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A Tale of Two Sphinxes: Proof that the Potaissa Sphinx is Authentic and Other Aegean Influences on Early Hungarian Inscriptions

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ABSTRACT

Vinereanu (2024) accepts the Hungarian language decipherment of a Greek lettered inscription found on the pedestal of a sphinx statue from the Roman Dacian town of Potaissa but argues that the sphinx is a 19th century forgery drawing by Count Kemény. This paper shows that the Potaissa sphinx is authentic because:
a. Several authors testified that they saw the Potaissa sphinx as a physical object themselves and that it was in the possession of Count Kemény before the 1848-1849 revolution when the sphinx was stolen.
b. The forgery accusation is based on the misattribution of a piece of the Potaissa sphinx to another sphinx artifact by Jerney in 1848. When the misattribution is rectified, all of Jerney's forgery arguments are defeated.
c. Previous scholarship falsely accused Count Kemény of forgery in other cases too.
Vinereanu also challenges the long-term continuity of the Hungarian language in the Black Sea area based on the belief that the first Hungarian language speakers arrived in the Carpathian Basin at the end of the 9th century. This paper supports linguistic continuity by:
a. Presenting seven other Hungarian language inscriptions from the Carpathian Basin from the 3rd to the 7th centuries written in the Carian alphabet.
b. Identifying a set of Pre-Greek and Hungarian cognate words with regular sound changes.
c. Showing that the regular sound changes apply between the Hungarians' self-name and Ovid's and Ptolemy's references to Hungarian speaking groups near the Black Sea in the first centuries.

Keywords: Archaic Greek alphabet, Carian alphabet, Dacia, Decipherment, Sphinx.

INTRODUCTION

My recent decipherment of a Greek lettered inscription found on the pedestal of a sphinx statue from the Roman Dacian town of Potaissa, which existed 106-275 CE, as a Hungarian language text Revesz (2023) was criticized recently by Vinereanu (2024). I thank Vinereanu for bringing to attention his concerns, which can be summarized as follows.

1. The sphinx never existed as a physical object, and it was only a forgery drawing by Count Kemény. To quote Vinereanu (2024, p. 198): "Legend has it that the statue was found in the 19th century by József Kemény, although no one has physically seen the statue, only a drawing showing a statue with the alleged inscription. The story began when the Leipzig newspaper Illustrierte Zeitung published the inscription and drawing in February 1847. The whereabouts of the statue with the inscription remain unknown. Jósef [sic] Kemény was known as a forger…"

2. Reputable scholars like the archaeologists Vlassa (1980) and Szabó (2001-2002), who accepted the artifact as authentic, were also misled. Based on a newspaper interview with Levente Nagy, who is not an archaeologist, Vinereanu (2024, p. 198) wrote: "He [Nagy] also mentioned that despite some reputable scholars supporting the authenticity of the statue, they [Vlassa and Szabó] failed to thoroughly investigate its origins."

3. There could not have been ancient borrowings between Hungarian and Greek because there was no linguistic continuity in the area.

4. An inscription from Potaissa from the 3rd century cannot be written in the Hungarian language because "... Hungarians are known to have arrived in Pannonia towards the end of the 9th century AD, specifically in the year 896."

In this paper, I answer these concerns by showing that the sphinx is authentic, that Vlassa already had considered the forgery claim directly and rejected it (Sections 2-4), that there was a linguistic continuity from the time of the Potaissa sphinx to the end of the 9th century as evidenced by other inscriptions (Section 5).

Vinereanu (2024) also made me aware of the sensitivity of this topic for some Hungarians and Romanians. Vinereanu could have asked about my motivations instead of imputing dark political motivations on my part and speculating about my background. I have been interested in epigraphy and the decipherment of ancient scripts and by a mathematical analysis identified the Cretan Script Family and studied its development. My motivation for Revesz (2023) was to test the hypothesis that the Carian alphabet spread to the Milesian colonies on the northern Black Sea, where the Hungarians learned about it and later developed it into the Old Hungarian script (Revesz, 2017, Figure 1). The sphinx, with its Aegean connections, caught my eye as an artifact worth studying because it could reveal some information about the development of ancient scripts.

VLASSA REJECTED THE FORGERY ACCUSATION

Nicolai Vlassa, the great Romanian archaeologist, already considered the claim that the Potaissa sphinx was a forgery and rejected it. Vlassa (1980) specifically counters the allegation that the sphinx did not exist by a reference to the historian Neigebaur (1851, p. 199) in the following paragraphs given in English translation:

> In his well-known book about the classical antiquities of Dacia, published in Braşov in 1851, J.F. Neigebaur dwells extensively on the epigraphic and archaeological discoveries coming from Turda, recording - among others - the multitude of pieces he had the opportunity to research in the collection from Luncani (Grind, Cluj County). of Count J. Kemény, in June 1847.
>
> Among the objects of this collection, his attention was caught by bronze sphinx "statue," standing on a low quadrangular pedestal. Under the pedestal was a massive pyramidal-shaped nail. Neigebaur also gives the dimensions: the height of the bronze sphinx (including the pedestal) = 3 and 1/3 inches, and the length of the nail (from the pedestal bottom) = 4 inches and specifies that the piece was found near the border of "Oláh-Vár," on the left side of the road from Turda to Cluj, very likely—we add—in the area northwest of Potaissa. (Vlassa (1980, p. 133)

If Vinereanu and Nagy would have read either Neigebaur (1851) or Vlassa (1980), then they would not have made the false claim that "no one has physically seen the statute." Fortunately, Vlassa (1980) was a more careful researcher and knew that the sphinx existed based on Neigebaur (1851).

Vlassa (1980, p. 136) also mentions that the sphinx disappeared during the 1848-49 revolution, but some drawings of the sphinx were preserved in Count Kemény's collection in folder IX at a museum in Cluj. However, Vlassa (1980) found the drawing of the sphinx that appeared in Illustrirten Zeitung (Figure 1 (b)). To be of higher quality, reproduced it as Figure 1 in his article, and then tried to decipher its inscription. Hence, the two drawings of the sphinx are different. This contradicts Nagy's claim in the newspaper interview that a manuscript of the Illustrirten Zeitung article was found at the museum in Cluj and that Count Kemény sent it to the newspaper for publication. The newspaper article was written by Anton Kurtz according to Neigebaur (Vlassa, 1980, p. 136).

Vlassa deserves praise as a careful archaeologist, although his Greek language decipherment has several problems that were already discussed in Revesz (2023).

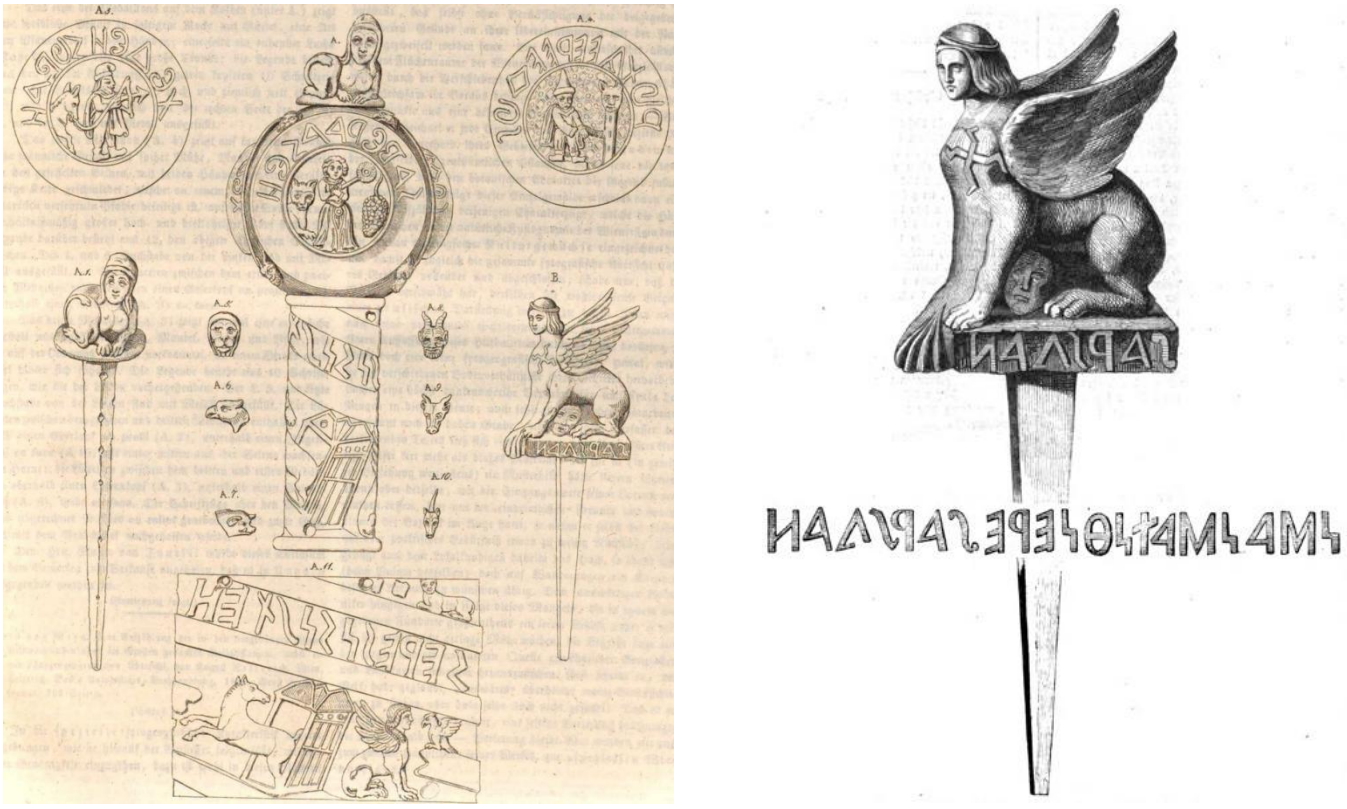
A CONFUSION BETWEEN TWO SPHINXES

Section 2 showed that the accusation that the sphinx never existed is false. This section shows that it is not a forgery. The origin of the forgery myth is also identified.

Drawings of two bronze sphinxes were published in the newspaper Oesterreichische Blätter in 1847 as shown in Figure 1 (a). According to Oesterreichische Blätter, the first sphinx, labelled Sphinx A, is composed of 11 parts, while the second sphinx, labelled Sphinx B, has only one part.

Sphinx B is the Potaissa sphinx that was also featured in an article in the newspaper lllustrirte Zeitung in

1847 as shown in Figure 1 (b).



