

## Article

# A Proposed Translation of an Altai Mountain Inscription Presumed to Be from the 7th Century BC

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**Abstract:** The purpose of this study is to examine an Old Hungarian inscription that was recently found in the Altai mountain and was claimed to be over 2600 years old, which would make it the oldest extant example of the Old Hungarian script. A careful observation of the Altai script and a comparison with other Old Hungarian inscriptions was made, during which several errors were discovered in the interpretation of the Old Hungarian signs. After correcting for these errors that were apparently introduced by mixing up the inscription with underlying engravings of animal images, a new sequence of Old Hungarian signs was obtained and translated into a new text. The context of the text indicates that the inscription is considerably more recent and is unlikely to be earlier than the 19th century.

**Keywords:** Altai inscription; decipherment; inscription; Old Hungarian script; Orkhon script; translation



**Citation:** Revesz, P.Z.; Varga, G. A Proposed Translation of an Altai Mountain Inscription Presumed to Be from the 7th Century BC. *Information* **2022**, *13*, 243. <https://doi.org/10.3390/info13050243>

Academic Editor: Francesco Fontanella

Received: 14 February 2022

Accepted: 7 May 2022

Published: 10 May 2022

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## 1. Introduction

A puzzling, unique inscription from the Altai Mountain was recently presented by Karžaubaj Sartkožaulý, who is a member of Kazakhstan academy of sciences, in a monograph on the Orkhon script [1]. According to Sartkožaulý, the inscription was made in the 7th century BC.

Sartkožaulý [1] also noticed that the inscription has similarities with the Old Hungarian script (Hungarian: *székely írás* or *rovásírás*), which was used by Hungarians before the adoption of the Latin alphabet in the Middle Ages [2,3]. Sartkožaulý's book [1] remained unnoticed in Hungary until Lajos Máthé brought it to the attention of the second author. Subsequently, the second author alerted the first author and asked for his help in the translation of the inscription. The second author already correctly identified a few words, and the first author identified the still-missing words and completed the translation. Both authors were intrigued by the Altai inscription and the possibility that it may be the oldest extant example of the Old Hungarian script.

Although Sartkožaulý already presented a translation of the inscription, we show that it has several errors. One of the problems is that the inscription is partly written over the engraved images of several animals. As we show, there are several instances where Sartkožaulý mixed up the actual inscription and the engraving of the animals. Correcting these mistakes gives us a different sequence of Old Hungarian signs. Moreover, this enables us to give a better, alternative translation of the Altai inscription.

The rest of this paper is organized as follows. Section 2 describes the materials and methods. Section 3 describes the main results of the paper, including our identification of a new Old Hungarian signs sequence read off from the Altai inscription (Section 3.1) and a transliteration and translation of the Altai inscription (Section 3.2). Section 4 discusses the Altai inscription and finds a new date range for its creation. Section 5 presents an alternative transliteration and translation of the inscription. Finally, Section 6 gives some conclusions and directions for further work.

## 2. Materials and Methods

The main method of our research was a careful examination of the original photo of the Altai inscription in [1]. It was discovered that the inscription was overlaid on the engraved images of some animals. The engravings are usually fainter than the inscription, but there are cases where the lines are indistinguishable. This causes several problems in the precise identification of the Old Hungarian signs that were intended by the scribe. We could correct several of the earlier mistakes made by Sartkožauly [1] and obtain a new sequence of Old Hungarian signs.

Next, we transcribed the new sequence of Old Hungarian signs. The transcription was complicated by the presence of ligatures, which are combinations of letters. We also looked for various Old Hungarian alphabets from various centuries to identify the one that contained signs that have similar forms to the one in the Altai inscription.

Finally, we translated the inscription first into Hungarian and then into English. The etymology of the Hungarian words was considered in finding an improved date range for this Altai inscription.

## 3. Results

This section may be divided by subheadings. It should provide a concise and precise description of the experimental results, their interpretation, as well as the experimental conclusions that can be drawn.

