## **Large Pictures**

(Click on picture to get full size)

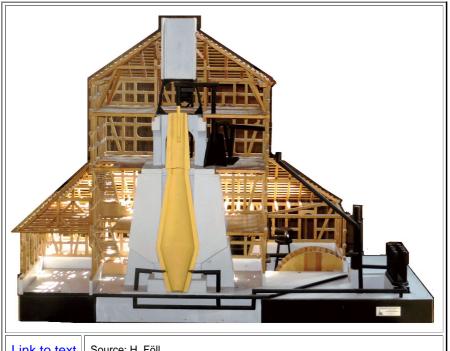
The "Neue Hütte" in Schmalkalden, one of the last iron smelters still running on charcoal. The main smelter is inside the building. On the left are the remains of a smaller unit.

The second picture shows a model of the smelter in the building.



Link to text

Source: H. Föll



Link to text

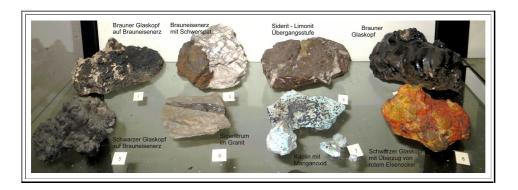
Source: H. Föll

This picture, attempting to elucidate how the smelter works, is from a brochure available at the Schmalkalden Museum.

It is essentially correct even so I'm not sure I subscribe to the correctness of every detail.



This picture shows some of the ores, flux and gangue that went into the smelter. You translate it; <a href="https://example.com/here">here</a> is some help.

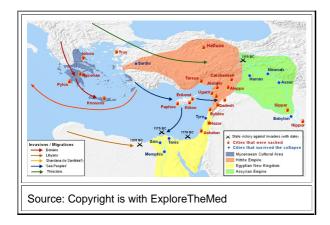


Here is a map of what was going on during the **Bronze Age Collapse**.

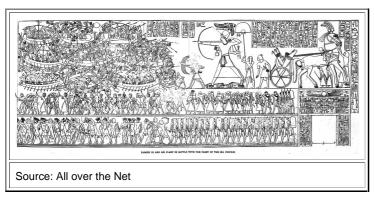
Note that this map contains a lot of known facts but also some interpretations open to discussion and unavoidable simplifications.

Essentially only the Egyptians and the Assyrians managed to defend their homeland (see below) but had problems on their outskirts; the Egyptians lost their Northern colonies, for example. Everybody else was in deep trouble.

Egypt never quite recovered whereas the Assyrians rose to become the dominating power somewhat later.

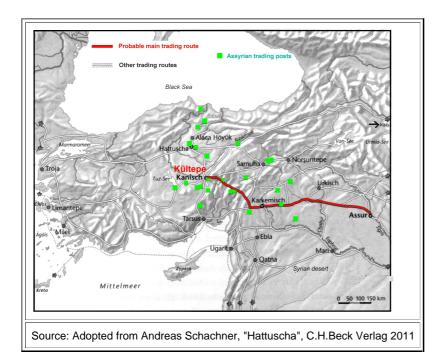


Here is the complete drawing showing the 15 m x 2.5 m limestone relief from 1170 BC in Medinet Habu, Egypt. In the lower row the victorious Egyptians lead off the bound sea people prisoners to captivity.

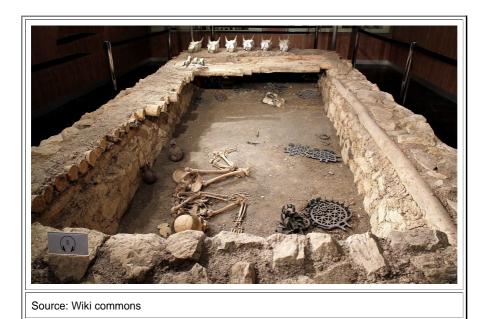


Here is a map showing the extent of Assyrian trade with Anatolia in the second millennium BC.

<u>Kültepe</u> is on the Wstern end of that route.

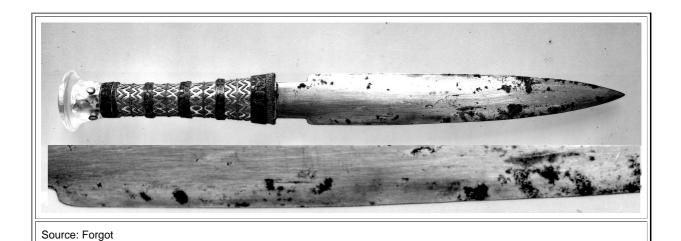


Here is a reconstructed Royal Tomb from Alaca Höyük as exhibited in the Archeological Museum in Çorum.





Here is the original photograoph of King Tut's iron dagger.



