

Decipherment of tin ingots from Haifa indicates they are from the Tin Lands of Sarkan of Akkad c. 2000 BC

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Summary

In the 1970's, a fisherman named Adib Shehade found thirty rectangular tin ingots in the sea near Haifa in Israel. He sold them to a tinsmith, who used all but four to repair car radiators. These four were purchased in behalf of Haifa University. Adib found them 60 meters north of a 13th c. BC shipwreck, but they did not come from that ship, so the ingots cannot be dated by normal means.

The radioactive age of the tin ingots matches the tin deposits of Cornwall.

Three ingots have inscriptions in a version of Old European, whose language is Finnish (Harris, 2016a) (Figure 1).

The common element among the three inscriptions is an hour-glass drawing that combines three letters: A-SA-KA. Following normal rules for compressing letters when writing, these expand into two phrases:

ahjs Sarkan meaning 'metal of Sarkan'

ahjs Akkan meaning 'metal of Akkad'

Taken together they say 'Metal of Sarkan of Akkad'.

The three ingots read:

8251. Handy metal of Sarkan of Akkad

CMS6. Slave metal of Sarkan of Akkad

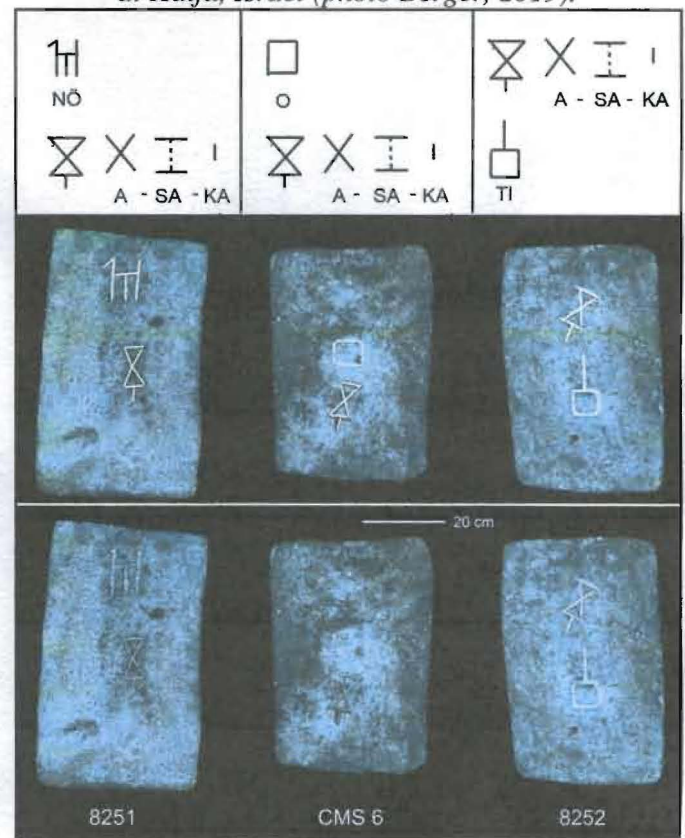
8352. Metal of Sarkan of Akkad, tin

They are written at a slight angle, implying not from Akkad itself but from a territory controlled by Akkad.

Of several possible countries that wrote with Old European, only the writing on Sumerian cylindrical seals match that of the ingots.

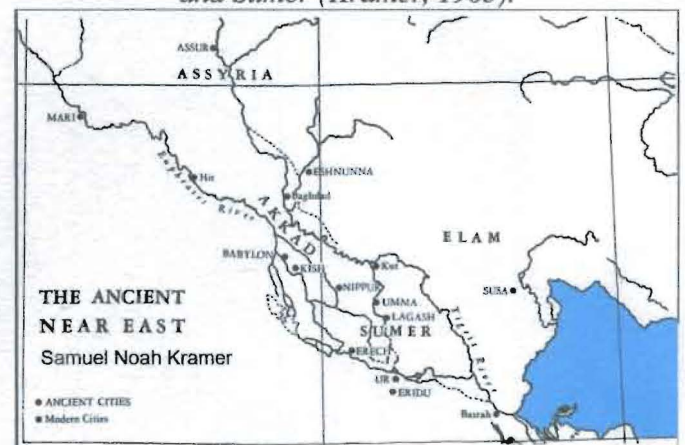
Therefore, the tin ingots came from the tin mines of Cornwall after Sargon of Akkad conquered Sumer, the former owner. Sargon built a fleet of ships from the Cedars of Lebanon; part of this fleet likely transported the ingots. The Sumerian scribe at Cornwall inscribed rather than stamped the tin ingots with the new owner's name, Sarkan of Akkad.