### 3.1. A Reexamination of the Old Hungarian Signs

Sartkožauly [1] gave a drawing of the inscription. Figure 1a is a modification of that drawing by enhancing it with different colors for the inscription itself and the underlying animal drawings. This distinction is important because it influences the interpretation of the signs that are thought to belong to the inscription. In fact, we do not completely agree with Sartkožauly's identification of what belongs to the inscription versus the underlying drawings.

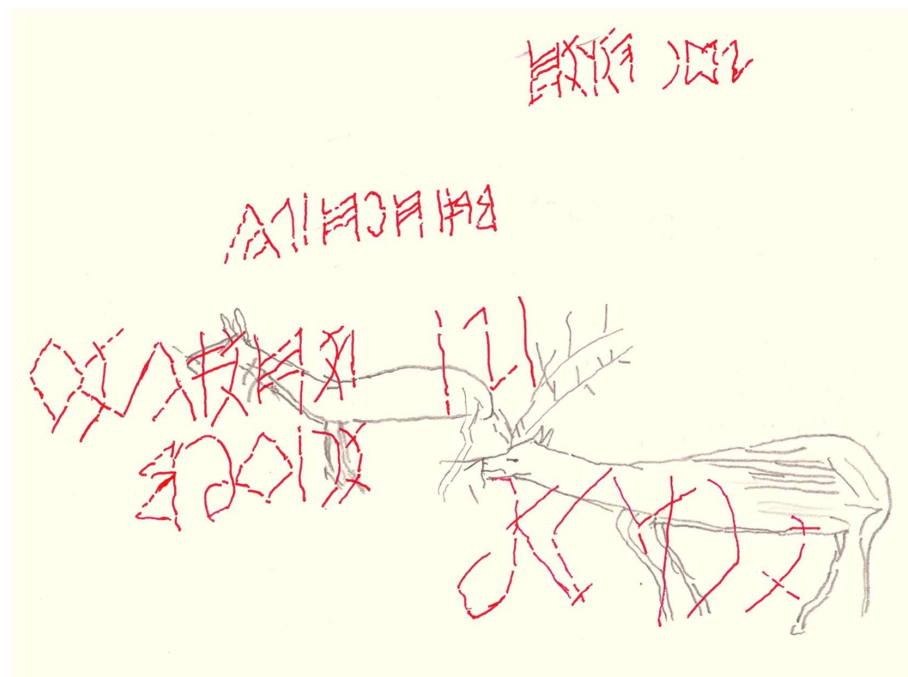
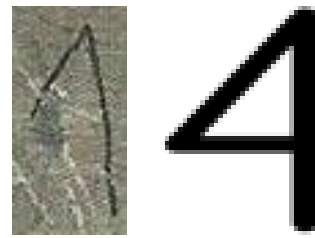
In fact, our examination of the photo of the Altai inscription led us to a different identification of the sequence of Old Hungarian signs as shown in Figure 1b. We believe these differences are due to different interpretations of what little line segments belong to the inscription itself and what line segments belong to the engravings of the animal figures on the rock surface where the inscription was found.

In addition, there are also some cracks on the rock that may cause problems in the correct discernment of the Old Hungarian signs that belong to the inscription. Below we list the most important differences that we identified.