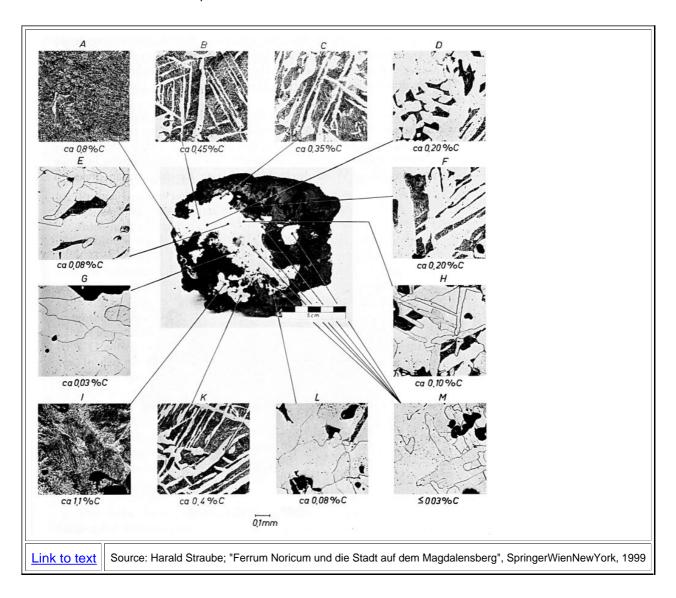
Here is a picture from Isabella Caneva showing a late Chalcolithic elite building of level XV, 4500 BC that was used as a metal workshop in Yumuktepe.



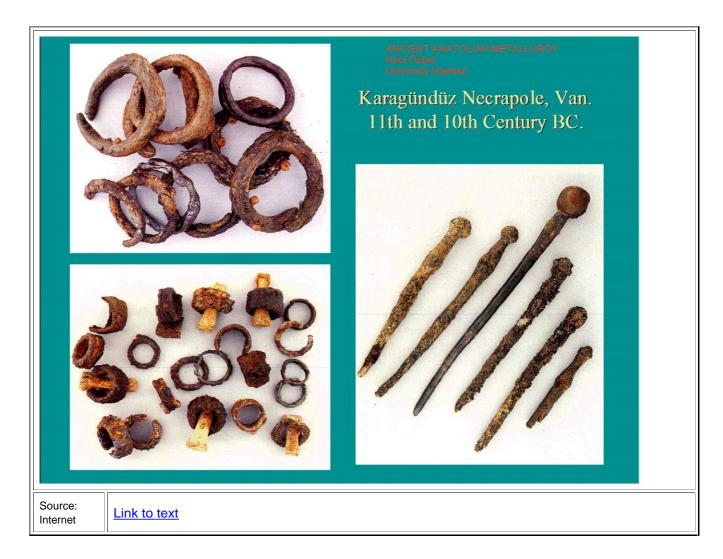
Source: Provided by Isabella Caneva; Thanks!

Here is a bloom produced in an effort to duplicate the making of "Ferrum Noricum" plus microstructure

and carbon concentration in the places shown.

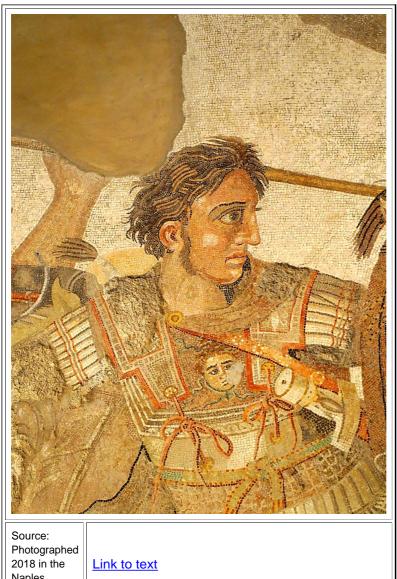


Here is picture from the power point presentation of Prof. Hadi Özbal, showing small "old iron" things.



The <u>picture of Alexander the Great</u> is actually not a picture but a **mosaic**.

Shown is just a tiny part of the whole mosaic that is marvelous to behold even so large parts have been destroyed. Here is a large picture of just Alexander; notice the hilt of his sword.



Naples Museum

To give you an idea about the scale of things - here is the whole mosaic:



Source: Photographed 2018 in the Naples Museum

Link to text

The Alexander Mosaic, dating from circa 100 BC, is a Roman floor mosaic originally from the House of the Faun in Pompei.

It depicts a battle between the armies of Alexander the Great and Darius III of Persia and measures 2.72 by 5.13 metres

] The original is preserved in the Naples National Archaeological Museum.

The mosaic is believed to be a copy of an early 3rd-century BC Hellenistic painting.

The mosaic is made of about one and a half million tiny colored tiles. We (probably) see the Battle of Issus ("333 bei Issus Keilerei" we had to learn in High School).