(a) (b)

Figure 1. (a). Original Publication of the Two Sphinxes in Oesterreichische Blätter für Literatur, Kunst, Geschichte, Geographie, Statistik und Naturkunde, November 20, 1847, no. 278, pp. 1101-1103. (b). The Potaissa Sphinx in Illustrirten Zeitung, February 6, 1847, no. 188, pp. 91-92.

Sphinx A has a globular part with a hole. The globular part contains three circular inscriptions. A sphinx with a spike at the bottom is placed through the hole of the globular part as well as a cylinder, which is labelled A11. A flattened-out drawing of the cylinder is shown at the bottom.

Sphinx B has a sphinx figure with a human's head, a lion's body and an eagle's wings. It also has a spike.

That the two sphinxes were featured together suggests that they were part of the same collection at one time. It is easy to see that the cylinder part (A11) is a loose piece that could be assumed to belong to either sphinx. If someone put these two sphinxes in the same bag, then upon opening the bag, the cylinder could have been mistakenly attributed to the wrong sphinx. In fact, it is easy to see that the cylinder originally belonged to Sphinx B instead of Sphinx A as Oesterreichische Blätter assumed. The following are some of the reasons.

1. The cylinder depicts a true sphinx that has the same shape as Sphinx B. Parallels between the cylinder sphinx and Sphinx B include the following.

a. They both have wings with eight ending feathers, while Sphinx A has no wings.

b. They both have straight, lion-like front legs, while Sphinx A has no straight front legs.

c. They both have head bands, while Sphinx A does not have a head band.

d. They both lack the large woman's breasts that can be seen on Sphinx A.

2. The letters on the cylinder and the letters on the pedestal of Sphinx B, which are fully given at the bottom of Figure 1 (b), are like each other and different from those of Sphinx A. (A detailed analysis will be made in the next section).

3. The two objects seem to be pole finials. The spiked parts of both sphinxes could have been pushed into a hollow wooden pole. Both the globular part and the cylinder can be used to strengthen the end of the wooden pole so that it does not split when the spike is pushed into the end. There is no need to use them together on the same object. It is more logical that the globular part was used to strengthen the wooden pole in the case of Sphinx A, and the cylinder was used to strengthen the wooden pole in the case of Sphinx B.

Hence, in subsequent sections, we will continue to analyze the two objects assuming that the cylinder part belongs to Sphinx B.

Jerney's Incorrect Mixed-Alphabet Translation and Forgery Claim

János Jerney, a regular member of the Hungarian Academy, gave a report to other academy members about the two Transylvanian sphinxes on February 21, 1848. His presentation was recorded in the minutes of the meeting (Jerney, 1848).

At the beginning of the meeting, Jerney mentioned that Sphinx A was purchased by Count Domokos Bethlen from Sámuel Literati Nemes at around 1830. He also said that Sphinx B was in the possession of Count József Kemény a few years before the meeting, and a translation attempt was already published in a German newspaper in 1846. Moreover, Sphinx B was sent by Count Kemény to the academy for an examination the previous year. The artifact was examined by János Luczenbacher, another member of the academy. Professor Lajos Darai (2024) found and quoted the meeting minutes of the Hungarian Academy where Luczenbacher gave a report about the sphinx (Luczenbacher, 1847). During the minutes, Luczenbacher opined that the object does not have a thick enough patina to be considered ancient. As Darai (2024) points out, it follows from such a statement that the object did exist, and the academy members saw it, which also contradicts Vinereanu's claim that no one saw it.

The patina thickness is a serious issue only for freshly found objects because many art dealers and collectors cleaned their objects of patina in the 19th century. The patina thickness would not have been discussed based only on a drawing of the artifact. Moreover, the expected patina thickness depends heavily on the conditions it was stored in and its composition. An object that is almost pure copper, which could happen in the case of a religious object, would have little patina, unlike a typical bronze weapon.

Jerney (1848) did not examine the two sphinxes from a linguistic point of view. In his attempted translation, Jerney considered some letters to be Greek letters, some other letters to be Etruscan letters, and still some other letters to be Old Hungarian letters. Then he concluded that the presence of mixed alphabets on these two inscriptions shows that they are forgeries because authentic artifacts do not contain mixed letters. Jerney's (1848) conclusion and his great reputation caused the sphinxes to be forgotten for over a century. However, his conclusion was wrong. Jerney was led to his mistaken conclusion because he did not notice that the cylinder belonged to the Potaissa sphinx (Sphinx B).

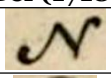
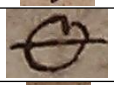
Correct Translation of Sphinx A

Table 1 shows that the inscription of the globular part of Sphinx A contains thirteen different letters that are all like the Old Hungarian runic alphabet given by Szegedi in 1655 and Bél in 1718 (see the copy of the source documents with commentaries in the Old Hungarian encyclopedia of Benkő, Sándor and Vásáry (2021). We will show that the globular part of Sphinx A can be read as an Old Hungarian inscription from right to left.

Since right-to-left reading is difficult to explain, we will mirror the letters as shown in the rightmost column of Table 1. Using these mirrored letters, we can read the mirror images of the three sides of the globular part of Sphinx A, which are shown in the second row of Table 2, from left to right. The third row of Table 2 contains the Hungarian transliteration using capital letters. It is customary to leave out some vowels that can be easily guessed. This is especially common when there is a string of deep vowels /a/ and /o/, in which case usually only the last vowel is written out as a reminder.

Table 1. Comparison of the Letters of Sphinx A with the Old Hungarian Runic Script of Szegedi (1655). and Bél (1718)

Number	Sphinx A	Old Hungarian Szegedi (1655)	Old Hungarian Bél (1718)	Hungarian Transliteration	International Phonetic Alphabet
1				A	a
2				B	b
3				C	t͡s
4				E	e
5				G	g
6				K (Not Word Final)	k

Number	Sphinx A	Old Hungarian Szegedi (1655)	Old Hungarian Bél (1718)	Hungarian Transliteration	International Phonetic Alphabet
7				K (Word Final)	k
8				LY	lj
9				M	m
10				N	n
11				O	o
12				P	p also f
13				SZ	s

The inscription consists of thirty-two letters. For the first word, we can reconstruct a Proto-Hungarian *bece ‘limp’ that is related to Hungarian (dialectical). bice ‘lame’ and biceg ‘limp.’ The word *bece has the adjective forming suffix -k (Zaicz, Tamás, & Somogyi, 2006).

The second word contains Hungarian asszony ‘woman, wife’ with a regional pronunciation of *asszon. This word also has a possessive suffix -nak, which indicates that the woman is the possessor of something.

The third word is German Schamel ‘support’, which apparently was borrowed into Hungarian as *samel (Zaicz et al., 2006). This word has the suffix -ja, which marks the possessed object. The root word’s final /l/ and the initial /j/ of the suffix are expressed by the diphthong /lj/.

The fourth word is the Hungarian definitive pronoun a ‘the’, which is used when the following word begins with a consonant.

The fifth word is Hungarian szék ‘chair.’ Hence, these five words combine to give the sentence: ‘A lame woman’s support is a chair.’

The next sentence is started by the sixth word, which contains the Hungarian root word jó ‘good’ and the comparative suffix -bb, to give the meaning ‘better.’ The Hungarian jó /jo:/ has regional variation /ljo:/ [CITE].

The seventh word is the Hungarian compound word kopjafa ‘carved wooden pole used as a tomb marker.’ The first element is Croatian-Serbian koplje ‘a type of lance’ and the second element is Hungarian fa ‘wood’ (Zaicz et al., 2006).

The eighth word is Hungarian fokos ‘shepherd’s axe.’ Hence, the second sentence means that ‘A carved wooden pole or a shepherd’s axe is better.’ Note that Hungarian sentences do not contain the verb equivalent to English because it is an implicit default. Hence, this sentence implies that a decorative wooden pole or shepherd’s axe is a more suitable support than a chair for a man. An older man is featured with a carved wooden pole on side A4 of the globular part of Sphinx A, which he is using to support himself with his hand. The lame woman may be pictured on side A2.

Finally, side A3 may be an allusion to the concept of lame, which is hard to illustrate. The artist may have chosen for illustration a hunting scene because an arrow renders a game animal lame by hitting one of the animal’s legs. A bowman alone or a bowman on horseback could be interpreted as a warrior scene, while a hunter could ride a horse to the forest, and then dismount and hide somewhere while waiting for a deer or elk to appear. While the semiotics of Sphinx A is somewhat debatable, the inscription and the pictures on the three sides of the globular part go clearly together and were likely designed by the same person. Given the meaning of the inscription, Sphinx A seems to have been used by a rich man to crown a decorative walking stick.

Table 2. Translation of the Sphinx A Inscription Using Old Hungarian Runic Letters. Each side of the globular part of Sphinx A is mirrored for left-to-right reading (2nd row). Below the following can be seen: the Hungarian equivalent (3rd row), the IPA pronunciation (4th row), the meaning using modern Hungarian orthography (5th row), an English word-by-word translation and grammatical explanation (6th row), and the English meaning (7th row).

A3 Mirrored	**A2 Mirrored**	**A4 Mirrored**
		
BECEK a SZONAK	**SZAMELYA A SZEK**	**LYOB GoPPLYafa FoKOS**
/becek asonak/	/samelja a sek/	/ljob goppljafa fokos/
Beteg asszony-nak	zsámoly-ja a szék.	Jo-bb kopjafa fokos.
Lame Woman-DATIVE	Footstool-3rd SG POSS. The Chair	Good-COMPARATIVE “Carved Wooden Pole” “Shepherd’s Axe”
A lame woman’s footstool is a chair. A carved wooden pole or a shepherd’s axe is better.		

The Dating of Sphinx A

The inscription can be dated stylistically and linguistically. Stylistically, we note that the G letter is written backwards. Such a backward G appears first in the alphabet by Gáspár Miskolci Csulyak in 1654 (Benkő et al. 2021, p. 511). Even his father did not write these backwards (Benkő et al., 2021, p. 497). Hence, the introduction of this reversal could be attributed to Gáspár Miskolci Csulyak. The backward G also appears in the later alphabets of Kájoni in 1673 and Bél in 1718 (Benkő et al., 2021, p. 526). Hence, the inscription on Sphinx A was made after 1654.

On the other hand, after Szegedi in 1655 the form of the /c/ was also almost always an arrow without a triangle head, and /lj/ was almost always a circle with a dot in the center as in Kájoni in 1673 and Bél in 1718 and later writers (Benkő et al., 2021). Hence, Sphinx A could not have been created much after Szegedi in 1655.