Figure 1: Three inscribed tin ingots found in the sea at Haifa, Israel (photo Berger, 2019).



Sargon of Akkad

Figure 2. Akkad was situated between Assyria, Elam and Sumer (Kramer, 1963).



Akkad came into existence by the territorial conquest of Sargon of Akkad. Exactly when is controversial. The Silver Cup of Elam from Princess Kiririsa discusses the upcoming marriage of her sister, Princess Narute of Elam to Prince Sarkan of Sumer,

no mention of Akkad. Kiririsa spelled his name as Sarkan, meaning 'flagon, goblet'. The two countries had warred intermittently; by this marriage, the sisters hoped to stop the wars. It worked; peace existed for as long as Narute lived. Kiririsa wrote:

Iron the new gown; I left it made loose. Sumerian men will escort all the champions of ours. Foolish to court the man Sarkan. Have the heart to court Sarkan!" (Harris, 2016b)

Over the last century, scholars have greatly reduced their estimate for the start of the reign of Sargon of Akkad. In 1931, L. A. Waddell estimated 2725 BC; in 1964, George Roux estimated 2334 BC; and in 1998, David Rohl estimated 2117 BC (Figure 3, Table 1). The start of his rule directly affects the possible date of the tin ingots.

Figure 3: Estimates of Sargon's reign over time.

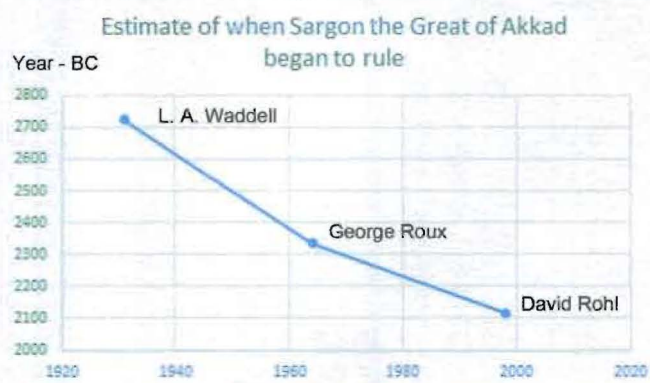


Table 1: King list of Akkad.

Akkad King List	George Roux	Short Chron.	David Rohl
Sargon	2334	2270	2117
Rimus	2278		2061
Menes	2269		2052
Narim Sim	2254		2037
Sar-kali-saari	2217		2000
Anarchy	2192	2083	1975

By his eleventh year, Sargon controlled an immense territory, from the tin mines of Cornwall to India.

"Both his own records and the records of the Omen indicate that by his eleventh year he [Sargon the Great] had conquered the world. The Western lands indicated Muru (Amorites) and the tin mines of Cornwall." (Lyle, 2015).

"In the eleventh year the Land of the West in full his hand subdued. He united them under one rule." One of his edicts on the boundaries of his empire refers to his "conquest of the land of the Muru (Amorites)" and his suzerainty over "the Tin-land country which lies beyond the Upper Sea (Waddell, 1931)

In Mesopotamia, 'upper sea' and 'lower sea' were the common names for the Mediterranean Sea and the Persian Gulf. 'Beyond the upper sea' lay the Atlantic Ocean. Therefore, the 'tin-land country' bordered the Atlantic Ocean.

