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# TRACING THE SCRIPT AND THE LANGUAGE OF THE ANCIENT MACEDONIANS

#### **Abstract**

In the paper, it is assumed that a syllabic script of the type consonant-vowel was used for the middle text of the Rosetta Stone. Symbols for 27 consonants were identified. By using the procedure of mirroring and rotation in the writing surface (plain), a monosemic (unambiguous) way was determined for connecting the symbol of consonant with 4 or 8 vowels. Although rarely used, the symbols for writing isolated vowels and some consonants were identified. In the analyzed text, the syllabic signs were not only written next to each other, but also they were often written one above the other in the form of what are known as ligatures. A small number of pictographic symbols were also identified.

The wiring for sound of the identified syllable signs, isolated consonants or vowels and ligatures was achieved by using archaisms from the dialects of the contemporary Macedonian language. In the text, which was written from right to left, without space between the words and without separation of sentences in an infinite series, more than 200 different words were identified which have kept their meaning in some dialects of the contemporary Macedonian language. A certain number of grammatical rules were also identified which are discerned in the contemporary Macedonian language, such as the formation of superlative of the adjectives with the prefix  $\mathbf{Haj}$  [ $\mathbf{nai}$ ] (equivalent to the English  $\mathbf{the}$  .....\_est/  $\mathbf{the}$  most .....); the plural of nouns by adding  $\mathbf{m}$  [ $\mathbf{i}$ ] (equivalent to the English  $\mathbf{s}$ ); the occurrence of definite and indefinite form of nouns, the frequent use of the preposition  $\mathbf{na}$  [ $\mathbf{na}$ ] (equivalent to the English prepositions  $\mathbf{on}$ ,  $\mathbf{at}$ ,), as well as passive and active form of verbs. With these identified syllables and their wiring for sound and the definite rules for writing, a monosemic (unambiguous) methodology was generated in order to make out certain words and to read what was written.

The results of deciphering the middle text of the Rosetta Stone point to the fact that there are many details which cannot be found in the text inscribed in uncial (ancient Greek) alphabet. This conclusion proves the science awareness from the time of Thomas Young (1822) that the middle text was the original. On the basis of our research we can make this knowledge more precise with the conclusion that the pharaoh's decree from the middle text of the Rosetta Stone in original is inscribed in the language of the ancient Macedonians with letters of the **alive (living) masters of that time**, i.e. with the official letters and language of the state that had been ruled by them for more than a century.

Keywords: Ancient Macedonians, Demotic, Egypt, Greek, hieroglyphs, language, Rosetta Stone, script

## Introduction

The Rosetta Stone is one of the best known textual artifacts from ancient Egypt and has been the object of a great number of studies and much research in the scholarly world of this field. It has its name because the location where it was excavated, that is Rosetta, i.e. El-Rashid in Arabic. In 1802 the Rosetta Stone was moved to England where it still is today and is one of the best-known exhibits at the British Museum in London.

The importance of the Rosetta Stone and the interest it has aroused in the scientific and scholarly world are based on the fact that special decree had been inscribed on it, which, according to contemporary scholarship, was issued by the priests in order to glorify the pharaoh Ptolemy V Epiphany Eucharist one year after his coronation, according to the present-day calendar on 27<sup>th</sup> March 196 BC. The special interest arises because this decree was written in three different scripts: in hieroglyphs, in so-called demotic script and in the uncial alphabet. On the basis of the text written in the uncial alphabet, in 1822 the well-known French scientist Champollion deciphered the hieroglyphic script using the ancient Egyptian language for wiring for sound [1-3].

According to the perceptions of contemporary science [1-3], as well as the text being written in three scripts, two languages had been used: ancient Egyptian, in the text written with hieroglyphs and in the demotic script, and ancient Greek in the text written in uncial alphabet. The thesis that **three scripts** and **three languages** are used on the Rosetta Stone was widely accepted until the beginning of the 20<sup>th</sup> century [1]. Due to the difficulties in determining and deciphering the third language, which was used to write the middle text of the stone, in the first decade of the 20<sup>th</sup> century the thesis that **three scripts** and **two languages** were used on the stone began to predominate [1]. Consequently, current scholarship supports the theory that two scripts: the hieroglyphic and the demotic were used to inscribe the decree on the Rosetta Stone in ancient Egyptian language [1-3].