The scribe had to know about the mirrored /g/ and /l/ forms and about the forms of /c/ and /lj/ recorded by Szegedi in 1655. Hence, there is a very strong chance that the inscription on Sphinx A was made around 1655. Moreover, Szegedi and Gáspár Miskolci Csulyak knew each other, but Szegedi obtained the /c/ and /lj/ variants from other sources (Benkő et al., 2021, p. 515). From this follows that the scribe of Sphinx A may have known Szegedi (or his sources). as well as Gáspár Miskolci Csulyak. Since they studied together at the Reformed Church College of Sárospatak, Hungary, the scribe may have studied there together with them too.

Linguistically, the inscription contains the /lj/ of the borrowed Croatian-Serbian word koplje ‘a type of lance’ and is also close to the borrowed German word schamel. Therefore, these word forms reflect either a multilingual environment where these foreign words were used in their original meaning, or an early stage after the borrowing of these words before they became modified to today’s kopja and zsámoly.

The word kopja is attested from 1464, but by 1543 it gained the meaning ‘tomb marker’ in some parts of Transylvania (Zaicz et al., 2006). This meaning later spread to the entire country. One can imagine walking with a lance while using it as a walking stick, but it is impossible to walk around with a tomb marker. Hence, this linguistic evidence suggests that the inscription was made before the ‘tomb marker’ meaning became widespread, that is not too much after 1543.

A fokos ‘shepherd’s axe’ can be used as a walking stick, although it has a sharp edge that can be used as an axe or weapon (Zaicz et al., 2006).

The word zsámoly is attested from 1395. By that time, the Hungarian word initial /ZS/ developed from German /SH. It is also unlikely that the scribe would use /samel/ which is close to the German word schamel if the word zsámoly had already been adopted into Hungarian. Hence, this linguistic evidence also suggests that the inscription was made before 1395 or it was used in a multilingual environment, which is not unlikely given the Austrian influence and political control on a large part of Hungary after 1526. Professors and students were also

exchanged among German and Hungarian speaking universities, which again points to a possible influence of the Reformed Church College of Sárospatak, Hungary.

The word bice was gradually replaced by sánta 'lame,' which was a 10th century Slavic borrowing but remained in dialectical use in some Hungarian language speaking areas. Hence, we cannot draw any conclusion from the use of the word bice regarding the date of the inscription.

Overall, the combined stylistic and linguistic evidence seems to point to the year 1654, the first appearance of the backward G letter, or soon after, and likely in a multilingual and educated environment. This educated environment may have appreciated and developed an interest in the Old Hungarian script, which remained in use among some peasants.

Correct Translation of Sphinx B

Here we give a brief, slightly improved translation of Sphinx B together with the cylinder inscription, which was not included in Revesz (2023) because the author only later became aware of Jerney (1848) and the reference there to the Oesterreichische Blätter newspaper article. This would also provide an easier comparison with the translation of Sphinx A. Table 3 compares the letters of the Dipylon vase, which contains the oldest known ancient Greek writing (Powell, 1988), the letters of Sphinx B, and the letters on the cylinder (part A11). that was alleged to belong to Sphinx A in the Oesterreichische Blätter newspaper and by Jerney (1848). We see that the three alphabets have a close resemblance. The only significant difference is in the form of the letter M, which is archaic on the Dipylon vase, and like the Latin M on Sphinx B and the cylinder inscription. This form of the letter M may be a Roman influence because Potaissa was a Roman town.

The letters I and T are particularly remarkable because they have very archaic forms. Usually, the letter I is just a straight vertical line. The bent archaic I of these alphabets only occurs in a few cities. The T is almost uniformly the Latin T form while these alphabets share a crossing form. Moreover, all three inscriptions are read from right to left, which is another archaic feature.

The translation can be followed word-by-word in Table 4. The meaning "Lo, behold, worship! Here [is the] holy lion. Holy [is] the god." is a religious text reflecting Egyptian-origin worship of the sphinx as a protector god Tutu (Herrmann & Hoek, 2005, p. 285). The sphinx acquired more symbolic meanings in later times. For example, Synesius of Cyrene (ca. 370-414) wrote about the Egyptians that "the sphinx is set up for them in the precincts of their temples as a sacred symbol of the coupling of virtues, an animal with regard to strength, a human being with regard to wisdom" (Herrmann & Hoek, 2005, p. 298).

We point out a few non-obvious features of the text. The second word is reconstructed as *wimad 'worship', which is regarded as the original form of today's Hungarian imád 'worship' (Zaicz et al., 2006). The dropping of the word initial /w/ is regular in the development of the Hungarian language (Csúcs, 2019, p. 40). A similar development took place in the Greek language because the digamma letter denoting /w/ ceased to be used. Hence, there could be two reasonable explanations why /w/ is not indicated in the inscription.

1. Given the apparently heavy Greek influence, the dropping of the word initial /w/ may have taken place in Potaissa by the time the sphinx was made, although this development took longer in other Hungarian speaking regions. In this case, there was no need to indicate the /w/.

2. The Potaissa dialect still had the word initial /w/, but it could not be written down using the Greek alphabet at the time.

The word *wimad and the beginning of the 2nd person singular imperative suffix *-ti are contracted into a single /t/ phoneme. The Proto-Hungarian 2nd person singular imperative suffix *-ti later developed into the suffix -d (Zaicz et al., 2006), which explains Hungarian imádd in current Hungarian orthography.

The inscription contains two more contractions. The ending of the 2nd person singular imperative suffix *-ti and the beginning of the word *it are contracted into a single /i/ phoneme. The ending of *it and the beginning of *hieres are contracted into /th/, which is the ancient Greek pronunciation of the letter theta.

The inscription contains some word borrowings. The word borrowing Turkic arslan 'lion' > Hungarian oroszlán 'lion' has been hypothesized by linguists to have taken place before any previously known written records in the Hungarian language (Zaicz et al., 2006). The occurrence of the word Arslan confirms the hypothesis.

Table 3. Comparison of the letters of the Dipylon inscription, the Potaissa Sphinx (Sphinx B). inscription, and the Cylinder Inscription that Was Alleged to Belong to Sphinx A by Oesterreichische Blätter. The Greek letter theta was originally pronounced /th/ instead of the later /θ/ (Mastronarde, 2013, p. 11).

Number	Dipylon Alphabet	Illustrirten Zeitung Sphinx B	Oesterreichische Blätter Cylinder	Hungarian Transliteration	International Phonetic Alphabet
1				A	a
4				E	e
5					th
6				I	i
8				L	l
9				M	m
10				N	n
11				R	r
12				S	s
13				T	t

Table 4. Translation of the Sphinx B inscription (left column) and the Cylinder Inscription (right column) Using Archaic Greek Alphabet Letters. The Sphinx B and the cylinder inscriptions are mirrored for easy left-to-right reading (2nd row). Below the following can be seen: the Hungarian equivalent (3rd row), the IPA pronunciation (4th row), the Proto-Hungarian forms also using IPA pronunciation (5th row), the meaning using modern Hungarian orthography (6th row), an English word-by-word translation and grammatical explanation (7th row), and the English meaning (8th row).

Illustrirten Zeitung Sphinx B Mirrored	Oesterreichische Blätter Cylinder Mirrored
	
IMAwIMATITᴴIERESARSLAN	**IERESISISTEN**
/ima wimati it hieres arslan/	/hieres is isten/
*ima *wimad-ti *it *hieres *arslan	hieres *is *isten
Íme imádd, itt híres oroszlán.	Híres az isten.
lo, behold worship-2nd-SG-IMP here holy lion	holy the god
Lo, behold, worship! Here [is the] holy lion.	Holy [is] the god.

Another word borrowing is Greek ἱερός /hiero:s/ ‘holy’ > Proto-Hungarian *hieres ‘holy’. The Proto-Hungarian word has front-back vowel harmony because each vowel is a front vowel. Borrowed words are regularly modified into words with front-back vowel harmony, which is a typological feature of Hungarian. This word

occurs on both Sphinx B and the cylinder, which is another indication that they belong together. The word initial /h/ is not indicated on the cylinder inscription likely because the Greek alphabet did not contain an independent letter to denote /h/ at the time Sphinx B was made. However, the scribe found a way to indicate the /h/ phoneme on Sphinx B using the contraction of /th/ as we saw earlier. Hence, the phoneme /h/ was pronounced by the Hungarian speakers at Potaissa.

Our hypothesis is that Proto-Hungarian *hieres 'holy' eventually developed into Hungarian híres 'famous' by a contraction of /ie/ into /i:/. The contraction of diphthongs into long vowels was a common occurrence in the development of the Hungarian language between the 10th and 14th centuries (Gerstner, 2018, p. 123). The shift of meaning from 'holy' to 'famous' could be explained by considering holy persons as famous persons in the context of the medieval word that venerated saints and shrines with the saints' relics that were visited by pilgrims.

THE FORGERY ACCUSATION IS UNTENABLE

The following is the most logical reconstruction of the timeline of the events regarding the two sphinxes based on the discussion so far.

1. 106-275 CE – The Potaissa sphinx (Sphinx B). and the cylinder part of Sphinx A (part A11). are created to be used together as a pole finial.

2. 17th century – The rest of Sphinx A is created to be used as a walking stick by an elderly man.

3. before 1830 – The antiquarian Sámuel Nemes Literati owns Sphinx A with the cylinder (Jerney, 1848). Since the cylinder is part of the Potaissa sphinx (Sphinx B), he likely owns both sphinxes and accidentally mixes up the parts.

4. c. 1830 – Count Domokos Bethlen buys Sphinx A together with the cylinder.

5. c. 1846 – Count József Kemény acquires the Potaissa sphinx and sends it out to experts for examination.

6. 1846 – D. Thalson presents the first description of the Potaissa sphinx in a newspaper article (Blätter für Geist, Gemüth und Vaterlandskunde, No. 45, pp. 348-350). according to Torma (1880, p. 89). Count Kemény and Thalson also exchanged six letters about the Potaissa sphinx in 1846 (Torma, 1880, p. 173).

7. 1847 February 6 – The Potaissa sphinx is featured in Illustrirten Zeitung (No. 188, pp. 91-92).

8. 1847 June – The Potaissa sphinx is examined by Johann Daniel Ferdinand Neigebaur during a visit to Count Kemény. Neigebaur considered it authentic without any comment on its patina. His description of the sphinx appears in Neigebaur (1851, p. 216).

9. 1847 September – The Potaissa sphinx is also examined by János Luczenbacher, who without knowing the archaeological context of the object or its precise composition opines that the object does not have enough patina thickness to be considered authentic. Luczenbacher's presentation is recorded in the minutes of the Hungarian Academy (Luczenbacher, 1847).