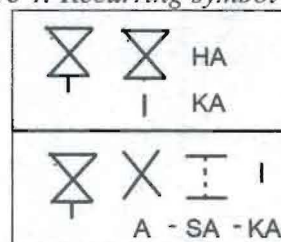
Age of the tin ingots

Using Rohl's time line, the tin ingots found at Haifa came from the Akkadian-owned tin mines of Cornwall between 2106 BC and 1975 BC.

Decipherment of recurring symbol

The recurring compound symbol reads HA-KA. Nouns written this way are 'hawk, hook, paddock, pasture, woolen coat, tholepin, duck, tall evergreen', none of which make sense.

Figure 4: Recurring symbol letters.



The closest country name is Akkad, which does not begin with H. However, AKKAT does make sense; it means 'women', the first letter of the alphabet, the ruling assembly of women.

Taken apart in a different way, the recurring letters are A-SA-KA. Normally, the last letter of a syllable is not written, but in this case, initial S could clarify the previous letter A, which then becomes *ahjs* meaning 'metal'!

The remaining letters have two different readings:

A-KA from *Akkan* meaning 'of Akkad'.

SA-KA from *Sarkan* meaning 'of Sarkan'

Taken together, the symbol means either 'metal of Akkad' or 'metal of Sarkan'.

Note that the symbol is tilted slightly, so it does not mean Akkad itself but a territory ruled by Sarkan. In this case it is Cornwall, once a territory of Sumer.

Meaning of Sargon

Sargon took the Semitic name *Sharru-kin* meaning 'Legitimate King' when he wrested control of Kish. According to one inscription, his given name may have been *Sharru-dan*.

The Silver Cup of Elam writes his name as SARKAN, which means 'flagon, goblet' in Finnish. It is highly unlikely that a mother would name her son 'flagon', but after a military victory, his soldiers might repeat this word in a toast.

Translation

Old European:

8251. NÖ A-SA-KA

CMS6. O A-SA-KA

8252. A-SA-KA, TI

Finnish decipherment:

8251. Nöyrä ahjs Akkan

CMS6. Ohja ahjs Akkan

8252. Ahjs Akkan, tin

English translation:

8251. Handy metal of Akkad

CMS6. Slave metal of Akkad

8352. Metal of Akkad, tin

Notes:

8251: NÖ is very rare, with few possible words, so final -RÄ in *nöyrä* is not necessary. It is so rare that the scribe wrote it as a reversed NO. In this context it means 'competent; handy'.

CMS6: *Ohja* meaning 'slave' confirms that slaves worked the tin mines of Cornwall.

8352: *Tin* from *tina* is an old Finnish word.

Kalevala (1430 BC) mentions *tina-vöita* 'tin-adorned belts'; *tina-neuloin* 'with tin needles', *tina-päitä* 'tin head ornaments', and *tina-rinta* 'tin ornament'.

Source of tin is Cornwall

Robert Clayton devised a means to measure the plutonic age of tin, either alone or combined with copper, by ratioing lead isotopes of tin that derive from the decay products of radioactive uranium

(Clayton, 2001). Daniel Berger et al. used high-resolution spectroscopy to fix the plutonic date of tin from several shipwrecks near Haifa at 295 BC for one, and 291 BC for the aggregate (Berger et al., 2019).

A plot of the age of worldwide tin deposits quickly narrows the provenance to Europe (Figure 5). Within Europe, only Cornwall has the right age (Figure 6).

Figure 5: Age of tin deposits around the world.