A basic assumption of our research is that in writing the text on the Rosetta Stone **three scripts were used**, but **in three languages: ancient Egyptian**, written in the hieroglyphic script, **ancient Macedonian**, written in the demotic script, and **ancient Greek** written in the uncial alphabet. This assumption is based on the fact that the rulers of Egypt in those times were the Ptolemaic dynasty, descend from Ptolemy Soter, general of Alexander the Great, i.e. they were ancient Macedonians. And according to the perceptions of a part of contemporary scholarship, [4], the ancient Macedonians used to speak in a language different from the ancient Greek, and it is more than obvious that they had to know how to read and write into their own language. Our assumption is that the script they used was the script used in the middle text of the Rosetta Stone and which is known today in the scholarly circles under the term of the demotic script. The assumption becomes true if the demotic script is taken into consideration in its universal use on the part of the literate people of those times, i.e. it was being used in Persia and Egypt for writing state documents, documents for legal and property issues, scientific texts, poetry and prose [5].

The appearance of the middle text of the Rosetta Stone is shown of Figure 1.

It is known that the demotic script is syllabic in character, [1-3, 6], which mean that each sign represents one syllable of the consonant–vowel type. It must be mentioned that the demotic script has been in the past and is still today a subject of intensive research [1-3, 6]. Although it is clear and generally accepted that a syllabic script is in question, in the significant publication, [6], the authors point out that they are not capable to read the variant of the demotic script used in Ptolemaic period sign by sign. Accordingly, they suggest the text could be read word after word, and at the same time supposing an absolute

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**Figure 1** – *The appearance of the middle text of the Rosetta Stone* 

language identity in the forming of sentences, phrases and all the names of rulers and gods in the text in ancient Egyptian (Demotic) with the ancient Greek text.

In the text that follows, the perceptions and results of our research in analyzing and deciphering the middle text of the Rosetta Stone are presented, starting from the assumption that the text in the demotic script was written in the language of the **ancient Macedonians**, i.e. **in the ancient Macedonian language**.

In the first section, the basic characteristics of the analyzed script are given, as well as the procedure of wiring for sound the syllabic signs, wiring for sound of pure consonants, of pure vowels and the way of reading and wiring for sound the pictographic signs and ligatures. Unlike the research by the Oriental Institute in Chicago [6], in our research of the demotic script we start from the basic fact: that is the syllabic script and we consider it sign by sign, i.e. syllable by syllable.

In the second section, by applying the rules for wiring for sound presented in the first section chapter, the following things are presented: the formation of the superlative of adjectives, the method of making the plural of nouns, the formation of definite and indefinite forms of nouns, and passive and active forms of verbs.

The third section is a thorough examination of the most frequently met composition of words in the text, i.e. titles, the first name, family name and nickname of the emperor.

In the fourth section a detailed analysis of the last row of the text is presented. The basic reason for this is the fact that here an order was given indicating in which temples, in which lands and with what kinds of scripts the decree was to be written.

In the fifth section the names of the territories and peoples that we find in the text are considered. We succeeded in identifying what the ancient Macedonians used to call Egypt, both parts of Egypt – Lower and Upper Egypt, as well as the ancient Macedonian name for Sinai. The names of the ethnic groups living in the ancient Egypt are also mentioned in the text.

In the sixth section the names of the ancient Macedonians' gods are presented. For some of them we managed to figure out their function as gods, too. In the text we also identify the names of some ancient Egyptian gods, in the way they were named in original, in ancient Egyptian.

A conclusion is added at the end of the text.

# Wiring for Sound of the identified Signs

The relatively wide range of the available text, of about 4500 signs, gives us an opportunity to identify the forms of the signs, which are the basis of the script used. The most frequent ones are denoted asymmetrical, symmetrical and inclined (slanting) signs. The main characteristics of the script and the initially identified signs are presented in details in our previous work, [7]. In the text bellow we will focus our attention to the process of wiring for sound of the signs. We will notify as well the new additional signs, compared with [7], which we were able to detect in the meantime within our research activities.

If the basic assumption is that the analyzed text is written in the language of the ancient Macedonians, the determination of the sound characteristics of that language will be realized through the sound features of the domestic population in the Balkan area, as their parent territory. We assume that the sound values of the consonants and vowels, as mostly not liable to changes, have retained the same pronunciation up to the present day.

## Wiring for Sound of the Syllabic Signs

The wiring for sound of the identified syllabic signs can be realized by finding words in the text, which have preserved their meaning to the present day in languages or dialects in the Balkan area or farther afield in the European area. In this phase the analysis will, of course, be based on a comparison between words from the text of the Rosetta Stone and archaisms from the dialects of the contemporary Macedonian language.

