

The ships of Tarshish are French!

New scientific evidence proves that France will save Israel. ¹

If I made the above statement on the hand of supposed “scientific” and “biblical” evidence I would be scorned (and rightly so). The idea of president Macron saving Israel is ridiculous, yet there are Christians who claim that the UK (and by extension the USA) are the “ships” of Tarshish. They latch onto a study² published by PLOS³ that has been peer reviewed but they cherry-pick the article to support their **confirmation bias**, in fact, I doubt that they have read the article at all because they reference the newspaper version. ⁴ This is like a student cheating at his homework by watching a movie, or reading a summary version, rather than reading the original literature. The “cartoon” version does not contain the same nuance and analysis as the scientific literature.

*“The lead isotope ratios strongly suggest a European tin source and exclude Asian and African deposits. Because of data overlap with the ores and larger variations within the finds, a couple of mines have to be taken into consideration for the Hishuley Carmel and Kfar Samir south ingots. The list of potential suppliers is also long for the two analysed ingots from Haifa. On the basis of our tin isotope data of ores the most probable candidates are the eastern and western parts of the Erzgebirge, cassiterites from the Carnmenellis and St. Austell granites in Cornwall **and several regions on the Iberian Peninsula**” [p.35]*

¹ France has been used by way of exaggeration. Of course, the Iberians were neither French nor Spanish or Portuguese. The term Iberian, as used by the ancient authors, had two distinct meanings. One, more general, referred to all the populations of the Iberian peninsula without regard to ethnic differences (Pre-Indo-European, Celts and non-Celtic Indo-Europeans). The other, more restricted ethnic sense, refers to the people living in the eastern and southern coasts of the Iberian Peninsula, which by the 6th century BC had absorbed cultural influences from the Phoenicians and the Greeks. The Iberian language which has now disappeared is possibly related to the Basque language.

² Article Source: [Isotope systematics and chemical composition of tin ingots from Mochlos \(Crete\) and other Late Bronze Age sites in the eastern Mediterranean Sea: An ultimate key to tin provenance?](#) Berger D, Soles JS, Giunilia-Mair AR, Brüggmann G, Galili E, et al. (2019) Isotope systematics and chemical composition of tin ingots from Mochlos (Crete) and other Late Bronze Age sites in the eastern Mediterranean Sea: An ultimate key to tin provenance?. PLOS ONE 14(6): e0218326. <https://doi.org/10.1371/journal.pone.0218326>

³ PLOS (for **Public Library of Science**) is a non-profit open-access science, technology and medicine publisher with a library of open-access journals and other scientific literature under an open-content license.

⁴ Groundbreaking study: Ancient tin ingots found in Israel were mined in England. Enigma of origins of Bronze Age Levant’s tin supply solved through isotope and chemical composition analysis that shows 13th–12th century BCE tin bars likely came from Cornwall. <https://www.timesofisrael.com/groundbreaking-study-ancient-tin-ingots-found-in-israel-were-mined-in-england/>

Of course, we can all cherry-pick the information that suits our bias but is that intellectually honest?

Evaluation

The web page “Last Things” looks at the provenance of tin and references various studies from PLOS and the Journal of Archaeological Science but (where possible) the complete article is reproduced.

As a scientist (Senior Chemist) I am well aware of the necessity for peer review and careful analysis and have used many of these techniques myself (AAS, atomic absorption spectrometry ; AES, atomic emission spectrometry) although I freely admit that I am more of a “bucket chemist” than a PhD research chemist.

This seems like a thoroughly researched paper and although I do not question the integrity of the scientists involved, by their own admission certain methodological elements raise concerns. Namely, **they freely admit** that they **mixed up the samples** and have interpolated certain results to make them fit. Now, back in the day when I did such things this would invalidate the whole experiment and it would need to be duplicated.

*“.....we fear sample confusion in this case due to the blatant coincidence with our data of ingot T4 (T3 ++ T4) (This problem will be addressed again in the lead isotope section). Finally, we cannot reconstruct **when the potential confusion might have occurred**, but irrespective of this issue, the data of MA-175670/MA-15671 (after interchanging of the data sets) and the other Hishuley Carmel ingots show a reasonable agreement for lead.....[p.18]*

*“Chemical data of the Hishuley Carmel (blue symbols) and Kfar Samir (red symbols) tin ingots collected in this study. They are compared with data of the same objects from previous studies of Begemann et al. [62] (a) and Gale [31]/Galili et al. [26] (b). **The arrows indicate interchangement of data** of the respective samples after **the recognition of sample confusion** (diagrams: D. Berger)”. [Fig 9. Graph page 20]*

*“For all other samples, there is either good agreement for one isotope ratio (MA-175621, MA-175668, MA-175671) or no agreement at all. **These differences are most likely not due to sample confusion** since the values determined by us do not show up are most within the datasets of Stos-Gale et al”. [p.26]*

Of course, if we were pedantic, we could dismiss any conclusions out of hand. However, I am not willing to do that as they have been commendably honest and much of their research is complex and innovative.

