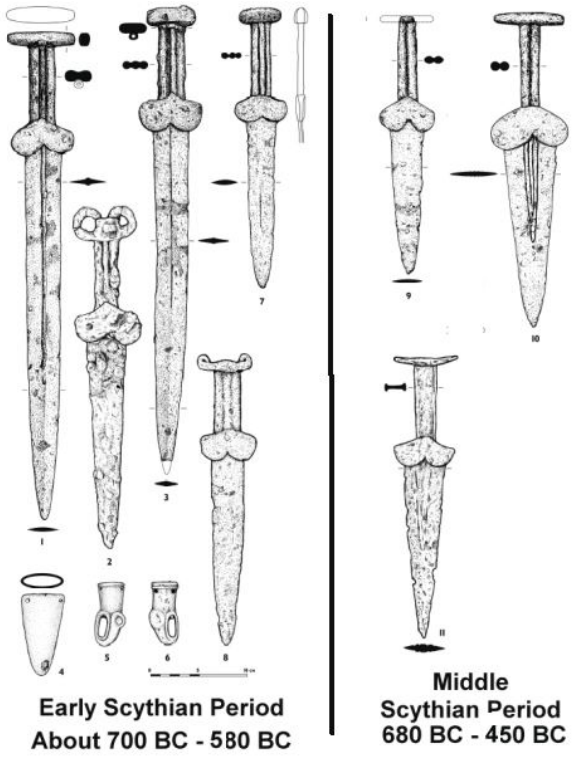
Scythian Akinakai

Introduction and Timeline

Link Hub

How can you tell that some akinaka is of Scythian origin? And with "Scythians" I essentially mean that branch that settled around the Crimea after 900 BC .

Well, look at the guard. It has always a peculiar shape, reminiscent of a heart, a kidney or (excuse me) bollocks. There is no doubt that the old Scythians did not have hearts or kidneys at mind but, excuse me once more, bollocks. Just look at a sculpture of one of their chieftains.
Here are some bollcks type Scythian akinakai:



Early Scythian akinakai
Large picture (with more)

Source: D. Topai "Scythain Akenakai Between Carpathians and Dniester. The Structure of Storm" .

Of course, other cultures (Cimmerians, Assyrians, Sarmatians, ...) might have used bollock-type daggers, and "true" Scythians might have used bollock-free daggers but on the whole it seems safe to correlate Scythians with the bollocks.

The Scythians were not the only ones fond of **bollock daggers**. About 1500 years later they appeared once more. As Wikipedia knows: "A bollock dagger or ballock knife is a type of dagger with a distinctively shaped hilt, with two oval swellings at the guard resembling male testes (" *bollocks*"). The dagger was popular in Scandinavia, Flanders, Wales, Scotland and England between the 13th and 18th centuries, in particular the Tudor period. In the Victorian period weapon historians introduced the term *kidney* dagger, due to the two lobes at the guard, which could also be seen as kidney-shaped, in order to avoid any sexual connotation.".
Here are some 15th century or so bollock daggers:

Bollock daggers
The inset shows horse bollocks
This link shows Scythian bollocks

Source: All over the Net, here "myrmoury.com"

- The next questions is: Given some (Scythian) bollock akinaka, can we tell how old it is? From the early Scythian period (about 700 - 600 BC) or younger? D. Topai supplied a kind of time line that allows at least to make good educated guesses.
  - The early akinakai typically have well expressed bollocks (kind of heart shaped) and a handle / grip with furrows or blights. No. 4 and 5 a below qualify The other ones are probably from around 500 BC or even younger. No. 2, if you look again, isn't of the bollocks type so it doesn't qualify at all.

Descriptions of the Sellers (Auction Houses)
No. 1: Scythian acinaces dagger; 6th - 5th century BC.
No. 2: *Sarmartian* Loop handled dagger. 5th century BC - 4th century AD
No. 3: Acinaces dagger; 6th - 5th century BC.
No. 4 Scythian dagger with omega shaped guard,

6th - 5th century BC
5.Akinake skythisch, 5. - 6. Jhdt
6 Scythian dagger, 4th - 3rd century BC

Source. Photographed by me

- All these akinakai were bought at auctions, The figure captions gives the original description. The "no-bollocks" akinaka is characterized as Sarmartion. The Sarmatians were part of the wider Scythian culture but they appeared somewhat later (500 BC or later). The ring-pommel dagger is actually quite typical for Sarmation weaponry.