#### Wiring for Sound of the Asymmetrical Syllabic Signs

Using more than one hundred words from the contemporary Macedonian language, all 13 (thirteen) asymmetrical signs were wired for sound with corresponding consonants. They are presented in the form **CYRILLIC** [Latinic]. They are:

In the previous figure we have one new sign ( ), compared with [7], and we wired it for sound as IIIT [sht].

The asymmetrical signs J[j], and P[r] in today's and in the ancient Macedonian script have the same form and the same sound. According to their written form the remaining asymmetrical signs are mutually similar, and in their pronunciation, too, for example the asymmetrical signs  $\mathcal{K}[zh]$ ,  $\mathcal{J}[z]$ , and  $\mathcal{J}[dz]$ . The similarity in writing and in the pronun-

6.R	COLUBCIA	0	ö	Y Z	ė	e E	Ь	<u>a</u>	Ä
1.	J	ſ	7	J	ſ	1	L	l	J
2.	Р	٩	ρ	٩	ρ	٩	þ	b	٩
3.	ŕ	្រ	}	J	J	ĵ	7	ſ	7
4.	ж	Y	٢	Y	۲	Υ	4	h	7
5.	3	۲	~	٨	۲	٩	4	h	۲
6.	S	ľ	<u>-3</u>	٦	٢_	ገ	_3	Ļ	7
7.	Т	ſ	_	J	ſ	1	_	Ţ	1
8.	П	Γ	_	]	_	1	_	L	1
9.	С	1	7	1	_	1	_	<b>\</b>	1
10.	Ц	Ν	7	1	<b>\</b>	1	_	V	7
11.	Ч	V	7	V	_	1	_	V	J
12.	Ш	Γ	_	1	_	1	_	L	1
13.	Шт	۲	マ	٦	۲	٦	~	L	7

**Table 1** - Asymmetrical Signs and Their Wiring for Sound

ciation also applies to the asymmetrical signs C[s], U[ts], V[tch], as well as V[tch], and V[tch]. Each of these 13 consonants on the writing surface (plane) can be written using 8 dispositions and can denote syllables with 8 vowels. All 8 (eight) positions of writing are identified in the text, which means they have been wired for sound with all 6 active vowels in today's Slavic languages and the long forms of the vowels V[tche] and V[tche] which have been preserved in the contemporary Slovenian language [8,9], as well as in some of the dialects of the Macedonian language, i.e. Miyatchki and Vevtchanski [10]. All forms of the asymmetrical signs with their wiring for sounds are presented in the table 1.

# Wiring for Sound of the Symmetrical Syllabic Signs

Using about 20 words from the contemporary Macedonian language, 6 symmetrical signs were wired for sound. They are:

6д	согласки	0 8	ò	Ž	ė	e E	Ь	<u>a</u>	Ä
1.	Б	<b>D</b>	U			C	C		•
2.	в/∜	>	~			<	^		
3.	Φ	2	S			C	6		
4.	M	l	<u>`</u>			1	1		
5.	X	$\rightarrow$	1			<b>←</b>	1		
6.	Γ	-	Τ			⊢	T		
7.	Ų	2	4			4	5		
8.	Д	Il				川		八	/\
9.	л(Р)∕•Х	7		λ		Y		K	
10.	љ	r		r		Y		Z	
11.	H//	<b>/</b>		<b>/</b>		7		/.	
12.	Њ///	1				1			
13.	К	^	>	<b>&gt;</b>	<b>✓</b>	7	>	/	^
14.	K	1		<b>V</b>		7		1	

Table 2 - Symmetrical and Inclined Signs and Their Wiring for Sound

No more than 4 positions for writing were found for each of the signs wired for sound in the text. The formation of syllables in the corresponding vowels is shown in the table 2, positions 1, 2, 4, 5, 6, and 7, respectively.

In order to form a syllable with the vowel  $\mu[i]$ , we identified that the signs of the consonants B[v] and  $\Pi[l]$  were written with the mark for virama and then the symbol for the vowel  $\mu[i]$  was added.

