Collection of Bi-Metal Swords

Science

This module contains an unsystematic collection of bi-metal sword pictures plus whatever information is available. This is usually not all that much because almost all pictures show unprovenanced swords, found in the antiquity trade.

- First some pictures of bi-metal swords that I have already presented elsewhere in this Hyperscript:

Left: Auction catalogue; identified as Luristani, 1000 BC.
Middle: Teheran Museum, dated to probably 1000 BC. From Khorasani's book. "Not excavated, confiscated".
Right: The "Essen" sword investigated and (wrongly) assigned to 1200 BC Hittite by Yalcin. Provenance is given as "?"; i.e. it was not excavated.

- Two more swords from unclear sources:

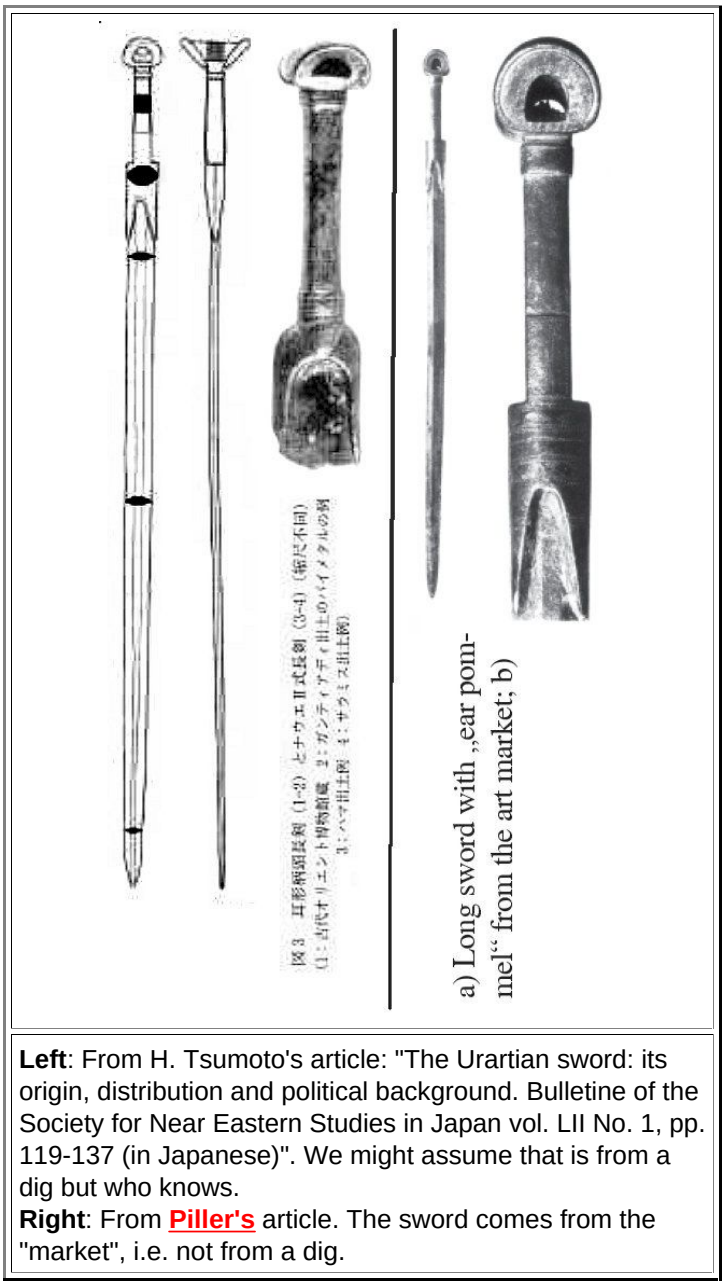
Left: From somewhere in the Internet without identification and description. Probably not from an excavation
Right: Acquired at an auction and donated to the Brussels Royal Museum of History and Art. It is also an example of a "cotton reel pommel" sword.

Next three remarkably well preserved examples offered at an auction (Timeline) in Feb. 2021 and obviously not excavated:

Three bi-metallic swords offered at an auction in Feb. 2021. Described as "Western Asiatic Luristan Swords"

- The sword in the middle shows traces of (mineralized) wood from the sheath on the blade. This might allow to determine the age of the wood (and thus possibly an educated guess at the age of the blade) except that (German) institutes capable of doing advanced radiocarbon dating will not touch "unprovenanced" objects because the German "**Kulturgutschutzgesetz**" interferes.

Next I show are all the pictures of bi-metallic swords I found in the scientific literature with the relevant figure caption



Left: From H. Tsumoto's article: "The Urartian sword: its origin, distribution and political background. Bulletine of the Society for Near Eastern Studies in Japan vol. LII No. 1, pp. 119-137 (in Japanese)". We might assume that is from a dig but who knows.
Right: From **Piller's** article. The sword comes from the "market", i.e. not from a dig.

