Old Copper Complex of the Western Great Lakes

- The American Indians essentially were hunters and gatherers in a kind of stone-age culture without any metals, right? Wrong. Some of the American "Indians" had used native copper since 4 000 BC or even earlier until "recently", i.e. before they were killed off completely in one the more successful genocides of recent history. Remember "The Last of the Mohicans" by James Fenimore Cooper? As the saying goes: It was a bad day when the Americans discovered Columbus".
 - The copper came from natural ore deposits, running for about 120 miles along the southern shores of Lake Superior on the Keweenaw Peninsula. The native copper is rather pure, typically over 95%.

 These deposits have bene mined for millennia, the most heavily utilized mines were discovered at Isle Royale, Keweenaw and Ontonagon. From the magnitude of mining it can be concluded that rather large amounts of native copper has been used for tools weapons and ornaments by the native Americans. Large numbers (> 10 000) of copper artifacts have indeed been found axes, adzes, various forms of projectile points, knives, perforators, fishhooks and harpoons. Some of these thing were rather large, indicating that large copper nuggets were found. Copper pieces weighing more than a ton were still found in the 19th century.

 By about 1500 BC a shift from more utilitarian objects to personal ornaments took place, possibly indicating an
- It is pretty much "of course" unfortunately that for a long time nobody believed that primitive Indians could have worked with copper. All kinds of bullshit "theories" were invented to explain the origin of these artifact, always involving racially superior "white" people. This only changed (slowly) when <u>radiocarbon dating</u> became available after 1950.
 - Here are some examples of the artifacts found:

increase in social stratification.



Below the bead is some unfinished part. The big object is a preform, possibly for trading. Her are two of the many stone hammers left behind:



- So let's compare technologies. Old "Turks" and old native Americans. Surprise! They are pretty much identical.
 - The Americans formed sheets by cold working, interrupted by annealing, then folded and polished the surface. No difference to "Turkish" technology. Look at the bead above. It's larger than the Cayönü Tepesi beads but made the same way.

The Americans did build up layered structures but, as it appears, did *not* achieve hammer welding - neither did the "Turks".

Since it is all but sure that the two cultures have never met each other and exchanged copper-working recipes, the <u>diffusion hypothesis</u> fails at this point. That does not prove, however, that the old Chinese, maybe, did learn a few things from the early Turks and their successors even so they the present-day Chinese would hate to have to admit that <u>1</u>).

- This is actually not really surprising. Copper is just copper. You want to work with it you ,must use the same technology as everybody else.
 - The native Americans, however, did not progress to smelting, melting and casting copper or any other metal. Maybe it's just as well, otherwise they might now be Europeans and we would be dead.

^{1) &}quot;The fact that Chinese Archeologists themselves are open to this possibility (concerning diffusion of metallurgical knowledge into China) is a remarkable turnabout from their long-standing position on the indigenous development of metallurgy in China and bodes well for fruitful future discussion" writes V. C. Pigott (eminent archeometallurgist) in the introduction to "The Archeometallurgy of the Asian Old World" Vincent C. Pigott; Editor, University Museum Momograph 89, Uni Pennsylvaia 1999.