10. 1847 November 20 – Both sphinxes are featured in an article in the Oesterreichische Blätter für Literatur, Kunst, Geschichte, Geographie, Statistik und Naturkunde (No. 278, pp. 1101-1103).

11. 1848 – The two sphinxes are examined from a linguistic point of view by János Jerney, who does not recognize that the cylinder belongs to the Potaissa sphinx. As a result, he is misled into believing that the two inscriptions used a mixture of three different alphabets. He pronounces the sphinxes forgeries (Jerney, 1848).

12. 1849 – The Potaissa sphinx is stolen during the 1848-49 revolution when Count Kemény's castle is ransacked. Scholars know about other artifacts that disappeared at this time such as a Dacian silver bracelet (Petan, 2013).

13. 1980 – Nicolai Vlassa finds a description of the Potaissa sphinx in a collection bequeathed by Count Kemény to Transylvanian museums. He also finds the description by Neigebaur (1851). Vlassa considers the Potaissa sphinx authentic and attempts a Greek language translation (Vlassa, 1980).

14. 2001 – Ádám Szabó (2001-2002). publishes a comprehensive review of the sphinx cult in Dacia and Pannonia. The review includes a reference to Vlassa (1980).

15. 2023 – The author gives a Proto-Hungarian language decipherment of the Potaissa sphinx (Revesz, 2023).

16. 2024 – The accusation of forgery is rediscovered and embellished by the claim that the object never existed and that the forger was Count József Kemény.

Regarding the two embellishments, the first one, that the Potaissa sphinx never existed was already debunked. The second embellishment that Count Kemény was a forger can now be equally easily debunked. Since besides the patina issue, the whole argument of forgery was based on the idea that the inscriptions contain mixed alphabets, which we showed not to be true, the forgery argument falls apart. Once the misplaced cylindrical piece is restored to the Potaissa sphinx, the two sphinx inscriptions can be seen to be both written using a single alphabet. The Potaissa sphinx was written in an archaic Greek alphabet, and Sphinx B was written in an Old Hungarian runic alphabet.

Moreover, the word forms and grammar of the Potaissa sphinx can be shown to match current linguistic theories based on modern comparative linguistics. In 1830, neither the best linguist nor any amateurish forger could have known the historical development of the Hungarian language such as that the imperative suffix -d was originally -ti. Similarly, in 1830, nobody knew about the most archaic Greek alphabet, the Dipylon alphabet, which was discovered only in 1871 (Powell, 1988). Finally, in 1830, nobody knew about the Sphinx of the Naxians, which the Potaissa sphinx closely resembles, because its first fragments were discovered only in 1860.

Jerney never accused Count Kemény of forgery but instead implicated the antiquarian Sámuel Nemes Literati as a forger of both sphinxes (Jerney, 1848, p. 37, p. 41). Unfortunately, Jerney (1848). did not consider the simple explanation that the antiquarian accidentally misattributed the cylinder part to Sphinx A.

Count Kemény was held in high esteem by the members of the Hungary Academy, who elected him a member in 1831. He published several collections of documents that he saw and copied by hand from libraries and at the private estates of other nobles. His copy is often the only source for many historical documents because their originals were lost in a tumultuous sequence of revolutions and wars after he copied them. Hence, he became an easy target of accusations of forgery, especially if the documents did not support some historians' views. Over the decades, the stories about Count Kemény's alleged forgeries just grew beyond all credible proportions culminating in the statement of Vinereanu (2024, p. 198). that "Kemény was the greatest forger of the nineteenth century." Instead of relying on sensationalist, tabloid newspapers, Vinereanu and others need to check carefully all forgery allegations. The shabbiness of Hungarian communist scholarship regarding the alleged forgeries of Count Kemény is illustrated by the following example.

Mályus (1988, p. 213) wrote that Kemény alleged that a document that he copied was shown to him by Johann Georg Megerle, the director of the Hofkammerarchiv, while visiting Vienna in 1824. Mályus claims that this proves that the document in question is a forgery because Megerle already died eight years before 1824. However, a Wikipedia article on Johann Georg Megerle (https://en.wikipedia.org/wiki/Johann_Georg_Megerle_von_Mühlfeld). says that he died on September 15, 1831. Hence, this seems to be another premature accusation of forgery against Count Kemény.

A few years after the fall of communism, the attitude towards Count Kemény started to change. Rady (1993, p. 110) accused Mályus of being overzealous in finding forgeries by Count Kemény by writing the following: "He [Mályus] overhastily threw doubt on the authenticity of several charters which are, as it turns out, of genuine medieval provenance. In this respect, he compounded earlier errors of Karácsonyi and Pauler, who have also mistakenly identified as fraudulent several other charters published by Kemény. The exposure of Kemény's career as a forger thus introduces a new danger. In the past historians unwittingly incorporated into their work false information supplied by Kemény. Now, on the advice of Kemény's critics, they may reject material which is in fact authentic."

Rady (1993) lists those documents that he thinks are forgeries, but he also lists five documents that are authentic and have been incorrectly classified as forgeries. In each of these five cases, the earlier forgery accusation was contradicted because the original document or other corroborative evidence was found. Clearly, Count Kemény was considered guilty until proven innocent. The case of the Potaissa sphinx was treated similarly by many authors. However, Count Kemény could be proven innocent in the case of the Potaissa sphinx too.

CARIAN INSCRIPTIONS THAT SHOW LINGUISTIC CONTINUITY

Vinereanu (2024) is right to say that the word borrowing Greek ἱερός 'holy' > Hungarian híres 'famous' requires some linguistic continuity. Of course, proving linguistic continuity requires more than just translating the Potaissa sphinx. It requires translating some more documents that are intermediate in time between the Potaissa sphinx inscription and the 896 Hungarian conquest, which he acknowledges. Vinereanu seems unaware that translations of such temporally intermediate inscriptions already exist, for example, Vékony (1987), which uses an

archaic Old Hungarian alphabet. This section will present some examples using the Carian alphabet.

The Carian Alphabet as Used in the Carpathian Basin

The letters that occur on the inscriptions that will be translated are shown in Table 5. All letters are Carian letters except the last two. One of the inscriptions contains the two additional letters shown in the last two lines of Table 5. The first additional letter is the Old Hungarian H, which was absent in the Carian alphabet, and the second additional letter is a Luwian NI syllable, which may have been adopted by some of the Carians from the Luwians who lived nearby.

Table 5. Carian letters and phonetic values (Adiego, 2007). using the International Phonetic Alphabet (IPA). (1st and 10th columns), compared with several different inscriptions (2nd -8th columns), except for the last two rows, which compare an Old Hungarian (*). and a Luwian (**). letter with the Vukovar inscription. The Hungarian transliteration is in the 9th row.

Carian	Vukovar Bronze Mirror (Mirrored) 3-7th cent	Kiskőrös Silver Cup 7th cent	Szarvas-Rózsási Bronze Belt 7th cent	Zamárdi Gold-Plated Silver Belt 7th cent	Hungary Bronze Seal pre-7th cent	Kiskundorozsma Bone Bow (Mirrored) 7th cent.	Csíkmadaras Door Frame	Hungarian Transli	IPA
								A	a
								B	b
								D	d
								E	e
								G	g
								I	i
								J	j
								K	k
								KH	kh
								L	l
								M	m
								N, NY	n, ñ
	 Rotate 900							NK	ŋ [nk]
								O	o
								R	r
	 Rot. 1800							R	rj > r

Carian	Vukovar Bronze Mirror (Mirrored) 3-7th cent	Kiskőrös Silver Cup 7th cent	Szarvas-Rózsási Bronze Belt 7th cent	Zamárdi Gold-Plated Silver Belt 7th cent	Hungary Bronze Seal pre-7th cent	Kiskundorozsma Bone Bow (Mirrored) 7th cent.	Csíkmadaras Door Frame	Hungarian Transli	IPA
𐊱								S	ʃ
𐊰								Ś (not used)	ś
𐊲								SZ	s
𐊳								T	t
𐊴								T	t
𐊵,𐊶	 Rotate 900							U	u
𐊷,𐊸								Ü	y
𐊹								JÜ, Ű	ɥ
𐊺								W	w
𐊻*								H	h
𐊼**								N	n

Bronze Mirror Inscription from Vukovar

A mysterious inscription on a bronze mirror was found recently in the vicinity of Vukovar in the Mediterranean country of Croatia and is now held in a museum in Vinkovci, Croatia. The museum confirmed that the object is authentic, and it is estimated to be from the 3-7th centuries (https://cogniarchae.com/2023/08/31/on-the-mysterious-proto-hungarian-inscription-from-vukovar-croatia/). Figure 2 shows the side of the mirror that contains a figure of a stag in the center and an inscription with twenty-seven Carian letters along the perimeter of the mirror. The image is a left-right-reversed mirror image of the original so that the inscription can be read in a clockwise direction as explained in Table 6 for the first 14 signs and in Table 7 for the rest of the signs.

Figure 2. Bronze Mirror Inscription from Vukovar, Croatia

The deer likely indicates a spiritual dimension because it was showcased on precious objects of Scythian art, which may have left traces on the art of the 3-7th century culture when the inscription was likely made. We can add that the stag is looking backwards, which is typical in Scythian art.

Table 6. Translation of the First Three Sign Groups of the Vukovar Inscription. The sign groups are shown in the second row. Below the following can be seen: the Hungarian transliteration (3rd row), the IPA pronunciation (4th row), the meaning using modern Hungarian orthography (5th row), an English word-by-word translation and grammatical explanation (6th row), and the English meaning (7th row).

Signs 1-5 Mirrored	**Signs 6-8 Mirrored**	**Signs 9-14 Mirrored**
		
Ü Ś T E N	**T Ü Ś**	**Ü h I J E N e K Ü**
/ysten/	/tys/	/y hijeneky/
Isten	tesz-NULL	Ő hi-je-nek
God	make-3rd SG	his believer-3rd SG POSS.-DATIVE
God makes for his believer		

Table 7. Translation of the Last Two Sign Groups of the Vukovar Inscription. The sign groups are shown in the second row. Below the following can be seen: the Hungarian transliteration (3rd row), the IPA pronunciation (4th row), the meaning using modern Hungarian orthography (5th row), an English word-by-word translation and grammatical explanation (6th row), and the English meaning (7th row).

Signs 15-19 Mirrored	**Signs 20-27 Mirrored**
	
W U R a Z T	**N I K Ü I H i J e K**
/vurazt/	/niky i hijek/
varazs-t	neki ő hi-j-ek
miracle-OBJECT	DATIVE he believe-IMP-1st SG
[a] miracle.	I believe him!