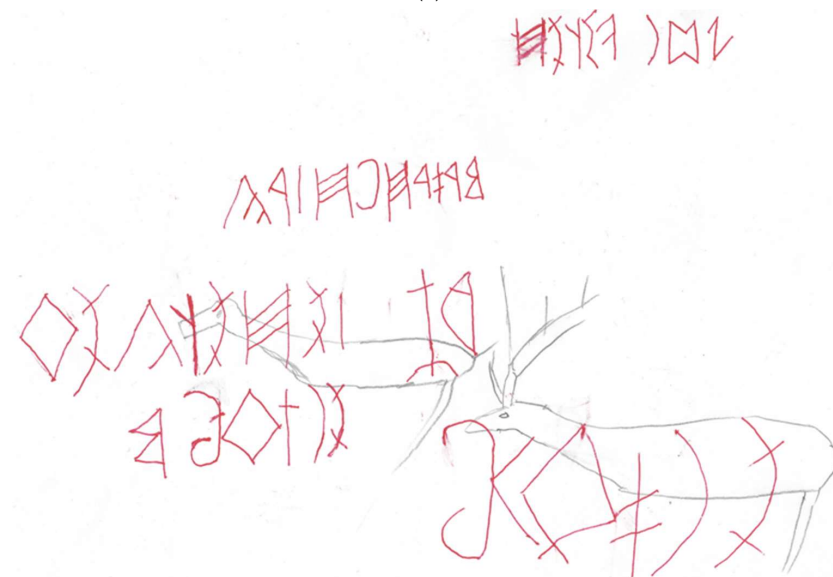
In the second row, we identified the fourth and the ninth signs from right to be the Old Hungarian sign denoting the vowel *a*. Here is an enlargement of the fourth sign from the right in the second row of the photo in [1] next to the Old Hungarian *a* sign:



Similarly, let us consider now the ninth sign from the right in the second row next to the Old Hungarian *a* sign:



(a)



(b)

**Figure 1.** Two drawings of the Altai inscription based on a photo from [1]. (a) the first author's redrawing of Sartkožauly's drawing in [1]. The improved drawing shows the inscription in red color and part of the animal drawings in the background in black color; (b) an alternative drawing of the same inscription by the first author. This alternative drawing follows closer the original inscription shown in the photo.



In both cases, there are line segments which look deliberate and belong to the Old Hungarian sign. In the second case, it is not clear why some of the lines have been blackened, but this feature also appears in some other signs of the Altai inscription. As can be seen in Figure 1a [1], left out some of the line segments that form the little triangle in these signs.

Sartkožauly [1] overlooked that the inscription contains some ligatures, which are combinations of two or more signs. Ligatures often save some space and are common in Old Hungarian inscriptions. In the Altai inscription, we also find a few examples of ligatures. For example, in the third row of the inscription, we believe that the first sign on the right is a ligature of the Old Hungarian *n* and *a* signs.

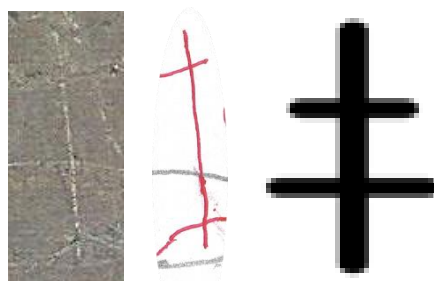
Below we show an enhanced image of the first sign from the right in the third row, our drawing of it, and the Old Hungarian *n* sign written with a mirror symmetry and an *a* sign:



The comparison shows that this sign may be a ligature of the Old Hungarian signs.

The Old Hungarian *n* sign  is likely mirrored to make the combination with the  sign easier and to save more space. The ligature is read as *na*.


The next sign in the third row is not a straight vertical line as [1] assumes, because it also has additional overlooked details, as can be seen in the following enhanced photo:



Here we need to be careful to ignore the engravings that depict part of the back and the belly of a deer. The lines to be ignored are shown in black in our drawing.

The seventh sign from the right in the third row is an Old Hungarian *t* sign:



In the enhanced photo, the Old Hungarian  is clearly visible. In addition, there are two parallel lines that belong to the head of one of the engraved deers. These lines do not belong to the Old Hungarian inscription and should be ignored. Unfortunately,



Sartkožauly considered these lines part of the inscription and obtained an Old Hungarian  $\dagger$  sign in this place.

In the fourth line, there are additional missing details in Sartkožauly's drawing. The first sign from the left is missing its top half, the diamond sign misses on side, and in the second word, which is written with smaller signs, the third sign from the right misses a small horizontal crossing line segment. These can also be verified by a careful observation of the original photo of the Altai inscription. In addition, the following ligature was also overlooked:



This ligature is a combination of the Old Hungarian *k* sign  $\diamond$  and *ő* sign  $\mathfrak{X}$ . Together they can be read as *kő*.