Difficulties caused by the smelting process

It is also important to qualify any results because a newspaper article will of necessity gloss over any ambiguities and present the research as unassailable “facts”. Of course, that is not how science works as new observations and data should demand the adjustment of scientific theories (the climate change debate demonstrates that scientists can be just as dogmatic and obtuse as non-scientists). So here then are the complexities that delineate the results:

A major obstacle (from my viewpoint) is the absence of an internationally agreed **tin standard** which makes comparative studies difficult since there is still *“no internationally certified tin reference material an in-house standard was prepared from ultra clean tin metal”* [p.12]). Another objection is that (although not observed) isotopic fractionation *due to evaporation can occur* [p.12] with regards to cassiterite/stannic oxide reduction. In other words, thermal and chemical reduction can result in **structural changes**. They admit that, *“the use of trace element concentrations for provenance studies of ancient tin requires several preconditions one of which is known behaviour of the trace elements during tin ore smelting”* [p.15]. However, often the smelting process cannot **be exactly known**, *“and smelting experiments show that only a few minor and trace elements in tin ores might be diagnostic since many do not partition quantitatively into the metal during the smelting process and either get lost to the slag or are considerably depleted in the metal.....”* [p.16-17] and *“This observation could be attributed to contamination by corroded material, but since the samples were cleaned prior to analysis it is more likely that it reflects differences in the reduction process (e.g. temperature, oxygen content of the atmosphere) of the tin ores or the intensity of refining after smelting”*. [p.17]

Perhaps this is the most telling statement, *“Due to the low lead concentrations, however, there is a risk of anthropogenic lead contamination of tin metal during the smelting process by minerals accompanying the ore charge, by fuels used (e.g. charcoal) and by the smelting structures (furnaces, crucibles). Moreover, corrosion can contaminate tin posthumously by exchanging lead with the environment during burial. All these contamination sources can*

make it difficult, if not impossible, to determine the tin provenance by means of lead isotopes.”
[p.23]

So, **the smelting process itself** can make it impossible to determine tin provenance by means of lead isotopes. But even ruling out the smelting process all that can be said (from isotopes) is that the tin originates from the same formation age; *“If significant contributions of anthropogenic lead can be excluded, the lead isotope composition of the tin metal may be used to determine the provenance of the parental ore. Since cassiterite mineralisation’s throughout Eurasia were formed at different times in the Earth’s history this approach can help to narrow down potential tin ore sources. Of course, ores with the same formation age and the same common lead composition cannot be distinguished”.”* [p.23]

“Depending on the applied temperature, tin isotope ratios will increase during repeated melting and casting processes because of the possible loss of tin vapours or due to dross formation. At the same time, tin metal will oust elements as dross (mostly oxides), which are not completely soluble within its crystal lattice (e.g. elements forming intermetallics such as Fe and Mn) or which are less noble. Regardless of whether such operations were actually carried out and how they worked in detail, at least three different ore charges must have been used to produce these ingots. Their origin could be different tin sources, but they could as well stem from different mines or locations of the same deposit”. [p.31]

Their Conclusion

“The tin isotope composition helps to further narrow down the tin origin, and in combination with trace elements it points to Cornish tin ores (possibly from Carnmenellis granite area) **as the most likely sources. However, other European sources, such as the Erzgebirge province or the French Massif Central, cannot be excluded categorically”**. [p.36]

Discussion

There is no doubt in my mind that Cornwall supplied tin to the Ancient Near East **as did Iberia and lots of other places**, however, bible prophecy cannot be determined by a single verse coupled with wishful thinking and poorly understood science. There is every indication that the merchant ship of Tarshish in Ezekiel 38 **wants to join in with the plundering of Israel**. Any interpretation that casts the merchants of Tarshish in a positive light is just more wishful thinking. Moreover, those who adopt such fanciful interpretations out of patriotic and nationalistic zeal assiduously avoid noticing the Godless, ruthless and plain evil way that the Anglo-Zionists have behaved (and are still behaving). Moreover, the Anglo-Zionists are already allied (and have been for at least 150 years) and they have brought nothing but war and repression to the world through their Empire building and financial control. The sad thing is that those who promote this type of interpretation cannot (or are not interested) in what this prophecy meant in Ezekiel's day. Apparently, that is not important.

P.S. To the Brexiteers....do your homework. Even if you "leave" the EU **you will still be part of the EU defence pact**. A nation that does not command its own military **is not a sovereign nation** (LOL).