Owners' Names on Precious Objects

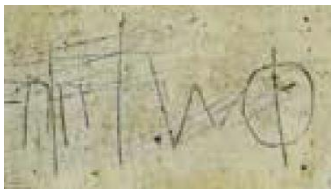
It is a natural custom that occurs in many cultures to carve the name of the owner on precious objects. We give three examples in this section. The full picture of these precious objects can be looked up in the original publications describing them. We only focus on their inscriptions, which can be seen in Table 8.

The first inscription is from a 7th century silver cup from Kiskőrös (Fehér, 2020, no. 66). This inscription contains only three letters with an unfortunate crack between the first letter and the other two letters, which are attached to each other as a kind of unique signature. The transliteration gives /benku/ which seems equivalent to the common Hungarian surname Benkő. This name is said to derive from either Hebrew Benjamin or Latin Benedict with the diminutive ending -ke with some sound change to better fit with the first vowel. It is still common today as a surname, as in for example Benkő (1980) and Benkő et al. (2021).

The second inscription is from a 7th century bronze buckle belt from Szarvas-Rózsási (Fehér, 2020, no. 78). This inscription contains eight Carian letters. The middle vertical line, which runs much longer than the other vertical lines, is likely a word divider between the two names given on the bronze belt. These two names are the Hungarian equivalents of the biblical-origin names of Solomon and Samuel. While people did not use family names in the 7th century, they distinguished among themselves by also naming their father. Hence, this inscription can be interpreted as 'Solomon, son of Samuel' where the 'son of' is implicit by convention and does not need to be written out in such cases.

The third inscription is from a 7th century gold-plated silver belt from Zamárdi (Fehér, 2020, no. 63). This is given in the original form without mirroring. Hence, it needs to be read from right to left. This inscription contains two ligatures. The first ligature is a VN-ligature, which saves space because the right side of V is the same as the left side of N. This ligature has the phonetic value of /mu/ when read from right to left. The second ligature combines the letter for /ŋ/ and the letter for /y/. This needs to be read as /nyk/, which is likely the old form of the Hungarian dative suffix -nak and -nek. Hence, the meaning of the inscription is 'to Samuel.' This name likely was held in high respect because several royalties a few centuries later also bore this name including Tsar Samuel of Bulgaria (reigned 997-1014). and King Samuel Aba of Hungary (reigned 1041-1044).

Table 8. Translation of the Kiskőrös Silver Cup (1st column), the Szarvas-Rózsási Bronze Buckle Belt (2nd column), and the Zamárdi Gold-Plated Silver Belt (3rd column). The inscriptions are shown in the second row. Below the following can be seen: the Hungarian equivalent (3rd row), the IPA pronunciation (4th row), the meaning using modern Hungarian orthography (5th row), and an English translation (6th row). Source: Fehér (2020). Item numbers 66, 78, and 63.

Kiskőrös Silver Cup 7th Century (Mirrored)	**Szarvas-Rózsási Bronze Buckle Belt 7th Century (Mirrored)**	**Zamárdi Gold-Plated Silver Belt 7th Century (Original, Read Right-to-Left)**
		
B e N K U	**Ś a L a M o N div. Ś a M Y e L**	**KYN L e U M a Ś**
/benku /	/śalamon śamyel/	/śamuel-nyk/
Benkő	Salamon Samuel	Samuel-DATIVE
A Hungarian Surname	Solomon, [Son of] Samuel	to Samuel

Bronze Seal with a Baker's Trademark

A bronze seal with eight Carian letters is presented by Friedrich (2015), who does not give a precise location but gives the date as pre-7th century based on its style. The seal can be divided into two halves. The top half is shown in the left and the bottom half is shown in the right column of Table 9. Both parts contain four Carian letters. The inscription needs to be read from left to right on the top and from right to left on the bottom unless we turn the seal 180 degrees.

The transliteration of the top half is slightly complicated because the third letter seems to contain a ligature of two letters, namely the letter T and the letter I. The two letters have similar shapes, but the T does not have a line within the enclosed area, while the letter I does have a line. Hence, an indication that T is followed by I was accomplished by simply adding an internal line within the enclosed area of the T letter. This yields the sequence of letters ARTIM, which can naturally be interpreted as the name 'Artemis.' Hungarian has a front-back vowel harmony, which means that root words have either all front vowels or all back vowels. Proto-Hungarian had a back vowel /i/, which may be the reason for the vowel change /e/ > /i/ with respect to the Greek name. The adaptation of foreign words with changes to enforce front-back vowel harmony was traditionally a regular occurrence in Hungarian. However, in modern Hungarian the names are adopted more faithfully to the original pronunciation. Hence, modern Hungarian has Artemisz /artemis/.

The transliteration of the bottom half of the seal yields the word/khyñer/, which seems to be Hungarian kenyér 'bread' with dialectical variation /kyñer/. This word for bread is an old Finno-Ugric origin word, which has cognates among the Mordvins, who live near the Middle Volga River (Rédei, 1988; Zaicz et al., 2006).

Table 9. Translation of the Bronze Seal Inscription with the Upper Half in the Left Column and the Bottom Half in the Right Column of the Second Row. (Source: Friedrich (2015, p. 13).). Below the following can be seen: the Hungarian transliteration with the addition of some vowels and name ending /s/ (3rd row), the IPA pronunciation (4th row), the meaning in modern Hungarian (5th row), and the English meaning (6th row).

Bronze Seal (top, Read Left-to-Right)	**Bronze Seal (Bottom, Read Right-to-Left)**
	
A R TI M is	**R e NY Y KH**
/artimis/	/khyñer/
Artemisz	Kenyér
Artemis	Bread

The middle part of the seal depicts a typical Hungarian bread as can be seen in Figure 3. The lines on the top of the bread are made with a knife before baking to enable the bread to rise higher. This bread-making technique is called scoring. Hence, the seal is the trademark of a baker called Artemis. The stamp may have been used to mark a side of the bread before baking or the boxes in which the breads were carried.

(a)

(b)

Figure 3. (a). Middle of the Bronze Seal, (b). Typical Hungarian Bread (Source: Author's Photograph.)

Bone Bow Pieces from Kiskundorozsma

The bone bow pieces from Kiskundorozsma, Hungary belong to the same bow that was found in a grave from the 7th century according to both radiocarbon and thermoluminescence dating (Szalontai & Károly, 2013, p. 381). These pieces were at the two ends of a bow as shown in Figure 4. Fehér (2020) lists these items separately under numbers 79 and 80, although he mentions that the two inscriptions are obviously made by the same scribe. The extant bone bow pieces contain twelve Carian letters as shown in Table 10. We give a drawing of the letters below the photograph of the inscription because the letters are not as clearly visible on some parts of the bone as on the

metal objects. Some parts of the bone have been treated with some paint or glue as is most evident on the top in the middle of the left side. A similar treatment was apparently applied to the right side because the letters are increasingly less visible as we go from left to right.

Figure 4. Bone Bow Pieces from Kiskundorozsma (Left-to-Right Mirrored Image). (Source: Szalontai & Károly (2013).)

These twelve Carian letters are the beginning and the end of a short inscription with some letters missing from the shorter piece. The inscription appears to be a short prayer for protection, which in current Hungarian can be expressed as "Úrunk lerázzad [aki enge]met üt" with the likely missing part in brackets. This prayer can be translated into English as "Our Lord, shake off anyone who attacks me."

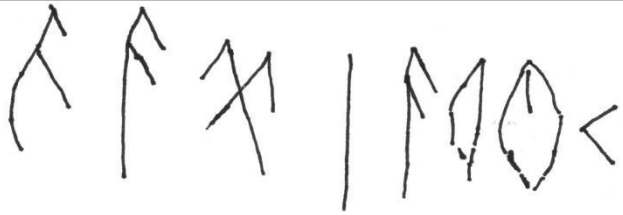
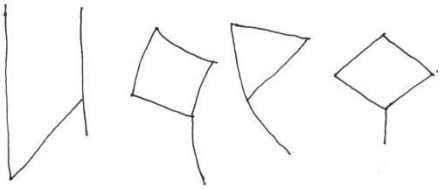
The first word is Hungarian úrunk, where úr 'God, lord' and the third person plural possessive suffix -unk. Between the 5th century and the modern form, there is a vowel change from /y/ to /u/.

The second word is Hungarian lerázzad 'you, shake off!' where the preposition le 'down' ráz 'shake' and -zad is the second person singular imperative suffix in modern Hungarian. The basic and standard form of this suffix is -jad, but the /j/ undergoes a consonant assimilation to /z/, which is the ending consonant of the root verb. The word ráz is onomatopoeic and the /z/ phoneme imitates a shaking action better than an /s/does. However, the original ending likely was /s/ because the /z/ phoneme did not exist at the beginning of the Proto-Hungarian language (Gerstner, 2018, p. 106). Therefore, the word ending /s/ > /z/ is a later development in this verb. The bone bow contains the expected older form /ras/. Hence, the -jad suffix was undergoing assimilation to the word final /s/, which resulted in a /śad/, which is a palatized /s/. Linguists believe that the Proto-Hungarian language contained the /ś/ phoneme (Gerstner, 2018, p. 103). The Hungarian language underwent a depalatalization and current Hungarian does not contain this phoneme (Gerstner, 2018, p. 103). The Hungarian prefix le, which is normally translated as 'down' can modify the meaning of verbs. In this case, leráz means 'shake off, get rid of, eliminate.'

The last word seems to be Proto-Finno-Ugric **äkt₃* 'hit, cut' with cognates such as Hungarian üt, Mansi jikt, Udmurt ukti, and Zyrian okti (Rédei, 1988). While the current Hungarian form lost the /k/ phoneme, it was apparently still present in the Proto-Hungarian language as shown by this example. The Mansi /j/ is a hiatus filler because it is not attested in the other Finno-Ugric languages. However, since Mansi is generally considered the closest to Hungarian, it is possible that it was also present in Proto-Hungarian. The /k/ sign has a bent and slightly curved form on the left side. That unusual form suggests that the scribe may have used here a ligature of /j/ and /k/, in which case the reading should be *jykt. The Proto-Hungarian *jykt closely resembles Mansi jikt. This word has no suffix, which indicates the third person singular present tense of the verb.

Since the second bone piece is broken, some letters are clearly missing before the extant letter M. This suggests that M is the frequent first-person singular suffix -m. The following T is likely the -t object marker. Therefore, with the connecting vowel E the suffix -met is obtained. The word engemet 'me' is an obvious choice in this case. The entire Hungarian phrase is likely "aki engemet üt" because then it would be a meaningful request from God by a bowman to save him from his enemies who may attack him. The archaeological context also supports this interpretation by showing that the bowman was a warrior. The archaeologists described the community at Kiskundorozsma as rich and located at a militarily important strategic location, which the community was tasked to defend (Szalontai & Károly, 2013, p. 383). The grave goods included gold-plated cast belt mounts with the image of some emperor (Szalontai & Károly, 2013, p. 374). There were likely even more precious items originally, but unfortunately, the grave was partially robbed sometime (Szalontai & Károly, 2013).

