

The Lost Language of the Ghassulians: Proto-Writing at Nahal Mishmar?:  
A Response to [“When did people start writing in the Levant?”](#) By Nissim  
[Amzallag](#)

*While Amzallag’s proposal to see the Nahal Mishmar treasures as a visual code is ingenious, it suffers from several linguistic problems. We cannot be certain that the Ghassulians spoke a Semitic language and—even if they did—the rebuses that Amzallag proposes would not work in a Semitic language of the late 5th or early 4th millennium BCE.*

See Also: [On the Origin of Alphabetic Writing Hebrew or Not?: Reviewing the Linguistic Claims of Douglas Petrovich’s The World’s Oldest Alphabet](#)

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In 1961, the archaeologist Pessah Bar-Adon discovered a hoard of copper objects at Nahal Mishmar (Fig. 1) associated with the Ghassulian culture of the Chalcolithic period (3770–4500 BCE). The hoard includes beautifully-wrought scepters, crowns, and mace heads (Fig. 2), which have provoked both wonder and a vigorous scholarly debate over their cultural significance. Recently, Nissim Amzallag (2018; 2019) has offered an ingenious interpretation of these objects. He suggests that they represent a visual code built on the rebus principle: recurring symbols represent phonologically similar words, which can be combined to form short phrases. An ibex head, for example, represents ore because the Semitic word for ‘ibex’—*ʿōper*—resembles the Semitic word for ‘ore’—*ʿāpār*. According to Amzallag (2018: 83; 2019: 5), the creators of these objects employed this visual code to record their musings on the process of copper-smelting and its cultural implications for their society. If he is correct, then the Nahal Mishmar treasures constitute one of the earliest known forms of proto-writing.

In this review article, I will evaluate the linguistic claims underlying Amzallag’s proposal: namely, that the Ghassulian culture spoke an early Semitic language and that the recurring artistic motifs of the Nahal Mishmar treasures could serve as rebuses in this language. Both claims I argue are problematic.



person pronoun 'I'. But different languages contain different homophones. The words for 'I' and 'eye' are homophonous in English, but not in French (*je* vs *œil*). This means that the potential for forming and decoding rebuses varies by language. The following rebus, for example, forms a coherent phrase in English, but not in French:



English Reading: Eye bee-leaf ewe ≈ I believe you.

French Reading: *œil abeille feuille brebis* ≠ *Je vous crois*.

To be able to interpret a rebus correctly then, we must first know what language its creators spoke.

### Language Sleuthing

In the case of the Ghassulians, this is easier said than done. Before the advent of written records, we cannot know with certainty what language or languages a given population spoke. We can, however, make educated guesses. Amzallag (2018: 51–52; 2019: 3) suggests that the Ghassulians spoke a West Semitic language because the West Semitic languages of the Levant all use native Semitic terms to designate ‘copper’ (Arabic *nuḥās*, Hebrew *nəḥōšet*, *nəḥûšā*, Phoenician *nḥšt*, Syriac *nḥāšā*; compare also Ethiopic *nəḥās*, *nāḥs*, *naḥas*).<sup>1</sup> Based on this fact, he suggests that speakers of Common West Semitic—the ancestor of all of the West Semitic languages—invented copper-based metallurgy around 5000 BCE and coined the term *\*nuḥās* for ‘copper’, which many of the West Semitic languages subsequently inherited. If speakers of Common West Semitic didn’t invent copper-based metallurgy—Amzallag reasons—we would expect the words for ‘copper’ in the West Semitic languages to be loanwords from a non-Semitic tongue.

There are several problems with this line of reasoning, however. For one, the Semitic pedigree of *\*nuḥās* does not necessarily indicate that West Semitic speakers were at the forefront of a metallurgical revolution. Speakers have several options when choosing names for new technologies: they can borrow the original name of the technology (e.g., German *Auto* ‘automobile’); they can reproduce its meaning using native morphology (e.g., German *Dampfmaschine* ‘steam-engine’); or they can coin a new word for it (e.g., German *Kühlschrank* ‘refrigerator’, literally ‘cool-cupboard’). It is possible therefore that speakers of Common West Semitic borrowed the use of copper metallurgy from speakers of another language, but coined an indigenous term for ‘copper’ itself.

Second, there are chronological issues with identifying the Ghassulians as West Semitic speakers. As Huehnergard and Pat-El (2019: 1; see also Kitchen et al. 2009: 2707) note, speakers of Common Semitic did not enter the Levant until the late 5<sup>th</sup> or early 4<sup>th</sup>

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<sup>1</sup> Lane 1863–1893: 2775; Koehler and Baumgartner 2001: 691; Hoftijzer and Jongeling 1995: 726; Smith 2007: 2341; Leslau 1991: 395.

millennium BCE—around the same time that the Nahal Mishmar treasures were first forged. This means that if the Ghassulians did speak a Semitic language, they most likely spoke Common Semitic, rather than the chronologically later Common West Semitic (see Fig. 3). But we cannot safely reconstruct a Common Semitic word for ‘copper’ because the East Semitic languages use a different term to designate this metal (e.g., Akkadian *werûm*) (Diakonoff 1998: 213).<sup>2</sup> The disagreement between the East and West Semitic languages suggests one of two possibilities: 1) speakers of East or West Semitic replaced the inherited Common Semitic word for ‘copper’ with a new coinage; 2) the members of the two speech communities independently coined a word for copper because they adopted copper-based metallurgy after Common Semitic split into western and eastern branches. If the second scenario is correct, then the Ghassulians could not have spoken Common Semitic since they were well-acquainted with copper.