Investigations of Akinakai

Metallographic Investigation of a "Polish" Akinaka

At the point in time I'm writing this (Easter 2020; socially isolated because of the Corona pandemic), I can keep it short. I hope that more information becomes available as time progresses. There is exactly one paper dealing with the metallography of a Scythian akinaka:
J. Baron, B. Miazga: Scythian akinakes or medieval kidney-dagger?

- In the words of the (Polish) authors:
"In March 1966, an anonymous finder handed to the four-year-old Muzeum Miedzi (a museum of copper) in Legnica a corroded object reported as discovered in the course of ploughing near Legnica in southwestern Poland. After the conservation work, the artefact turned out to be an iron double-edged dagger which then was identified as piece of *13th-century weapon* (of the "kidney, i.e. bollocks type). After nearly half a century the dagger was rediscovered during the research on medieval weapons done by one of our colleagues. Questions aroused both concerning the character, chronology and provenance of the item."
Here is a picture plus X-ray:

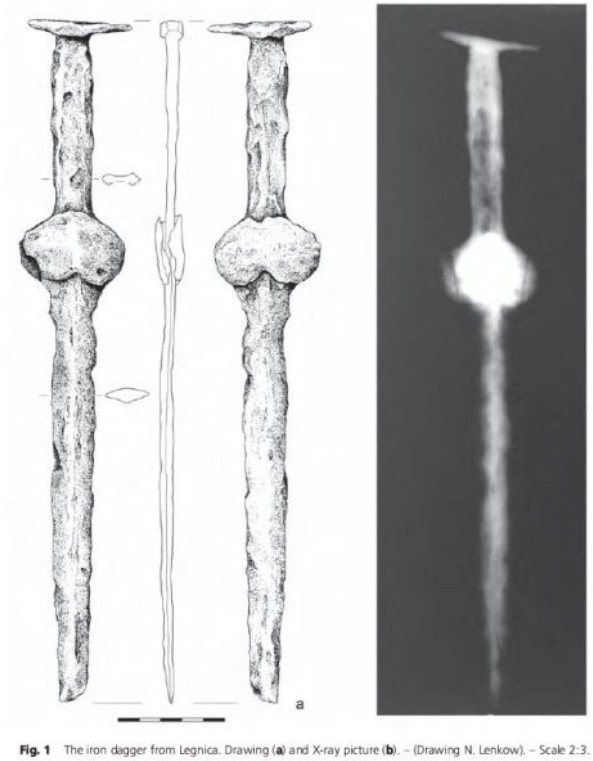


Fig. 1 The iron dagger from Legnica. Drawing (a) and X-ray picture (b). – (Drawing N. Lenkow). – Scale 2:3.

The analyzed "Polish" akinaka

Source: The paper of J. Baron, B. Miazga; accessible by the link given above

- To mal a long story short: The dagger was found to be an (early) Scythian akinakai and small specimen from 3 areas were metallographically investigated. In essence they consisted of low-carbon iron (ferrite) with the usual slag inclusions. Here are two typical pictures:

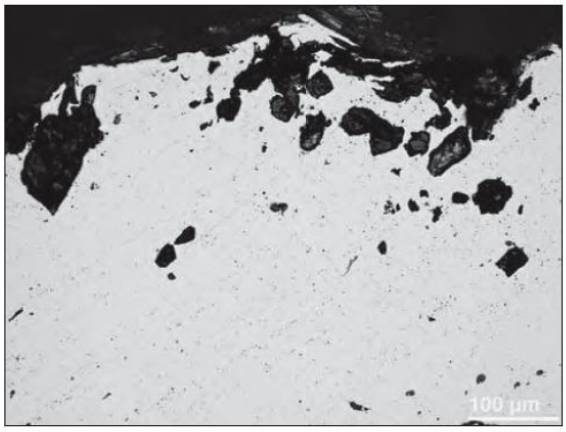


Fig. 6 Sample B showing non-metallic inclusions at the surface as a result of corrosion. Unetched; ×200. – (Photo B. Miazga).

