not been excavated so it is possible that they are fakes. It is not likely however, because nobody in his right mind fakes unknown objects. What makes these two swords so special is the fact that they seem to be the only long iron swords on (easily accessible) record for the first millennium BC in the East Mediterranean / Middle East! That is quite remarkable, if you think about it.

Could these swords be younger than 1000 BC? Well, yes - but they also could be older. There is just no way of knowing, short of doing a [C14 analysis](#).

- Could these swords be Celtic in origin? The [Celts](#), after all, did make it to Anatolia in 278 BC - as hired mercenaries. Even before that they were employed as fearsome warriors by Mediterranean potentates. They did have their long swords then and earlier. Maybe a few made it to the East as booty from some battle or as trade object.

I do not think that this is a good explanation of the swords above but so far it seems to be the only one.

- ▶ Constant warfare was a fact of life in the East Mediterranean / Middle East, just as about everywhere else. Why did we not find *long* swords in all the stuff dug up from about 1000 BC to 0 AD? The simplest explanation would be that there weren't many around. Depending on the fighting style, a long sword is not necessarily a good weapon. The Roman army, after all, did rather well for many centuries with the short gladius and the pilum (spear). Long swords or spathas were weapons for mounted warriors or crazy single-fighter egomaniacs like the Celts.

- Long swords also make sense for [executioners](#). From there it is a short way to long swords becoming symbols for power over life and death, a symbol for the King. As a side benefit a normal King, not to mention a [King of the universe](#), looks so much better with a long heavily embellished sword (in addition to his [gold dagger](#) or akinake) than with a short one.

The hilts of the swords above make them not particularly fit for fighting. The balance without a pommel must be rather awful, and your grip could not have been very secure either. It is conceivable that they were only for representation, sort of highlights in the collection of strange war trophies. The hilt must have been added locally, and it is conceivable that it was made deliberately in a strange shape to emphasize the exotic nature of the sword. This is all wild guessing, of course. But more than that I cannot do.

▀ There is a whole literature out there about long swords vs. short swords, and thrusting vs. slashing in fighting. Add fighting modes like single combat style to phalanx (closed ranks) style, fighting on horseback other mounted warriors or foot soldiers, and you can come up with endless lists of who should have had what and when. Add on top a certain amount of human stupidity, like fighting tanks on horseback because we are a cavalry unit after all, and everything is possible. The introduction of the metal shields, for example, might have changed fighting style from thrusting (short swords) to slashing (long sword or axe). Or maybe not.

- Then it also matters to whom size matters. ~~No to women but to men~~; excuse me: not so much to the disciplined Roman soldier who just did his job but to the Celtic egomaniac who never ceased to believe that bigger is better, no matter how often he was rejected.

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<sup>1)</sup> JUSTYNA BARON and BEATA MIAZGA: "Scythian akinakes or medieval kidney-dagger? Archaeometric study of a recent find from Legnica (south-western Poland). Article in: *Archaeologisches Korrespondenzblatt* · January 2013