- Once more: Even this sword was not scientifically excavated. Obviously no good picture of an excavated one was available for the article.

That's it in June 20121. I do not claim that there are not more bi-metallic swords around, in museums as well as in private hands. There certainly are. I do claim, however, that they are not ubiquitous and that most of them come from unscientific digs. I also claim that just one (the "Essen" sword) has ever been metallographically analyzed.

- Given the importance of these swords for understanding the development of early iron technology, it follows:

We must move these swords from private hands into the public domain (i.e. suitable museums)

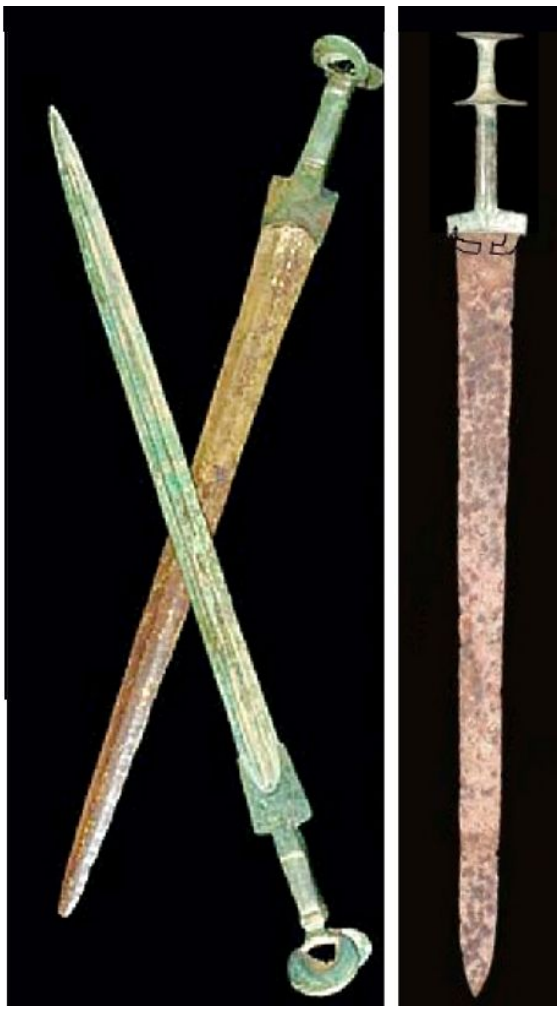
Now some new findings

Timeline Auction, Sept. 2019. Described as:
Western Asiatic Luristan Bronze Hilted Long Sword; 8 - 7th century BC; 77 cm long

On sale (June 20121) by Ancient & Oriental in London.
Described as:
"Large Luristan Bronze Sword with Iron Blade. Date: Circa 1800-600 BC"

- All these swords must have been very expensive show-off items for the rich and mighty. It is surprising, up to a point, that none bears an inscription giving the name of its owner. Could it be that these swords were so rare and distinctive that this was unnecessary since all and sundry new that this was King Assur Slimeball's famous sword?

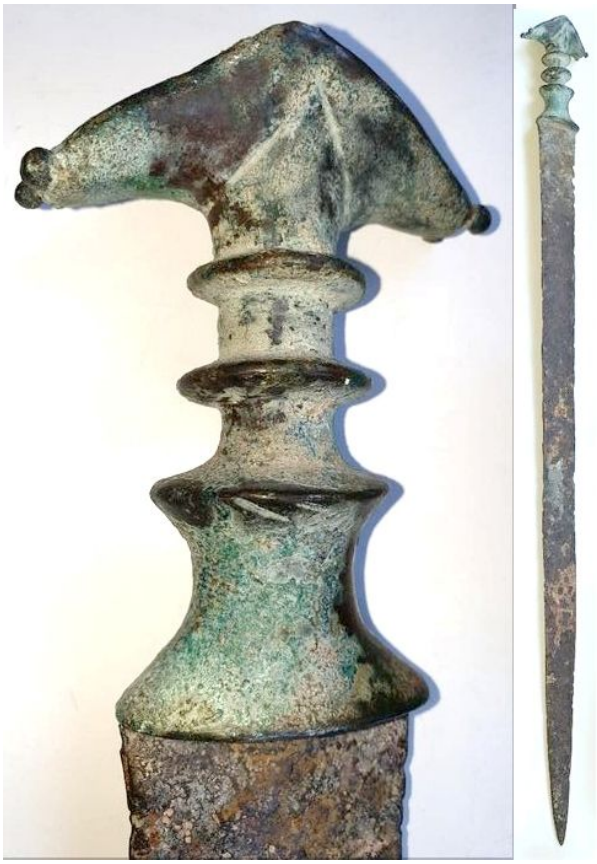
Next we have two good ones:



Left: "A North-West Persian Iron Sword; early first millennium BC"; recently sold by Christies (together with the bronze sword)
Right: A uncommented pictures from a sword lovers blog. Remarkably well preserved and with a "double disc pommel" hilt

- The hilt of the one on the right looks rather like the one of the British Museum pastche

So, yes, bi-metal swords (and daggers) were plentiful, sort of. There might be as many as Luristan mask swords (around a 100) or even some more floating around in the "market".
Here are two swords that came up in a recent auctions:



Offered at an auctions (Catawiki) in June 2021
Described as: Bronze Age Iron Extremely large Luristan sword - 830×45×3 mm

Sold at an auction by Catawiki. Described as:
"Rare Bronze and Iron Sword - 51.7×6.3×4.2 cm"

Next some short bi-metal swords or daggers:

Found on the Internet page "Ancient to Medieval (And Slightly Later) History"; Nov. 2013. Described as:" Persian Bronze and Iron Short Swords, Late 2nd - early 1st Millennium BC"

The next one is on sale by Hermann Historica in June 2021. It's blade is heavily corroded but the hilt is a bit unusual and richly decorated

Described as: "Eisenschwert mit Bronzegriff; Luristan,. 9. - 8. Jhdt. v. Chr.

I still have to see a bi-metal sword being displayed in a museum, though. It is a bit curious that many Luristan *mask swords* have .made it from the market to museums (by donations or outright buying) but obviously not many bi-metal swords.
I also still need to see a bi-metallic sword that was excavated. Well - here it is (perhaps):

The next picture shows a rather well preserved bi-metallic sword that an acquaintance of mine acquired some time ago:

Bi-metallic sword from a private collection

Source: Picture given to me by an acquaintance (private collector)

- While the hilt shape is not uncommon, this is the first bi-metallic sword with this kind of hilt that I'm aware of.

Here is a particular interesting one:

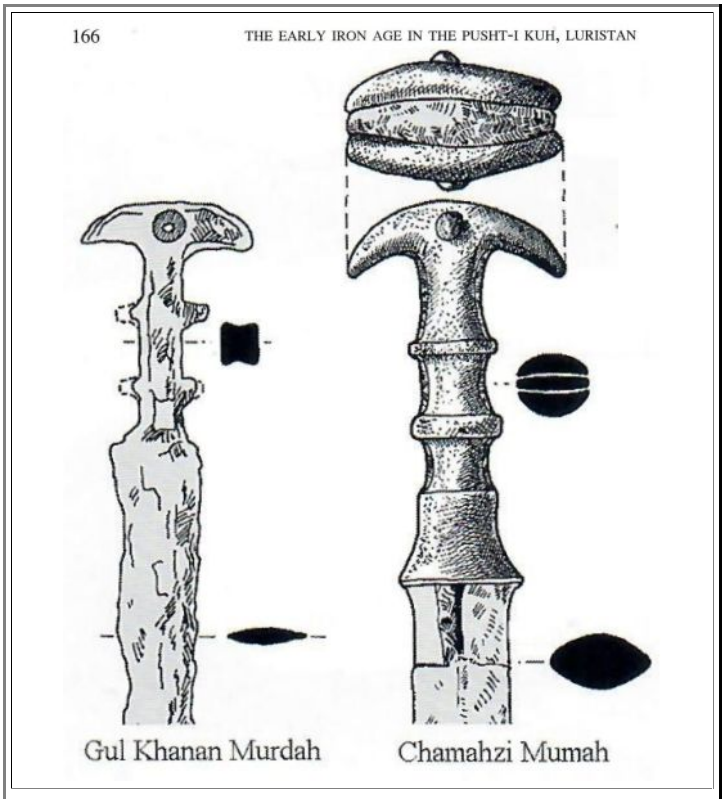


Fig. 133: Sword form Iron Age III tombs in Pusht-i Kuh

- This probably bi-metalic sword (on the right) I found in our old friend, the "Acta Iranica", the huge volume (by **Bruno Overlaet**) containing the Luristan excavation documents.
  The Chamahzi Mumah gravesite is dated to 800 - 700 BC. So dar this seems to be the only properly excavated bi-metal sword!