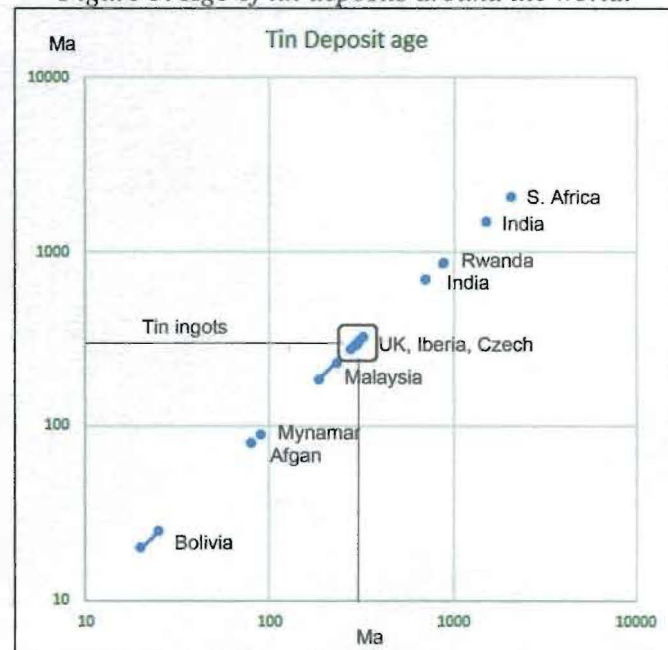
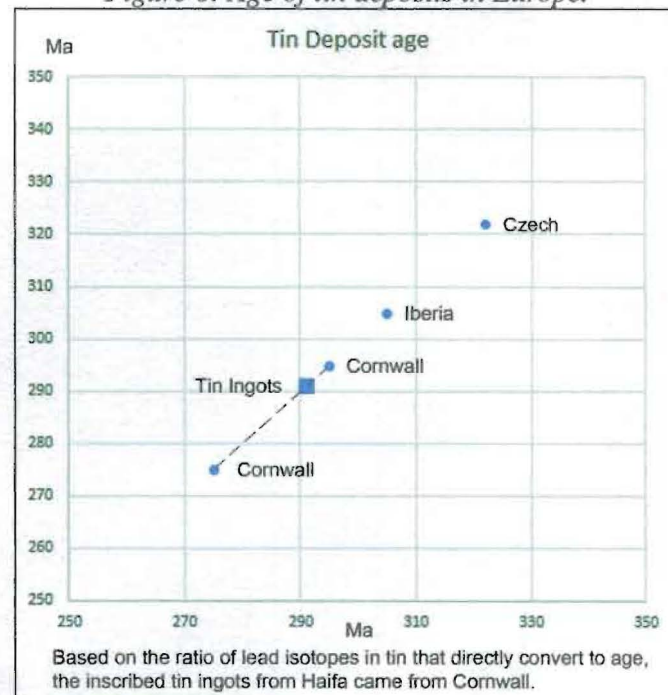


Figure 6: Age of tin deposits in Europe.



Possible source of inscriptions

When Sargon took over the tin mines of Cornwall, they were already in full production. Once, when he was younger and worked as a high administrator for Sumer, he disappeared for three years. Perhaps he went to Cornwall. As a military general, Sargon did not travel to Cornwall, but conquered the country that owned the tin mines. Which country was that? Perhaps the inscriptions will give a clue.

When Sargon came to power, several maritime countries spoke Finnish and wrote in a version of Old European. The scribe of the ingots came from one of these, and depended on the recipient being able to read his writing.

Figure 7: Comparison of letters from different countries with those of the tin ingots.

Consonant Vowel Syl.	Tin Ingots	Sumerian Sealstones	Old European	Indus Valley	Linear Elamite	Phoni- cian	Val Camonica
A	X	X	X	X	X	X	X
O	□	□	□	𐎶	𐎶		□𐎶
KA	'	'	'	'	'	'	'
NO			𐎶	𐎶			𐎶
NO	𐎶						
SA	𐎶	𐎶	𐎶	𐎶	𐎶	𐎶	𐎶
SA		=	=	=	=		=
TI	𐎶	𐎶	𐎶	𐎶	𐎶	𐎶	𐎶

Minoan Crete

Minoan Crete was settled at the same time as Tyre, 2000 BC, by a fleet of Danish, Swedish, Finnish and Polish warriors and their families, who had sailed from Sweden (Oera Linda Boek). Although they spoke Finnish, they wrote in Linear A, not Old European, so the inscriptions on the tin ingots are not Minoan.

Elam

The Silver Cup of Elam is a wedding gift from Princess Kiririsa, Goddess of War and Fertility, to her sister Princess Narunte, Goddess of Victory, on the eve of Narunte's marriage to Prince Sargon of Akkad. Both are pictured on the cup, Kiririsa kneeling, Narunte standing (Arch. Museum of Iran at Tehran).