### 3.2. Transliteration and Translation of the Altai Inscription

We agree with Sartkožauly that the Altai inscription needs to be read from right-to-left. Most Old Hungarian inscriptions known from Hungary and the Carpathian Basin are also read from right-to-left. On the other hand, a left-to-right presentation would make the translation hard to read. Hence Table 1 presents each row of the Altai inscription in red based on our drawing, its Old Hungarian left-to-right transliteration in black, and below the Old Hungarian signs a Latin alphabet transliteration of the Old Hungarian letters. The Latin alphabet is extended by some accent marks.

**Table 1.** The Altai inscription and its row-by-row transliterations into Old Hungarian and Latin.

Row	Script	Inscription
1	Altai, right-to-left	
	Old Hungarian, left-to-right	$\mathfrak{1} \mathfrak{M} \mathfrak{C} \mathfrak{E} \mathfrak{S} \mathfrak{Y} \mathfrak{X} \mathfrak{H}$
	Latin	<u>k u n p é t e r</u>
2	Altai, right-to-left	
	Old Hungarian, left-to-right	$\mathfrak{B} \mathfrak{4} \mathfrak{t} \mathfrak{4} \mathfrak{H} \mathfrak{C} \mathfrak{H} \mathfrak{I} \mathfrak{4} \mathfrak{A}$
	Latin	<u>m a g y a r o r s z á g</u>

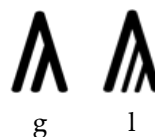
Table 1. Cont.

Row	Script	Inscription
3	Altai, right-to-left	
	Old Hungarian, left-to-right	ᚾ 4†   3 H 3 Y M 3 O
	Latin	n a g y   s z e r e t l e k
4	Altai, right-to-left	
	Old Hungarian, left-to-right	3 O † O 3 3 O † O 3
	Latin	e n i k ő   e n i k ő m

There are certain peculiarities in the Latin transliteration that we made in order to obtain meaningful words. In particular, we believe that the scribe was not using the standard Old Hungarian signs but mixed up some of the similar looking signs. In particular, the scribe mixed up the Old Hungarian letters for *r* and *z*, which are the following, respectively:



Similarly, the scribe also mixed up the Old Hungarian letters for *g* and *l*, which are the following, respectively:



We had to assume these two interchanges to obtain meaningful Hungarian words. We give a row-by-row translation of the Altai inscription in items (1–4) below.

1. The first row of the inscription starts with the name *Kun Peter*. Interestingly, the family name *Kun* is written first, and the given name *Peter* is written second. This order agrees with the Hungarian word order. In addition, *Peter* is a common given name in Hungary, and *Kun*, meaning 'Cuman', is also a common family name. In fact, Hungarian *Kunság* is the name of a region of Hungary that was settled by Cumans in the 13th century. Many people in that region consider themselves to be descendants of the Cumans and took *Kun* as a family name in later centuries.
2. The second row of the inscription contains the Hungarian word *Magyarország*, which means 'Hungary.' The Hungarians' neighbors apparently confused the Hungarians with the Huns and the Onogurs, who occupied present day Hungary before the Magyars and allied peoples arrived in the 9th century. For example, German speakers in Austria and Germany call the country *Ungarn*.
3. The third row of the inscription contains the Hungarian word *nagy*, which means 'big' or 'much', and the Hungarian word *szeretlek*, which means 'I love you.' Hence the two words together express the sentence 'I much love you.'

4. The fourth row of the inscription contains the Hungarian word *Enikő*, which is a common woman's name, and its conjugation *Enikőm*, where the -m suffix is a first-person possessive marker. Hence the meaning of *Enikő*, *Enikőm* is 'Enikő, my Enikő'. The name *Enikő* is said to derive from Hungarian *enéh* meaning 'young hind (female deer)' [4]. It is perhaps for this reason that we see two deers drawn next to these words in the inscription.

In summary, the inscription can be translated into Hungarian as follows.