## Wiring for Sound of the Inclined Syllabic Signs

Unlike the asymmetrical signs, where the vertical line is dominant in the basic sign, in the inclined signs an inclined line is dominant. And for these signs no more than 4 positions for writing were identified. The formation of syllables with corresponding vowels is shown in the table 2, positions 3, 9, 10, 11, 12 and 13, respectively. They are:

In the previous figure we have two new signs ( $\nearrow$ ), and ( $\nearrow$ ) compared with [7], and we wired it for sound as  $\mathbf{H}[\mathbf{n}\mathbf{j}]$ , and  $\mathbf{K}[\mathbf{k}\mathbf{j}]$ .

## Wiring for Sound of the Specific Syllabic Signs

The specific syllabic sign which in form recalls the letter  $\mathbf{H}[\mathbf{d}]$  in the Cyrillic alphabet was proved by wiring for sound in all its forms, such as:

Apart from our research, the syllabic sign  $\Pi u[di]$  has the same form of wiring for sound in the monograph [11], as well as in *glagolitsa*, as it is presented in [12].

## Wiring for Sound of the Signs for Isolated Consonants

The frequent use was noted of some isolated consonants, which were wired for sound in the following way:

The pronunciation of the isolated consonant  $\lambda$  changes into soft P[r], sound which we have it even today in the pronunciation of words from the Macedonian language. It should be mentioned here that contemporary scholarship has concluded that it was during the Ptolemaic dynasty that a distinction was made for the first time between the sounds  $\Pi[1]$  and P[r], which was appropriately transferred into the script, i.e. in the analyzed text.

The pronunciation of the isolated consonant  $\mathbf{B}[\mathbf{v}]$  most frequently occurs in the formation of the syllable with the vowel  $\mathbf{u}[\mathbf{i}]$ , or in the formation of the preposition  $\mathbf{Bo}[\mathbf{vo}]$  (equivalent to the English prepositions  $\mathbf{in}$ ,  $\mathbf{at}$ ), in original  $\mathbf{BB}[\mathbf{vv}] - \langle \langle \cdot \rangle$ .

 $\checkmark$  The inclined line without addition denotes the isolated consonant  $\mathbf{H}[\mathbf{n}]$  which is very frequently used in the contemporary Macedonian language.

#### Wiring for Sound of the Signs for Isolated Vowels

In the analyzed text, most frequently used sign is the vertical line (|), which was wired for sound with the vowel  $\mu[i]$ . Besides the use of the vowel  $\mu[i]$  as a conjunction, it is also used at the end of the word for formation of the plural of nouns and adjectives.

The horizontal line (—) was wired for sound with the vowel a[a]. It is also frequently used as a conjunction. The wiring for sound of the identified signs for the vowels is the following:

#### Wiring for Sound of the Pictographic Signs

The very frequent occurrence and the place of occurrence of the three vertical lines as a single sign suggests its meaning: **BOFO** [**Bogo**]. The same sign, with the identical

wiring for sound is found in [11] as well. We prove our conclusion by deciphering the adjective **Божен** [bozhen] (equivalent to English *divine*), written down using syllabic signs previously formerly wired for sound in form / ב ב and their superlative form / зајбожен [naibozhen] (in English *the most divine*).

The three inclined lines occur in a specific construction to define the term **CBETOCT** [**Svetost**] (equivalent in English *the Eminence*), in original inscribed as (from right to left):

That is equivalent to English Master Master.

If for the sign  $\lambda$  we conclude the pronunciation of soft P[r], as is the case in contemporary Macedonian language, then from the analysis of the previous examples of the three inclined lines we can definitely give the wiring for sound of ΓΟСΠΟДΑ [gospoda] (equivalent to English *Masters*).

### Wiring for Sound of the Ligatures

The signs used for writing ligatures have preserved their sound value: they were mutually connected with the preposition **Ha[na]** (equivalent to the English prepositions **on**, **at**,), if written one on or one above the other, as in the example (read from right to left):

Usually the ligatures were written at the beginning of the word, and the word was ended by adding 1 or 2 syllabic signs. In some cases two successive words can be connected with a ligature, which makes the process of the division of words additionally difficult in a continuously written text. Most frequently 2 to 3 signs were used in a ligature.

# Some Rules for writing

By identification and wiring for sound of the syllabic signs, the findings for writing isolated consonants and vowels so far described, as well as deciphering the ligatures, certain necessary conditions were discovered for a further analysis of the rules for writing and reading the analyzed text.

#### Writing Superlatives of Adjectives

Writing the syllabic signs one on the other or one over the other, it is possible to form superlative forms of adjectives in an effective way in those languages which do not contain the prefix **Haj\_ [nai]** (equivalent to English **the ... ... \_est/ the most ... ...**). In that case the basic form of the adjective was written above the sign for the syllable **Jb[jb]**.