Table 10. Translation of the Bone Bow Inscription from Kiskundorozsma. The first piece is shown on the left and the second piece is shown on the right column in the second row. Source: Szalontai and Károly (2013). Below the following can be seen: author's drawing of the inscription (3rd row), the standard Carian letters (4th row), the Hungarian transliteration and implied vowels in small case (5th row), IPA pronunciation (6th row), the Proto-Hungarian grammar with an explanation of the root words and the suffixes in blue (7th row), the meaning using modern Hungarian (8th row), and the English meaning (9th row).

Bone Bow Left Side (Mirrored, Read Left-to-Right)	**Bone Bow Right Side (Mirrored, Read Left-to-Right)**
	
	
	
Ü R ü NK Le Ra S Ś a D	**M e T ü K T**
/yr-ynk leras-śad/	/….met ykt/
úr 'Lord, God'-3rd-PL-POSS le 'down' ráz 'shake'-2nd-SG-IMP	[aki enge]-1st-SG-REFL-OBJECT üt 'hit, attack'
Úrunk lerázzad	[aki enge]met üt
Our Lord, Strike Down	[Anyone Who] Attacks Me

Szalontai and Károly (2013) attempted to translate the inscription as a Turkic text, but they could not obtain a meaningful translation. They did not correctly recognize several of the letters. For example, they interpreted the first T as a Z-shaped letter with a different phonetic value, and they missed the second T letter.

Upper Door Frame Inscription from Csíkmadaras

In the Transylvanian region of Csík, the village of Madaras (Romanian: Mădăraş), which is also called Csíkmadaras by a combination of the region and village name, already had a chapel by 1500 according to local history. The upper part of the stone entrance door frame of the chapel had the inscription as shown in the second row of Table 11. This entrance door frame became the door frame of the sacristy of the new church that was built starting in 1796 (Fehér, 2020, no. 199). The door frame stone with the inscription may have been modified when it was moved to the new church or even before when the chapel was built. Hence, we cannot say anything definite about the age of the inscription based on the finished style of the door frame. The current door frame style is said to be late Gothic, which matches the 1500 date (Fehér, 2020).

The first three letters of the inscription /som/ seem related to the root of the names of Somlyó Mountain, which is about ten miles away, and Csíksomlyó village, which is at the foot of this mountain (https://hu.wikipedia.org/wiki/Csíksomlyó) and Someş River (Hungarian: Szamos), which is also close.

Table 11. Translation of the Door Frame Inscription Shown in the 2nd Row (Source: http://rovas.info/2015/11/csikmadarasi-gorog-felirat/). Below the following can be seen: the Hungarian transliteration with the addition of a vowel (3rd row), the IPA pronunciation (4th row), the meaning in modern Hungarian (5th row), and the English meaning (6th row).

Door Frame inscription

S O M Ś a G
/somśag/
Somság (Regional *Szomság)
A Hungarian Personal Name

These regional names may derive from the Hungarian som ‘dogberry’ (Sándor, 1998), which is a native plant in the area, or the root of Hungarian sompolyog and (Csángó regional) szompolyog /sompoljog/ ‘move slowly’ (Zaicz et al., 2006) because the Olt River goes through this area by dividing into three branches and forming two islands in the middle as shown on a map from 1769 as shown in Figure 5. The word szompolyog is applied to slow flowing, meandering rivers. There is also a Szum River in southeastern Poland, and there is also a Szomolya village near the Tisza River in Hungary and a Som village near Balaton Lake.

Figure 5. The Village of Csíkmadaras Shown on a Map from 1769 (Source: https://upload.wikimedia.org/wikipedia/commons/d/dc/Josephinische_Landaufnahme_pg163.jpg)

The last two letters can be read as the Hungarian suffix -ság. The letter A is omitted from the suffix, but the G letter is rotated almost 90 degrees like , which may be intended as a ligature of the A and the G letters because the A letter is included within the rotated G letter.

The Hungarian -ság suffix means ‘area’ as used in many toponyms such as Bánság, Jászság, Kunság, Ormánság, Vajdaság, etc. There is also a Hungarian family name ‘Somság,’ which may derive from the root som and the same toponym-forming suffix. Hence, the inscription may record ‘Somság’ as an older name of the Csíkmadaras area.

Other Examples of Word Borrowings Besides Greek ἱερός

For over two centuries, no serious etymologist wanted to be the first to consider direct word borrowings from ancient Greek into Hungarian and thereby risk a conflict with historians, who taught the mistaken historical belief that all Hungarians came to the Carpathian Basin at the end of the 9th century. Aczél (1975), a Greek language teacher in a high school, wrote a book about his observations of Greek-Hungarian word similarities, but his work was ignored. Vinereanu (2024) also wants to brush aside my theory that Hungarian híres ‘famous’ is a borrowing from the Greek ἱερός ‘holy.’ However, my theory is supported by a large set of other words that are borrowings

between Greek and Hungarian as shown in Table 12, which is a selection from Revesz (2020).

Table 12 only lists Greek-Hungarian word similarities where the Greek words are borrowings from a Pre-Greek language (Beekes, 2009) and the Hungarian words are derived from Proto-Finno-Ugric (Proto-FU) or Proto-Ugric (Proto-U) (Rédei, 1988). The Greek-Hungarian word similarities in Table 2 cannot be accidental because there are only 1106 Pre-Greek words (Beekes, 2009) and only 626 Hungarian root words that have Proto-Finno-Ugric origins. Moreover, the Greek-Hungarian word pairs have regular sound changes as shown in Tables 13 and 14 based on Revesz (2020). Tables 13 and 14 also show regular sound changes between Proto-FU or Proto-U and Hungarian as are already well-known in Finn-Ugric linguistics (Csúcs, 2019). The Pre-Greek and the Hungarian regular sound changes with respect to the common proto words are surprisingly similar.

The first column of Table 12 gives the ID number of the Pre-Greek suffix that is used (Beekes, 2014, p. 29), except for the suffixes of the form -βV, where V is a vowel. These suffixes are likely also Pre-Greek because they occur regularly among the words in Table 12. Most word pairs are straightforward, but a few may need some explanation.

Ἀσγελάτας, an epithet of Apollo, is considered a compound word, where λάτας is related to Hungarian lát 'to see', and Ἄσγε is related to Hungarian üszög 'ember' (Zaicz et al., 2006) and Mansi eškėŋ 'blazing' (Kálmán, 1976, p. 99). The Hungarian and Mansi words suggest a Proto-Ugric *ešk3 'blazing ember.' Hence, this epithet refers to Apollo as the one who sees with a blazing ember eye.

γοῦρος 'cake' is pronounced /gojuros/ based on van Emde Boas, Rijksbaron, Huitink and de Bakker (2019, p. 9), who points out that a semivowel may be pronounced in diphthongs. The IPA notation makes it easier to match the consonant phonemes with Hungarian kenyér 'bread' and Zyrian keńịr 'grits.' Although the latter is assumed to be only a borrowing (Zaicz et al., 2006), the Pre-Greek connection suggests that these words are cognate and originate from a Proto-Finno-Ugric *keńir3 'bread.'

Καδμῖλος (or the likely older variant Κάδμιλλος) was the younger of two sons of a Mother Goddess (Beekes, 2014, p. 162) in the mystery religion of Lemnos and Samothrace, where the names of the gods were kept secret. Hence, Καδμῖλος is likely not a real name just an attribute of the god such as 'the second son.' Hence, this may be a compound word with Κάδ related to Hungarian két 'two' and μιλλος related to Pre-Greek μέλλαξ 'young boy' (Beekes, 2009). The Hungarian word was likely *kat by regular sound change, but it later changed to két to distinguish it from hat 'six' (Zaicz et al., 2006).

καραβίς 'kind of a sea crab' is a variant of κάραβος (Beekes, 2009). A sea crab's pinch is like a bite of animals.

κιθάρα is related to the way the musical instrument is played by outstretching the arms to pluck the strings, which movement can be described by Hungarian kitár. This movement is also shown on several Cycladic harp player statues.

κότταβος is related to the Hungarian kettő 'two', which is a suffixed form of két 'two.' As mentioned under Καδμῖλος, the Hungarian root word was likely *kat by regular sound change, but it later changed to két to distinguish it from hat 'six' (Zaicz et al., 2006). Similarly, the suffixed form kettő was likely *kattó.

σισύρα 'goat's fur cloak' seems to be a compound word with σύρα related to Hungarian szőr 'fur' and σι related to Proto-Finno-Ugric uče 'sheep' from which derives Finnish uuhi and regional Estonian uhi (Rédei, 1988). Hungarian juh 'sheep' seems to be a borrowing from one of these with a word-initial /j/ hiatus-filler because the word medial /š/ > /h/ sound change is regular in Finnic languages but not in Hungarian. Before the sound change, the word had the form *usi, which was likely the Proto-Hungarian form too that was borrowed by the Greeks. The Hungarian borrowing of uuhi or uhi came after the Greek borrowing of *usi.

Χάρων 'Charon, the ferryman to the underworld' is related to κήρ 'doom, death demon', which had the original form *kar according to Beekes (2009). These seem to be related to Hungarian harag 'anger, bicker.'

Table 12. Pre-Greek and Hungarian Cognates. Columns 1-2 show Greek words and their meanings from Beekes (2009). Columns 3-6 show Hungarian words, their meanings, the reconstructed forms, and their reference numbers from Rédei (1988).