Fig. 8 Sample B showing ferrite grains of various sizes with elongated non-metallic inclusions
Etched: nital; ×200-500. – (Photo B. Miazga)

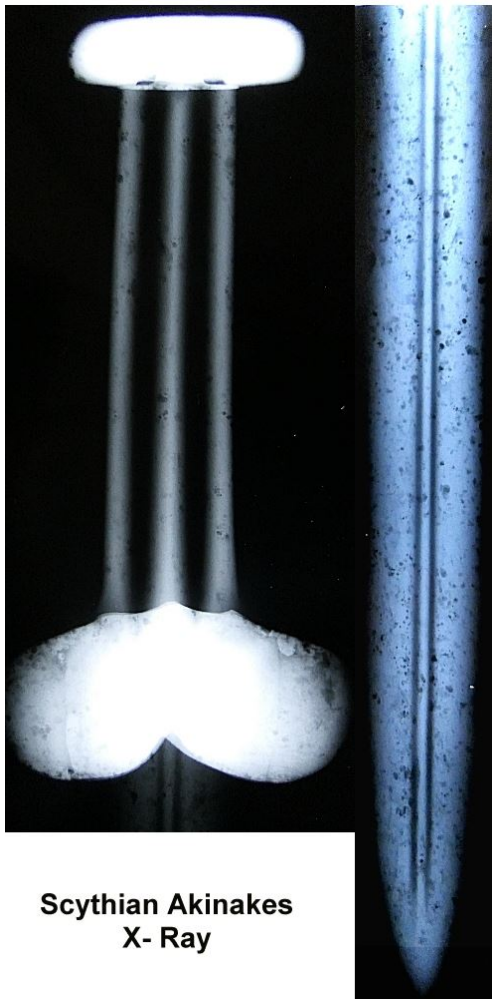
Metallographic structure of the "Polish" akinaka

Source: The paper of J. Baron, B. Miazga; accessible by the link given above

  - Microhardness (Vickers) varies between about 100 and 170, compatibilities with ferrite plus possibly some slight hardening by cold working. Due to the smallness of the sample no statement concerning the forging technique (e.g. lamination, fire welding, etc.) could be made.
- We do not learn all that much about Scythian akinakai but the authors did what they could and they still are the only ones who ever inevestgated an akinaka in in some detail.

Some "Random" Data

- Two of the akinakai shown above (No. 4 and No. 6) have been investigated (by me) to a small extent. Here are the result.
  - No. 4 is rather well preserved and therefore was X-rayed [1)] in the hope of seeing some kind of internal structure. Here si the result:



Scythian Akinakes
X- Ray

- Most of the structure you see results from corrosion pits. The "bollocks" show some vague intrinsic structure; here is a better picture. Sorry. We can't learn anything of interest from the X-ray picture

Akinaka No. 6, if not as old as No. 5, was cleaned (from the rust) and ground / polished to reveal parts of the metal. That did produced some minor results. Here are pictures:

Akinaka No. 6 "as received" and after cleaning / grinding / polishing

Two results emerged:

1. The hilt part above the bollocks was made by fire-welding tow pieces in a kind of crude way by "folding over" a partially flattened part of the blade material on a second piece forming the upper part of the hilt.
2. The blade consists of a core region and a welded-on part on at least one side. The weld was not too good, the weld line is partially corroded and well visible (see arrows).

We night assume a layered structure for the blade; possibly with a harder core part. That might explain why the hilt was made from two pieces. You didn't need as much "expensive" layered iron if you did not extend the layered blade material all the way to the end of the hilt.

That's it. Al I know about the metallurgy and making of Scythian akinakai. I don't believe that anybody knows much more. I do hop that this will change. I might in time investigate No. 5 from above, an early and interesting one. Or I might not. But others - the professionals - should do this. I'm willing do donate some of my akinakai for the noble deed.

[1)] Once more we are indebted to **Mr. Petersen** from the big wharf across the road from my office (formerly HDW) or taking the X-ray pictures "on the side" with his powerful (high-voltage) machine.