In the analyzed text, more cases of formation of superlative form in this way were identified, such as:

<b>\</b> ⟨ <b>ァ</b> → <b>\</b> ⟨ <b>ヮ</b> →		/20	$\rightarrow$	/2-3			
уНеВеЖ	$\rightarrow$	уНеВеЖьјаН	НеЖоБ		НеЖоБьјаН		
[unevehZ]		[unevehZьiaN]	[nęhzoB]	$\rightarrow$	[nehzoBьiaN]		
	Equivalent to English						
Living	$\rightarrow$	The most living	Divine	$\rightarrow$	The most		
(For ever living)				divine			
		(Ethernal)					

#### Writing the Plural of Nouns

In many Slavic languages, and especially in the Macedonian language, the plural of nouns and adjectives is often formed by adding u[i] at the end of the noun in singular. In the analyzed text, we also identified the formation of the plural in this way, as in the example:

λ///	$\rightarrow$	1/\///	ไป	$\rightarrow$	IλΊ	
радопсоГ [radopsog]	$\rightarrow$	ирадопсоГ [iradopsog]	oMeIII [omehs]	$\rightarrow$	ИоМеШ [iomehs]	
Equivalent to English						
Master	$\rightarrow$	Masters	Priest	$\rightarrow$	Priests	

It is very important to mention that in ref. [6], the authors are claming that for forming the plural of nouns a vertical line was added at the end of the word. However, in contrast to our research and findings, the authors treat the sign for vertical line only as a simple mark for the plural. This is completely comprehensible if it is known that according to [6] it is not possible to read the demotic script sign for sign (in accordance with our findings that corresponds to reading/writing syllable for syllable), but is being read word for word.

#### Non-defining and Defining Form of Nouns

While reading the analyzed text we identified nouns in the definite and indefinite form, in the singular, as well as in the plural.

	Singu	lar	Plural			
λ///	$\rightarrow$	(\lambda ///	1/1/11	$\rightarrow$	( <i>\lambda III</i>	
радопсоГ	$\rightarrow$	оТрадопсоГ	ирадопсоГ →		аТрадопсоГ	
[radopsog]		[otradopsog]	[iradopsog]		[atradopsog]	
Equivalent to English						
Master	$\rightarrow$	The master	Masters	$\rightarrow$	The masters	

The definite article for singular is  $\mathbf{To}[\mathbf{to}]$ , and for the plural is  $\mathbf{Ta}[\mathbf{ta}]$ , equivalent in English  $\mathbf{the}$ .

In several other cases the definite form of nouns was made by adding **mo**[**mo**] (some type of case form) as in the example:

$$Orob[ogob] \rightarrow OMOrob[omogob]$$
 и Дед [asted]  $Orob[ogob] \rightarrow OMOrob[omogob]$  аЦед [asted]  $Orob[ogob] \rightarrow OMOrob[omogob]$  Еquivalent in English:  $God \rightarrow Gods$   $Fids \rightarrow Kids$ 

# Mentioning the name of the Pharaoh – the longest form

Mentioning the name of the pharaoh in the analyzed text is the most frequently occurring composition of words. There are several different ways of mentioning the personal and/or surname, and the nickname of the pharaoh, but in this section text we are presenting the longest form. The other forms of mentioning the emperor in the analyzed text are with smaller lengths. According to the findings of our research and in accordance with the suggested wiring for sound of the signs, addressing the ruler was very similar with today's way of addressing the contemporary rulers.

#### The Title of the Pharaoh

We were able to identify 2 words that are preceding the personal name of the pharaoh as 2 superlatives, in original from right to left:

Equivalent in English: For ever living (Ethernal) Our most honourable name

The Greek words BASIAEYS EYXAPISTOS (read from left to right) correspond completely to these titles.

#### The Personal Name of the Pharaoh

We have concluded that after the title follows the name of the pharaoh, which is not formal in today's sense, but is rather descriptive:



Equivalent in English: The gods admired him (He who is beloved by the gods)

This Macedonian name is translated into ancient Greek with the words  $\Delta EOY$   $E\Pi I \Phi ANOY \Sigma$ .