*Kun Péter, Magyarország: Nagy szeretlek, Enikő, Enikőm.*

This means the following in English:

*Enikő, my Enikő, I much love you.—Peter Kun, Hungary*

Therefore, the Altai inscription is a message of love from a gentleman named *Peter Kun* to *Enikő*, who is his beloved woman.

#### 4. The Inscription's Implications for the Development of the Old Hungarian Script

The Old Hungarian alphabet is thought to be a descendant of the Orkhon Turkic alphabet [3]. An early example of an Old Hungarian inscription from the Altai Mountain would support the theory of an Orkhon Turkic origin of the Old Hungarian alphabet.

On the other hand, the first author argued that the Old Hungarian alphabet may be a descendant of the Carian alphabet, which in turn may be a descendant of the Minoan Linear A script [5]. The second author has also proposed that the Old Hungarian script had a pictogram or hieroglyph script-like origin in the Carpathian Basin even earlier [6]. These two views do not exclude each other because there is growing evidence based on archaeogenetics [7,8] and art motif comparisons [9] that the Minoans came from the Danube Basin to the Aegean islands in the early Bronze Age. Hence both authors were skeptical about an Asian or in particular an Orkhon Turkic origin of the Old Hungarian script. However, we were intrigued by the reported find and undertook the research described in this paper.

During the translation, we noticed that the Old Hungarian signs of Altai inscription reflected not the earliest known forms, as one would expect from a 2600 years old inscription, but from later centuries.

Luckily, the date of the inscription can be narrowed down a pure linguistic reason. The reason is that the name *Enikő* was created by Mihály Vörösmarty (1800–1855), a Hungarian poet [4]. Hence the Altai inscription was carved in the latter half of the 19th century or later. Already in the 19th century, Hungarians had a strong interest in exploring the area because of presumed cultural connections with some people living near the Altai Mountains. In fact, a well-known Hungarian scientific expedition to the Altai Mountain was led by Count Jenő Zichy in 1895 [10].

#### 5. An Alternative Translation of the Inscription

Sartkožauly [1] has given a transliteration of the letters of the Old Hungarian inscription based on an interpretation of the drawing as shown in Figure 1a. His transliteration, which is only the substitution of the Old Hungarian letters by Latin letters, is the following from the topmost line to the bottom-most line:

Line 1: kunpétez

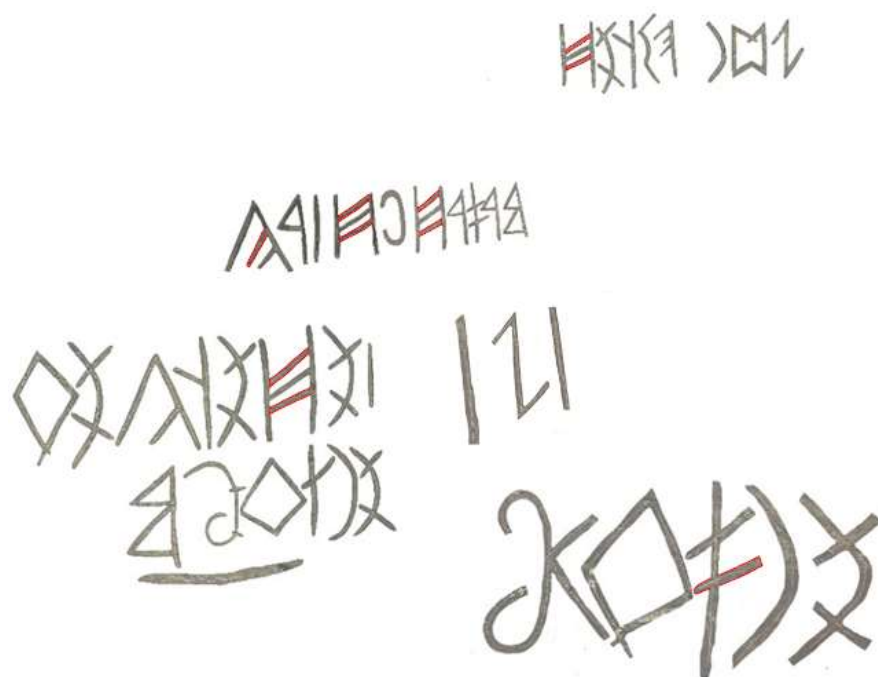
Line 2: magy sz zcz sz

Line 3: sz ksz sz eze gügek

Line 4: enü ? o en sz kom

As can be seen, the transliteration is different from ours because some letters are faintly written over some underlying drawings of animals. Therefore, they have ambiguous interpretations. In fact, Sartkožauly [1] has used a question mark at some point in the last line to indicate that at that point he did not find a clearly readable letter that he could transliterate with confidence. Sartkožauly [1] could not give an actual translation.

Sartkožaulý's drawing and transliteration was the starting point of our translation of the inscription. Initially, we tried to make only minimal changes to both his drawing and transliteration as shown in Figure 2. In particular, Figure 2 follows Figure 1a at the right end of the third line. In the third line, the three letters are supposedly the following from right to left: sz ksz.



**Figure 2.** An alternative drawing of inscription. Here the red lines are those that seem extra to the letters that are apparently needed for a meaningful reading of the inscription.

It is possible to translate this as the word *szex* because while the traditional Old Hungarian alphabet does not have an *x* letter, the convention is to render the letter *x* as a combination of Hungarian *k* and *sz*, which is equivalent to English *k* and *s*, respectively. Of course, then the translation would change to the following:

*Enikő, my Enikő. I love sex [with you].—Peter Kun, Hungary*

This alternative has some problems. First, the Hungarian word *szex* is a borrowed word that was first used only in 1958 according to Zaicz [11]. Hence this would require a late 20th century origin of the inscription. Second, the use of the two Old Hungarian *k* letters would be inconsistent. Usually, the Old Hungarian diamond-shaped letter *k* is used with front vowels, while the Old Hungarian Z-shaped letter *k* is used with back vowels. The latter can also be used to express the frequent syllable *ak* because the vowel *a* can be omitted.

The Altai inscription adheres to this custom because the Z-shaped letter is used in the word *Kun*, which contains the back vowel *u*, while the diamond-shaped letter is used in the words *szeretlek*, *Enikő*, and *Enikőm*, all of which contain front vowels. However, this custom would be broken by the use of the Z-shaped letter in writing the word *szex*, which has a front vowel. For these reasons and also the visual analysis that we presented in Section 3, this alternative reading seems less plausible. We present this here mainly to show the evolution of our thinking.

In Section 3, we mentioned that the scribe mixed up some letters because of misremembering some details. Instead, it is possible to imagine that the scribe remembered correctly the letters and at first wrote them correctly as shown by the black lines in Figure 2. Then he became embarrassed by the inscription and deliberately added the red lines shown in Figure 2. The scribe may have thought that the addition of the red lines makes the original inscription unreadable. The hypothesis of deliberately adding extra lines can be used with

either of our translations. Because it is only an explanation for the apparently mixed-up letters, it can be accepted or rejected without changing the meaning of the translation. The reason this hypothesis may be attractive is that whenever the scribe mixed up letters, the intended letter, whether *r* or *g*, always has fewer lines than the actual written letter, whether *z* or *l*.

## 6. Conclusions

We gave a new, correct transliteration and translation of the Old Hungarian inscription from the Altai Mountain that was reported by Sartkožauly [1]. We also redated the inscription to the 19th century or later based on a linguistic argument. Although the inscription did not prove to be as ancient as originally assumed, it still provides an amazing and valuable cultural connection between the peoples near the Altai Mountain and Hungarians in Central Europe.

**Author Contributions:** Conceptualization, methodology, and investigation, P.Z.R. and G.V.; draft notes in Hungarian, drawing of Figure 2, G.V.; extension, writing in English, drawing of Figure 1a,b, and dating using linguistic argument, P.Z.R. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

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