Inscribed on the cup (Linear Elamite Q), Kiririsa encourages her sister to be brave, and reveals that her wedding gift to Sargon will be a mace (Harris, 2016b). This mace Sargon always carried in battle and he never lost a battle. It was handed down father to son, ending up with his great-grandson Shar-Gali-Sharri. In 1883 the British Museum acquired the mace head, a votive gift deposited at the temple of Shamash in Sippar. Walter Hinz, an expert on Elam, dated the cup to the early part of the reign of Sargon of Akkad, before Akkadian replaced Linear Elamite (Hinz, 1969). However, letters O and TI do not match the ingots.

Figure 8: Silver cup from Elam. (Arch. Museum of Iran in Tehran)



Indus Valley

Sargon's rule extended to the Indus Valley civilization of India and Pakistan, who wrote in Finnish with a distinctive variation of Old European. However, letter O does not match the ingot inscriptions.

Frisland, Phoenicia

Frisland (Freya's land), centered in the Netherlands and Denmark, spoke Finnish and wrote in Old European at the time of Sargon of Akkad. *Oera Linda Boek*, the history of the Frisian people 2193 to 0 AD, lists their foreign territories. These include France, coastal Spain and eastern England, where they sent convicts and other unwanted people, but not western England or Cornwall.

Frisian navigators dominated trade in the North Atlantic and Mediterranean, referred to as Phoenician. Phoenicia was a sheltered port on an island at the northern branch of the Rhine in Frisland, whose emblem was the Phoenix Bird (Figure 9, now called Ouddorp).

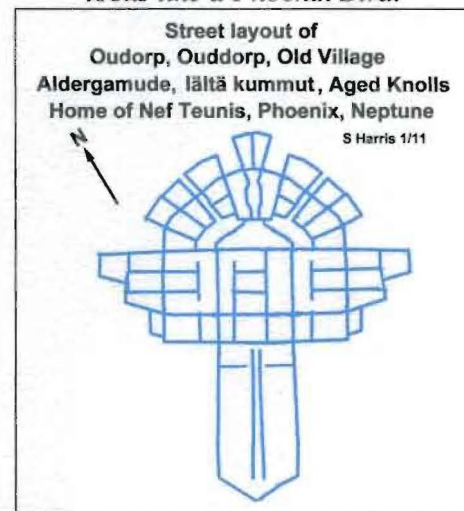
Frisian Admiral Nef Teunis married Demeter, the sister of Zeus, and adopted Korea, who later became Europa. They founded Tyre and Tunisia, and set up many trading centers on offshore islands in the Atlantic and Mediterranean. He was also called Phoenix and Neptune.

On the tin ingots, letter TI is very close, and letter SA is an exact match. Phoenicians may have transported the ingots to Akkad by way of the shortcut through their territory in France on the rivers Seine and Rhone. Otherwise, Phoenicians routinely sent large fleets to the Mediterranean when they had colonies in Greece, Italy, Spain and North Africa before the sinking of Aldland in 2193 BC. After this catastrophe, they lost all their Mediterranean colonies and had no need to send supply fleets, but still controlled the routes to the Mediterranean Sea.

Figure 9: Location of the port of Ouddorp in 1700 BC on the lee side of an island at the mouth of the northern branch of the Rhine.



Figure 10: Canals of Ouddorp circa 2000 BC. These have been filled in to make streets. The canal system looks like a Phoenix Bird.



Sumer

Most Sumerian inscriptions are in Cuneiform, but cylindrical seal stones were written in Old European. Because tin is a commodity, the scribe might choose to use Old European. Every letter but SA exactly matches the inscription on the tin ingots, and SA is very close. Therefore, it appears that Sumer owned the tin mines of Cornwall until conquered by Sargon. Afterwards, Sumerian slaves continued to mine tin, but now labeled the ingots as belonging to Akkad.

Sargon's histories say he built a great Mediterranean fleet from the cedars of Lebanon. He personally conquered Cyprus, then returned to Akkad. Most likely part of this fleet transported the tin.

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