The word  $\Delta EOY$  in ancient Greek is equivalent to the English *gods*, and the word  $E\Pi I\Phi ANOY\Sigma$  means: *That one to whom gods are admiring (who is beloved by the gods)*. The accuracy of the suggested way of reading and wiring for sound is more than clear from this. The method of forming personal names with word **Bogo** [bogo] is frequent in contemporary Macedonian language. The following names are very frequent: **Богомил** 

[bogomil], Боголјуб [bogoljub], Боговид [bogovid], Божидар [bozhidar], Божана [bozhana] and others.

### The Family Name of the Pharaoh

The family name of the pharaoh, i.e. the name of the dynasty was recognized in the expressions (read from right to left):

손	<i>∖</i> ([ ∪	Y <sub>&lt;&gt;</sub> <b>/</b> Y	54	4
еВиШаН	Л оТоПо	еЗеВоБ оТеЗ	еМеСиаН	ęЦИaН
[evihsan]	[lotop o]	[ezevob otez]	[emęsian]	[ecian]

Equivalent in English: The most respected the most family beloved by Ptah from the town on the stone built

The first two words are the epithets to the pharaohs' family. After those epithets follows the expression *beloved by Ptah*, and at the end the pharaohs' family name. For the expression *beloved by Ptah* and pharaohs' family name in ancient Greek text the following expression was used for translation (in original):

ΠΤΟΛΕΜΑΙΟΥ ΑΙΩΝΟΒΙΟΥ ΗΓΑΠΗΜΕΝΟΥ ΥΠΟ ΤΟΥ ΦΘΑ ....

Equivalent in English: Ptolemy, the ever living, beloved by Ptah ....

Unlike the present day scholarship, we suggest that the first word of the previous expression (the word for Ptolemy in ancient Greek text) could be divided as follows:  $\Pi TO\Lambda$  E MAIOY

The first word ΠΤΟΛ is a term for *town*, E is a preposition, and MAIOY is a *goddess of (the) earth* of the ancient Greeks. This practically means that the term ΠΤΟΛ E MAIOY means in ancient Greek *town of the goddess of (the) earth*, which coincides completely with our reading of the corresponding term in the middle text of the stone. Excluding the first two epithets that precede the expression *beloved by Ptah* and pharaohs' family, we find that ancient Greek text and the demotic text at those places are very much the same.

#### The Nickname of the Pharaoh

When the pharaoh is mentioned with all his titles and full name and family name, or when only his family name is mentioned, it always ends with the expression (read from right to left):

From left to right

Јь Мо НаЗеВеН НаНЗе На ЃуоПаЦаВе

[jь mo nazeven nanze na gjuopacave]

Equivalent to English: Is Me Called necklace of necklaces of the Egyptians from Upper Egypt.

#### **Comparison of Readings**

At this point, we are able to compare the readings obtained by our proposed methodology with the readings of the emperor's title, name, surname and nickname in [1-3]. According to previous part of text in this section, it is very clear that we have a significant difference between our reading compared with readings presented in [1-3], were the respective authors assumed that the order of words in emperor's mentioning in the demotic text is literally identical with the ancient Greek text. Consequently, according to that assumption, the word Ptolemy is the emperor's first name. This is a consequence of the fact that the word Ptolemy follows the title of the pharaoh  $(BA\Sigma I \Lambda E Y \Sigma)$  in the ancient Greek text. However, we think that the word Ptolemy, which is actually the name of the dynasty, must denotes the surname (family name), and as a consequence that each ruler has a different personal name. This is in accordance with the ancient Greek text as well. Additionally, it is very clear that the order of words in the demotic text is not the same with the order of corresponding words found in the ancient Greek text in this case. In ref. [1-3] in the demotic text, after the title of the pharaoh, according to previously mentioned "very logical" assumption the authors obtain the corresponding sequence of signs in the demotic text. The problem with obtained sequence of signs for Ptolemy, as a consequence of this assumption, is that 10 letters used originally in the ancient Greek text for the word Ptolemy are substituted with 12 signs that are syllabic by their nature. This should be very wrong, because if we have in mind that the demotic text has 32 lines, and the ancient Greek one has 54 lines, by the very simple proportion, the word Ptolemy in demotic text must be substituted with maximum 6 syllabic signs. Consequently, the sequence of 12 syllabic signs, which according to [1-3] denotes word Ptolemy, must be connected with the superlative and the personal name of the pharaoh, which are denoted by 18 letters in ancient Greek text. As a result, by applying our methodology and previously discussed assumptions, we obtain the following reading for the longest text form of mentioning the pharaoh:

In original demotic text on the stone:

Reading of the original demotic according to our methodology and wiring for sound (from right to left):

oTe3 <u>eMeCИаН eЦИаН</u> ИęЈеВиД оМогоБ ьЈоТ уНеВеЖьЈаН <u>aЦНеМИęSаНьЈаН</u>
<u>eВаЦаПоуЃ аН e3HaH HeBe3aH оМ ьЈ</u> eВиШаН Л оТоП о e3eВоБ
otez emęsian ęcian ięjevid omogob ьjot unevęhzian acnemiezdanian]
[evastapoujg an ęznan nevęzan om ьj evihsan lotop o ezevob

Reading of the same text from left to right:

<u>НаЈьНаЅеИМеНЦа</u> НаЈьЖеВеНу ТоЈь Богомо ДиВеЈеИ <u>НаИЦе НаИСеМе</u> ЗеТо БоВеЗе в ПоТоЛ НаШиВе <u>Јь Мо НаЗеВеН НаНЗе На ЃуьПаЦаВе</u> [nainadzeimenca naizhevenu toj bogomo divejei naice naiseme zeto boveze o potol nashive јь mo nazeven nanze na gjuopatsave]

Equivalent in English: Our most honourable name (Pharaoh), for ever living (ethernal), the gods admired him, the most respected, the most family, beloved of the rising sun (Ptah), from the town on the stone built, is me called necklace of necklaces of the Egyptians from Upper Egypt.

According to authors in ref. [1], for the same sequence of signs, the reading in English is the following: *The pharaoh Ptolemy, the ever living, the beloved of Ptah, the god who appeared, whose goodness (or, beauty) is splendid.* 

# Deciphering the last line of the text

According to the ancient Greek text, in the last line the pharaoh orders (in the following succession) the decree to be written in 3 scripts and to be placed in the temples of (the) first, (the) second and (the) third rank near the statue of the pharaoh, although just here a part of the stone is broken off (the part is missing).

In the analyzed text, the pharaoh's order was identified in a different succession, first in which three classes of the temples of gods, then in which three regions of the country a stone should be placed, and finally, in which scripts in the language of the three circles of the population it should be written.

The pharaoh divided his wish into two orders, and because of that we will analyze the text in the last row as two orders.

## **Analysis of the First Order**

The first order begins with the word *ordered* and the expression to be made of stone, in the original written as:



Read from left to right: JьВИ НаШьВеИВеН [jьvi nashьveiven]

Equivalent in English: Ordered to be made of stone.

The order continues with:



НИоШаН огоБ НуСАаН Е огоБ еЗУ аН О ајимЗ огоБ ИеВьШаН А [niohsan ogob nusaan e ogob ezu an o ajimz ogob ievьhsan a]

Read from left to right:

A НаШьВеИ Бого Змија О На УЗе Бого Е На АСуН Бого НаШоИН [a nashьvei bogo zmija o na uze bogo E na asun bogo nashoin]

That is equivalent in English: In stone constructions (temples) of: God Snake of the Mouth, the God of Aswan and our God.

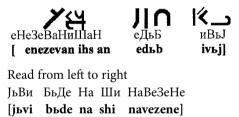
The order continues with the names of the three regions of the land, the first is a (main) city of Egypt, the second is Sinai, and the third is the land of the greatest God Cho NaThnani. The expression written in original is the following:



In respect to the Greek text, here we find significantly more precise information, which indirectly proves the primary importance of this text in respect of the other two. Having in mind that in that period Alexandria was a main city, here we find the indirect proof of the archeological fact that copies of the Rosetta Stone was excavated only near Alexandria in the delta of Nile.

#### Analysis of the Second Order

The second order begins with the expression, which is equivalent to English *To be on stone embroidered (written)*, written in the original with the expression:



In this case, for the word *written* the term *embroidered* is used, which is to this day figuratively used for writing in some dialects of the Macedonian language.

In the analyzed text, a single identification is used for stating the identity of the scripts and languages in which the decree was to be written, or a social circle in a multi – ethnic society of that time Egypt.

The Supreme (High) Priests, presented with the original expression



The Alive Masters, presented with the original expression

لاً الكرالية الله المالية аТЛадопсоГ еВеЖаН ИоМ

[atladopsog evehzan iom]

Read from left to right

НаЖеВе ГосподаЛ(Р)Та

[moi nazheve go

gospodal(r)ta]

The Danai, presented with the original expression

么川

МоИ

еВьЈаНеД аН

[evbjaned an]

Read from left to right: На ДеНаЈьВе [na denajьve]

The second order ends with the expression written in original as:

 IV
 C
 C
 V\_9/

 oTall иШ
 BB
 allbJePaH

 lotac ihs
 vv
 acbjeran

Read from left to right: НаРеЈьЦа ВВ Ши ЦаТо [narejьса vv shi cato]

That is equivalent to English Scripts in stone hard.