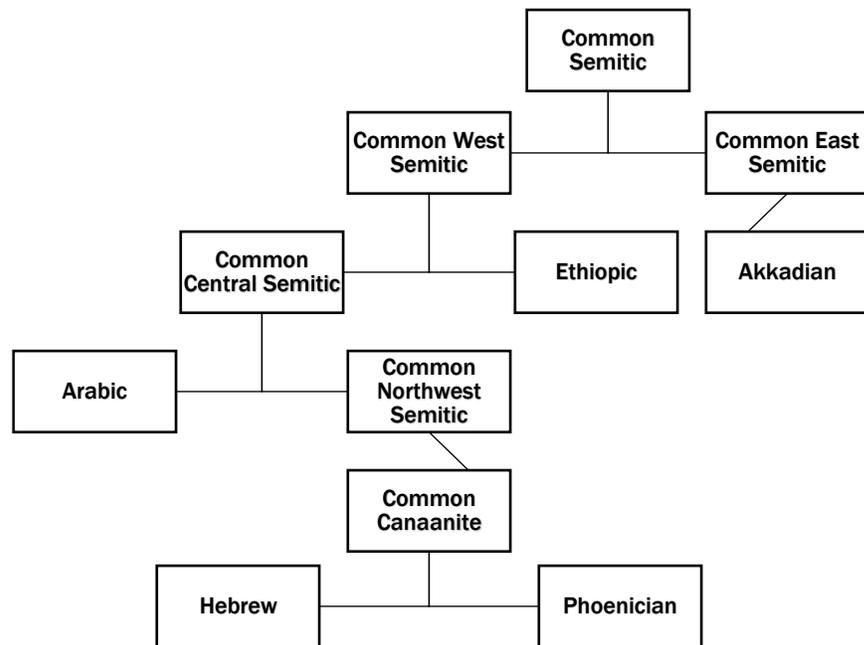


Figure 2: The Relationship between the Semitic Languages Mentioned in this Article

Problems persist even if we grant Amzallag’s claim that the Ghassulian’s spoke a Semitic language. As mentioned above, if Ghassulians spoke a Semitic language, they most likely spoke Common Semitic. But the rebuses that Amzallag identifies don’t work in Common Semitic (or Common West Semitic for that matter).<sup>3</sup> Although ‘*ōper*’ ‘ibex’ and ‘*āpār*’ ‘ore’

<sup>2</sup> Gelb et al. 1958: 4.321.

<sup>3</sup> In his summary for Bible and Interpretation, Amzallag (2019: 4–5) gives two examples of the rebues from the Nahal Mishmar hoard. In the longer article on which this summary is based, he proposes almost a dozen more (Amzallag 2018: 80–81). In this review, I will only focus on the two examples from Amzallag’s summary, but my comments are also valid for the other ten.

are near homophones in the modern reading tradition of Biblical Hebrew, their Common Semitic antecedents *ʿaparu* and *ǵupr* ‘ibex’ aren’t.<sup>4</sup> The same principle applies to *ḥōr* ‘hole’ and *ḥar* ‘to be hot’. They are near homophones in the modern reading tradition of Biblical Hebrew, but not in common Semitic. *ḥōr* ‘hole’ descends from common Semitic *ḥurru*, while *ḥar* comes from earlier *ḥarra* which begins with a different consonant and contains different vowels. Furthermore, it is unclear whether speakers of Common Semitic would have used the word *ǵupr* to designate the ibex. Forms of this word are only found in Biblical Hebrew (*ʿōper*) and Classical Arabic (*ǵufr*), which means that we can only reconstruct to *ǵupr* Common Central Semitic, but not Common Semitic itself.<sup>5</sup>

## **Conclusion**

While Amzallag’s proposal to see the Nahal Mishmar treasures as a visual code is ingenious, it suffers from several linguistic problems. We cannot be certain that the Ghassulians spoke a Semitic language and—even if they did—the rebuses that Amzallag proposes would not work in a Semitic language of the late 5<sup>th</sup> or early 4<sup>th</sup> millennium BCE. For the time being, the cultural significance of the Nahal Mishmar hoard remains mysterious.

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<sup>4</sup> Nor were they near homophones in Common West Semitic or even early Hebrew itself. As Greek transcriptions of Hebrew proper names show, Hebrew speakers maintained the distinction between *ʿ* and *ǵ* until the 3<sup>rd</sup> century BCE and the distinction between *ḥ* and *ḥ* until the 2<sup>nd</sup> century BCE (Steiner 2005: 267).

<sup>5</sup> Koehler and Baumgartner 2001: 862; Lane 1863–1893: 2274.

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