Pre-Greek suffix # in Beekes (2014) cf. for compound words	**Pre-Greek Meaning**	**Hungarian**	**Hungarian Meaning**	**Proto-FU or Proto-Ugric**	**UEW**
ἄγ-νος (#91)	Withy Tree	ág	Bough, Branch, Tree	ϑaŋ3	1745
αἴδω-σσα (#108)	Walls of a Hall/Court	aj-tó	Door	ϑj3	1873
αἴθου-σα (#105)	Portico	aj-tó	Door	ϑj3	1873

Pre-Greek suffix # in Beekes (2014) cf. for compound words	**Pre-Greek Meaning**	**Hungarian**	**Hungarian Meaning**	**Proto-FU or Proto-Ugric**	**UEW**
άκιδ-νός (#91)	Thin	kes-hed	Lean	kɑ̈ńćɜ	1773
ἀκκώ	Bogey, Vain Woman	ük, ik	Great-Grandmother	ewkkɜ	139
ἀλείατα	Rice-Wheat Groats	lisz-t	Flour	leśe	480
ἄλοξ, ἄλοκ-ος	Furrow	lyuk	Hole, Crevice	lowkkɜ	493
Ἄρη-ς	War God	ara-t, ir-t	Cut, Divide, Eradicate	šurɜ	1014
Ἀσγε-λάτας (cf. λάτας)	Epithet of Apollo	üszög	Blazing	eškɜ	new 1
Ἀχιλλε-ύς	Achilles	hal > haló	to Die > Mortal	kola	339
βαλ-μός (#90)	Breast	váll	Shoulder	wolka	1161
βασκά-ς	Duck	vöcsök	Duck	wajće	1106
βῆκα	Vine on Trees	vék-ony	Thin	wekkɜ	1136
βλά-βη	Damage	vál	to Separate, Fall Apart	walka	1110
γαῖα < *γή-αῖα (cf. γή)	Earth Goddess	anya	Mother	ańa	15
γή	Earth	kő	Stone	kiwe	322
γοῦρο-ς /gojuros/	Cake	kenyér	Bread	keńirɜ	new 2
Εἰλείθυια	Goddess of Birth	él > él-et	to Live > Life	elɑ̈	132
Ελέ-νη (cf. Εἰλείθυια)	Mother of Life	ne	Woman	niŋɑ̈	598
Ἐρεχθε-ύς	Ancestor of The Athenians	ér > ere-get	to Reach, Let Go > Originate	šɑ̈rɜ	1000
ἕψω /epsɔː/	Boil	fő > fő-z	to Heat, Simmer Cook	peje	735
ϝάναξ, ϝάνακε-ς	Name of The Dioskouroi	vén > vén-ek	Old > The Old People	wθ̈nɜ	1180
ἥρω-ς	Lord, Hero	ër	Man	ir-kɑ̈	152
θάτα-ς	Sacrificer	táltos	Magician, Diviner	tultɜ	1862
θρόμβο-ς	Clot, Curd	töm > *tereb	Stocky > Spreading	temɜ	1046
θύσ-θλα (cf. τύλλος)	Bacchic Ritual Tool	tűz	Fire	tüwɜtɜ	1864
θώραξ, /tʰɔrak-s/	Cuirass, Trunk, Chest	toro-k	Throat	turɜ	1863
ἰσχίο-ν (#91)	Hip-Joint	segg	Buttocks	śɑ̈ŋkɜ	951
Καδ-μῖλος (cf. μέλλαξ)	Younger of Two Boys	*kat > két	Two	kakta	227
καλλα-ρίας (#101)	a Kind of Cod Fish	hal	Fish	kala	228
κάλύ-βη	Sleeping Tent	hál	Stay For The Night	kalɜ	231
καραβί-ς	Kind of a Sea Crab	hara-p	to Bite	karɜ	249
καρκί-νος (#91)	Crab	hara-g	Anger, Bicker	kurɜ	426
κέλῦ-φος (#141)	Husk/Peel, Eggshell	ki > kívül > kül	Out > Outside	ki	1776
κιθάρα	Lyre	tár > ki-tár	to Open, Outstretch (Arms)	tara	1026
κίρ-βα	Leather Pouch	here-zacskó	Scrotum	koj-ra	333
κισσύ-βι-ον (#91)	Rustic Cup	köcsö-g	Vessel	kičɜ	300
κολο-βός	Curtailed, Maimed	halo-k	Crack, Gap to Cut Tree	kolɜ	342
κομμόο-μαι (#90)	Embellish/Adorn Self	hom-lok	Forehead	kuma	393
κόττα-βος	Game With 2 Vases	*kat-tó > ket-tő	Two	kakta	227
κρω-σσός (#108)	Pail, Pitcher, Bottle	hor-d > hor-dó	to Drag, Draw; Barrel	kurɜ	1784
κυδοί-μός (#90)	Din of Battle	had	Army	kunta	400
κύμ-βη	Head	hom-lok	Forehead	kuma	393
λαίθα-ργος (#102)	Guileful, Treacherous	lát	to See	lθ̈ttɜ	505
λᾰ̀ξ /laks/	With Heal Or Foot	lök	Push, Shove	likkɑ̈	485
λᾰ́πα-θος (#65)	Pitfall For Animals	láp	Drift Objects > Mud	lθ̈ppɜ	504
λάτ-ας	Cf. Ἀσγε-Λάτας	lát	to See	lθ̈ttɜ	505
λᾰ́ττα	Cretan Fly	légy	A Fly	lθ̈ńćɜ	501
λέπω	Peel off	lep	Cover	leppɜ	479
λίβα-ς (cf. κιλ-λίβας)	Three-Legged Stand	láb	Leg	luwe	498
λιχ-άξαι (#25)	Throw	lök	Push, Shove	likkɑ̈	485
λώβηξ /lɔbɛːk-s/	Vulture	lebë-g	to Fly	lempɜ	475
μακε-δνός (#38)	Tall	mag-as	Tall	muŋkɜ	563

Pre-Greek suffix # in Beekes (2014) cf. for compound words	**Pre-Greek Meaning**	**Hungarian**	**Hungarian Meaning**	**Proto-FU or Proto-Ugric**	**UEW**
μαλ-θακός (cf. θᾶκος)	Weak, Tender, Soft (Seat)	mál	Peel off, Wash off	mθlɜ	569
μάλκη	Numbness From Cold	mele-g	Warm	mɑ̈lɜ	1803
μὰρ-πτω (#100)	Catch, Seize	mar	Bite, Break	mura	566
μαρὰ-σσαι (#108)	Dogs, Swine	mar	Bite, Break	mura	566
μάργο-ς	Mad, Furious	mérëg > mérges	Poison, Anger > Angry	mirkkɜ	547
μέγα-ρον (#101)	Temple Inner Space	mag-as	Tall	muŋkɜ	563
μέρμερο-ς (root dupl.)	Difficult, Awesome	mer	to Dare, Risk	mɑ̈rɜ	1806
μήρ-ινθος (#81)	Cord, Thread	mér	to Measure	merɜ	538
μίτη-ς	Substance of Bees	méz	Honey	mete	539
μῦθο-ς	Word, Discourse, Tale	mese	Tale	mańćɜ	1800
μύραι-να (#91)	Eel	már-t	to Dip	marɜ	1801
Νηρε-ύς	Gaia And Pontus' Son	nyiro-k	Moist Place, Swamp	ńorɜ	639
νύ-μφη (#90, 141)	Nymph	nő	Woman	niŋɑ̈	598
νῶκα-ρ (#101)	Slumbering	nyug-szik	Rest	ńuŋɜ	648
Ὀδυσσεύ-ς	Odysseus	út > uta-zó	Road, Path > Traveler	utka	1096
ὄλ-βος	Prosperity, Bliss	ál-d	Bless, Spell Magic	alɜ	9
ὄνο-ς	Cod-Like Fish Family	őn	Fish Type	šɑ̈wnɑ*	886
ὄρυμ-ος	Altar < *Peak Sanctuary	orr > orom	Nose > Mountain	wōre	1144
πανό-ς	Torch	fejér > fény	Light	pɑ̈jɜ	717
πελεμ-ίζω	to Shake, Tremble	fél > félelem	to Fear > Fear, Worry (N.)	pele	739
πήλη-ξ (#55)	Helmet	fő > föl	Head > top, Cover	pɑ̈ŋe	729
πήρα	Leather Bag	fér	to Fit In	pθ̈rɜ	823
πίθο-ς	Wine Jar	fazé-k	Pot, Kettle	pata	710
πλα-στή (#109)	(Clay). Wall	fal	Wall	paδɜ	687
πύελό-ς	Bathtub	foly-ik	to Flow	pθ̈lɜ	1832
πύλη	One Wing of Double Gate	fél > ajtófél	Side > Doorjamb, Doorpost	pele	738
ῥί-ς	Nose	orr	Nose	wōre	1144
ῥίπτω	To Throw	rëp-ít	to Fly, Throw, Shake	rθ̈ppɜ	868
ῥώδ-ιγγες (#69)	Bruise	rút	Ugly	rθ̈tɜ	866
σαυκό-ν (#91)	Dry	szík	Salty, Dry	ćθ̈kkɜ	1737
σαῦλο-ς	(Animal). Walking	szala-d	Rust > Run	ćaδa	49
σι-σύρα (compound)	Goat's Fur Cloak	szőr	Fur	sɑ̈krɜ	1844
σίγραι	Wild Swine	csokor	Herd, Group, Bouquet	ćukkɜ-rɜ	76
σίττυ-βος	Cauldron	süt	to Bake, Shine (Sun)	čittɜ	1744
σοφία	Clever	szép	Beautiful, Old	śeppɑ̈	956
σπυρί-ς	Basket	csupo-r	(Birch Bark). Vessel	ćuppɜ	80
σύρι-γξις (#69)	Pipe-Like Objects	szár	Leg, Stem, Stalk	sθ̈rɜ	1854
σφά-ζω	To Slay, Slaughter	csap	to Hit	ćappɜ	51
τέραμ-να (#91)	House, Residence	tér > terem	Space, Room, Square	tɑ̈rɜ	1860
τέρχ-νος (#91)	Sprout, Twig, Fruit	törk-öly*	Pressed Grape	tθ̈rkkɜ	1085
τόξο-ν (#91). /tokson/	Quiver	tegez	Quiver	tɑ̈ŋɜtɜ	1859
τρέφω	To Cause To Curdle	töm > törp-ül	to Shrink	temɜ	1046
τύλη	Bulge, Callosity, Nail	toll	Feather	tulka	1075
τύλλο-ς	Box, Chest	tál	Serving Dish	talɜ	1857
τύμβο-ς	Burial Mound	domb	Hill	tθ̈mpɜ	1865
τύρ-αννος (cf. ἀννίς)	Tyrant	tőr	Dagger, Sword	terɑ̈	1049
ὑστρ-ιχίς (#88)	Hedgehog, Whip	ostor	Whip	oćtɜrɜ	658
φάσσα	Wood-Pigeon	fecs-ke	Swallow (Bird)	pɑ̈č-kɜ	711
φαῦλο-ς	Bad, Unfit, Ill, Mean	bal	Left	palɜ	698