Here is one from a Sept. 2022 auction (Catawiki). The last offer I saw was Euro 800.-

Offered at a Catawiki auction in Sept. 2022

Here is one from a fall 2022 auction (Hermann Historica). The starting price is Euro 1-200

Offered at a Hermann Historica auction; fall 2022

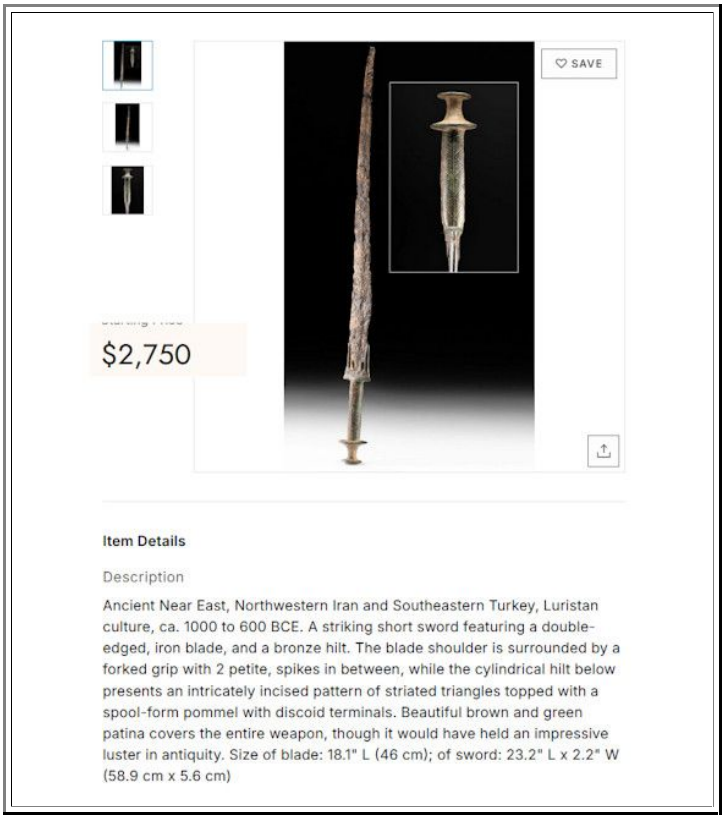
Now an interesrting ob"ne from is 2024 auction (Hermann Historica). It sopld fopr around 5.500.
It is quirtew simeila to the one in Bochum and one of the examples above. The description refers to the Bochum sword in detaisl. (and thus provides doubtfukl information).

Eisenschwert mit Bronzegriff, hethitisch, 14. - 13. Jhdt. v. Chr.

Schmale, spitz zulaufende Eisenklinge mit längsprofilierter Mittelrippe, die unmittelbar vor dem Griff minimal ausschwingt. Die Klinge mit Angel oben im Überfangguss mit einem bronzenen Griff versehen, der mittig drei Rippen besitzt: eine wulstige in der Mitte und zwei gratige darüber und darunter. Letztere auf dem Grat fein gekerbt. Flacher, aber massiver Knauf, in Aufsicht von oben ein "flach gedrücktes" Sechseck mit abgerundeten Ecken. Die Längskanten des Knaufs mittig über der Handhabe mit je einem Knuppel versehen. Unterhalb der Handhabe besitzt die Griffplatte seitlich nach unten ausgezogene Zargen, welche die Klinge seitlich einfassen, deren oberes Ende somit bögenförmig eingeschlossen ist. Länge 56 cm. Breite der Klinge im oberen Bereich ca. 3,3 cm. Breite des Knaufs in Aufsicht 5,5 cm. Die Eisenklinge mit Korrosionsschicht bedeckt und abgesehen von minimalen Ausbrüchen am Rand ausgezeichnet erhalten. Der Bronzegriff mit minimalen Korrosionsnarben und Oxydauflagen. Eine sehr nahe Parallele zu dem hier vorgestellten Stück befindet sich im Ruhr Museum Essen. Äußerst seltenes und frühes Eisenschwert, das zum Zeitpunkt seiner Herstellung eine technologische Innovation darstellte. Eine metallurgische Messung des Eisens erbrachte folgende Beimischungen in der Eisenlegierung: 1,2 % Mangan, 1 % Kobald (typisch für anatolische Lagerstätten), 4,5 % Kupfer (der hohe Anteil rührt wohl von einer Verunreinigung der Patina durch Oxyde des Bronzegriffs her), 0,1 % Zinn und vier weitere Elemente. Die Bronzelegierung des Griffs ist zweifelsohne antik und typisch für sehr alte Lagerstätten, die in römischer Zeit bereits ausgebeutet waren. Die Messung erbrachte u.a. folgende Ergebnisse: 76 % Cu, 17 % Zinn, 1,3 % Blei, 0,8 % Ag, 0,36 % Gold.

Offered at a Hermann Historica auction 2024

A somewhat unusual bi-metal swird came up in an Artemis auction in March 2025. Here is the text:



Offered at a Artemis 2025

- The bronze hilt sports a cotton-reel pommel and a lomg and engravesdhilt