Pre-Greek suffix # in Beekes (2014) cf. for compound words	**Pre-Greek Meaning**	**Hungarian**	**Hungarian Meaning**	**Proto-FU or Proto-Ugric**	**UEW**
φήληξ, φήληκος	Wild Fig	*boló-k > bogyók	Berries	pola	789
φιάλη	Flat Vessel	fël	High, Long	piδe	759
φλε-ν (#91)	to Burn	fül	to Burn	pilɜ	1826
φορί-νη (#91)	Hide	bőr	Skin, Birch Tree Bark	perɜ	751
φορκό-ν (#91)	White/Grey, Wrinkled	far > far-k-as	Behind > Tail > Wolf	purɜ	821
φωρια-μός (#90)	Chest, Trunk	fara-g	to Carve, Hollow Out	parɜ	708
χαρά-σσω (#108)	Carve, Engrave	hor-zso-l	to Scrape	korɜ	367
Χάρω-ν (#91). > κήρ	Doom, Death Demon	hara-g	Anger, Bicker	kurɜ	426
χιτών	Apron, Tunic	köt > köté-ny	Tie, Knit	kit-ke	320
χλεμε-ρός (#101)	Warm, Verdant	këll > kelle-m	Necessary > Pleasant	kel-ke	281
ψάλλω /psallɔ/	Pluck	foszli-k	Pluck off Feather	puśɜ	826
ψόθο-ς /psot^{h}os/	Ashes	füs-t	Smoke	pičɜ	1825

Table 13 shows that Proto-FU word initial š or ϑ is regularly omitted in both Hungarian and Pre-Greek. This /š/ omission of regular sound change was hypothesized to have taken place in a two-step process: /š/ > /h/ > - (Róna-Tas & Berta, 2011). Table 13 also shows that when the Proto-FU word initial is kV^{B}, then Hungarian is always hV^{B}, but Pre-Greek can be either κ V^{B} or χ V^{B}, where V^{B} is a back vowel. Therefore, the regular sound change process with the word initial kV^{B} > hV^{B} occurred only after the separation of Hungarian and Pre-Greek. This agrees with the observation of Róna-Tas and Berta (2011) that the initial /š/ omission process (š > h > -) must have finished before the initial kV^{B} > hV^{B} process started. Otherwise, the /h/ > - step of the /š/ omission process would cause all the word initial h phonemes to disappear.

Table 13. Word-initial Regular Sound Changes among Proto-FU or Proto-Ugric, Hungarian, and Pre-Greek. The letter ψ is treated as equivalent to πσ. Legend: V vowel, V^{B} back vowel, V^{F} front vowel, and V^{S} semivowel (j or w).

PFU, PU	č	ć	kV^{B}	kV^{F}	kVV^{S}	l	m	n	ń	p	r	s	ś	š	ϑ	t	w
Hungarian	cs s	cs s sz	hV^{B}	kV^{F}	h k	l ly	m	n	ny	b f	r	sz	s sz	-	-	d t	v -
Pre-Greek	σ	σ	κV^{B} χV^{B}	κV^{F} χV^{F}	γ	λ	μ	ν	ν	π φ	ρ	σ	σ	-	-	θ τ	β Ϝ -

Since Khanty and Mansi, which are traditionally considered the closest to Hungarian, underwent neither of the above two regular sound change processes, they must have separated from the common ancestor of Hungarian and Pre-Greek before Hungarian and Pre-Greek separated from each other.

Table 14. Word-medial Regular Sound Changes among Proto-FU or Proto-Ugric, Hungarian, and Pre-Greek. The letter ψ is treated as equivalent to πσ, and ξ is treated as equivalent to κσ.

č	ć	δ	j	k	kk	kr	kt	l ll	lk	lt	m	mp	n	ŋ	ŋk	nt	ń	ńć	pp	r	s	ś	š	t	tk tt	w
cs	cs s	l	j -	k	k	r	t tt	l ly	l ll	lt	m	b mb	n ny	g -	g gg	d	ny	s gy	p	r rr	s	sz	sz	t z	t	b -
σσ	σ	λ	ι	κ	γ κ κκ χ	ρ	δ ττ	λ λλ	λ	τ	μ μμ	β, μβ	ν	γ κ	γ κ χ	δ	ι	δ θ ττ	β π φ	ρ	σσ	σ τ	σ	δ θ σ τ	δ θ τ ττ	β -

Table 14 does not include those cases where Hungarian introduces new medial and final phonemes as part of some suffixes. These phonemes also change regularly as Hungarian g > Pre-Greek κ, χ, Hungarian p > Pre-Greek β, and Hungarian zs > Pre-Greek σσ.

One of the interesting regular sound changes shown in Table 14 is from Proto-FU ńć to Hungarian gy and to Pre-Greek dental phonemes. Hence, a hypothetical self-name *Mańći could become Mansi Mańśi and with

depalatalization Mansi. If it is compounded with Hungarian er(ä). 'man,' which is derived from Proto-FU irkə̈ 'man' (Zaicz et al., 2006). by the regular sound change of omission of the k that follows a medial r, then the compound word *Mańćer(ä) could become Hungarian *Magyer and with vowel-harmonization Magyar, which is the self-name of the Hungarians. Furthermore, *Mańćer(ä). could become in Pre-Greek Matherä. Finally, Greeks could adopt this name as Matheri, which appears on Ptolemy's map near the lower Volga River's bend (Ptolemy, 1932), and Romans could adopt it as Meterea, which appears as a reference to a group of people living near the Danube Delta in Ovid's Tristia (book 2, line 191), which was written while he was exiled to Tomis on the western coast of the Black Sea between 8-17 CE (Figure 6). Pekkanen (1973). also proposed that Ovid's Meterea as well as Ptolemy's Matheri refer to Hungarian speaking groups.

The map in Figure 6 summarizes the following movements.

Egypt to the Aegean: The sphinx had an origin in Egypt where it spread to Crete in the Middle Minoan II period (Kourou, 2011), and it spread to other locations in Greece, such as the island of Naxos, which was well-known in the ancient word for the Sphinx of the Naxians, which was set up by the Naxians in Delphi as a gift (Kourou, Komvou, Raftopoulou, Krauskopf, & Katakis, 1997).

Aegean to the Black Sea region: The Carian and the Greek alphabets spread to the northwest Black Sea coastal area as shown in Figure 6. Megara, the Greek city, which was a major rival of Athens, founded the Black Sea colonies Chersonisos, Kallatis, and Troesmis (blue squares). Miletus, the most powerful Carian city, founded the Black Sea colonies Boristhenis, Istria, Tomis, and Tyras (red squares). The sphinx also spread from the Aegean to Thrace, specifically to Dimum and Novae which were part of the Roman limes along the lower Danube in the 2nd to 3rd century (Biernacki & Klenina, 2018, p. 262).

Black Sea Region to Potaissa: Troesmis, which was also part of the Roman limes along the lower Danube was the location of the Legio V Macedonica until 169 CE, when it was transferred to Potaissa (Nemeti & Nemeti, 2019).

Since the pre-Greek language existed in Greece before the arrival of the Greeks to present day Greece (Beekes, 2009), Hungarian speakers had to live in an area of the Balkans that included at least part of Greece during the Bronze Age. Hence, some Hungarian speaking groups likely participated in the previous two movements, which explains the presence of Greek and some Carian lettered inscriptions in the large grey elliptical area in Figure 6. This fact does not contradict other historical data about later Hungarian movements in the area. The above map and explanations relate to the spread of the sphinx cult and the Cretan Script Family to a wider region across time (Revesz, 2016).

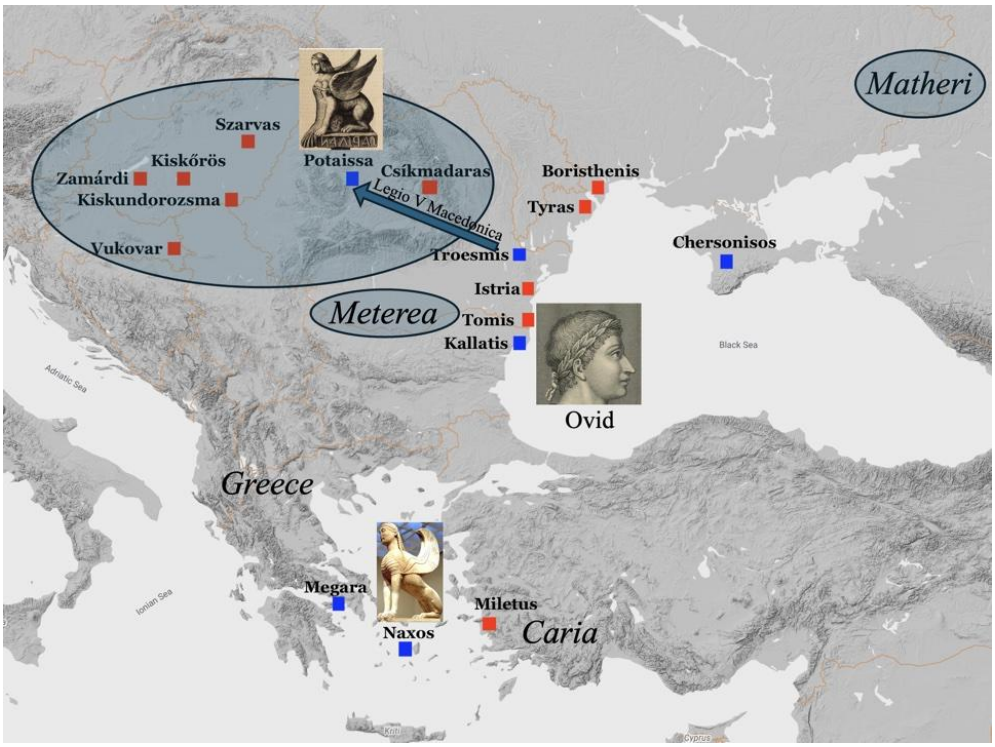


Figure 6. The Carian-associated Locations (Red Squares), Greek-associated Locations (Blue Squares), Hungarian-Associated Areas (Ovals)

The Meterea were mentioned by the poet Ovid, who was in exile at Tomis. The Matheri were mentioned by Ptolemy. Pekkanen (1973). proposed that these were Hungarian-associated areas in the first century. The large oval includes those areas where Carian or Greek letter inscriptions were found with Hungarian as the underlying language. Legio V Macedonia was moved from Troesmis to Potaissa as a base in 169 CE, which is the likely reason for the spread of the Greek alphabet and the sphinx cult to Potaissa.

CONCLUSION

The interdisciplinary study of archaeology, archaeogenetics (Revesz, 2021), epigraphy, history, and linguistics can bring us a more realistic view of the processes of cultural development in various regions of the world. A deeper understanding of these processes can make us all better human beings. Keeping that goal in mind, any individual specialty or researcher will gladly revise any earlier theory that is shown to be outdated.

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