We can conclude from the contents of the second order that for the upper text (hiero-glyphs – sacred script) the expression *Script of the Supreme (High) priests* was used. The expression *Script of the Alive Masters* was used for the middle script (demotic), and those were the **Ancient Macedonians**, whereas the term *the Danai* was used for the lowest text (ancient Greek).

The word EΓXΩPIOIΣ ΓPAMMAΣIN in the  $54^{th}$  row of original ancient Greek (Danai) text, translated as *native script* for the ancient Greek text, according to the Greek-Croatian vocabulary, [13] (p. 116), is translated as **domovinski** (the script of the land). The appropriate word used in  $32^{nd}$  row of the demotic text is translated in the [3] as the script of the documents. By implementing our methodology for this script we read the expression the script of the Alive Masters. The term the script of the land, the term the script of the documents, the term the script of books, as well as the term the script of the Alive Masters is very close with the term official script. Having this in mind, we can conclude that the script and the language used in the middle text of the Rosetta Stone, are in fact the script and the language of the Ancient Macedonians.

# Comparison of the Readings

According to the analysis presented in previous section, we can compare the results obtained by implementation of proposed methodology with the translations of the proper text within known literature.

In original demotic text on the stone:

Reading of the original demotic according to our methodology and wiring for sound (from right to left):

НИоШаН огоБ НуСАаН Е огоБ *e3V aH O ajuм3 огоБ* ИеВьШаН А НеВиеВьШаН иВьЈ [niohsan ogob nusaan e ogob ezu an o ajimz ogob ievьhsan a nevievьhsan ivьj]

**еВИ¢СоЈаНиСаН** ¢ЦИаН ИоВ **оТоП ьуЃАаН** ¢ЦИаН ИоВ

[evies ojanis an ecian iov оторьијда an ecian iov]

**ИНаНьТаНоЧоЈьВаНогоБ** еЦИаН ИоВ [inanьt an ohc ojьvan ogob ecian iov]

оТЛадопсоГ еВеЗаН ИоМ еЃИ оТЛадопсоГ еВеЗаН ИоМ еНеЗеВаНиШаН еДьБ иВьЈ [otladopsog evezan iom ejgi otladopsog evezan iom enezevan ihs an edьb ivьj]

оТаЦ иШ ВВ аЦьЈеРаН *еВьЈаНеД аН* оМоНьЈаН **аТЛадопсоГ еВеЖаН ИоМ** ьЈаПаН И [otac ihs vv acьjeran evьjaned an omonjan atladopsog evehzan iom]

Read from left to right:

ЈъВи НаШъВеИВеН А НаШъВеИ Бого Змија О На УЗе Бого Е НаАСуН Бого НаШоИН [jъvi nashъveiven a nashъvei bogo zmija o na uze bogo e na asun bogo nashoin]

ВоИ НаИЦе *HaAÍ'уь ПоТо* ВоИ НаИЦе *Ha CuHaJo CeИВе* [voi naice na agjuьpoto voi naice na sinajo sieve]

Вои наице Бого НаВьЈо Чо На ТьНаНи

[voi naice bogo navijo cho na thinani]

ЈъВи БъДе На Ши НаВеЗеНе <u>МоИ НаЗеВе ГосподаЛТо ИЃе МоИ НаЗеВе ГосподаЛТо</u> [jъvi bъde na shi navezene moi nazeve gospodalto igje nazeve gospodalto]

И На ПаЈь МоИ НаЖеВе ГосподаЛТа НаЈьНоМо На ДеНаЈьВе НаРеЈьЦа ВВ Ши ЦаТо [i na pajь moi nazheve gospodalta najьnomo na denajьve narejьca vv shi cato]

Equivalent in English: Ordered to be made of stone into stone constructions (temples) of: God Snake of the Mouth, the God of Aswan and our God in yours most respected (main) city of Egypt, yours most respected into all of the Sinai, yours most respected (the) greatest god Cho of Thnani; Ordered to be on stone embroidered (written) (with, using) the Supreme (High) Priests, the Alive Masters, and the end the Danai scripts in stone hard.

According to authors in ref. [3], for the same sequence of signs, the English translation of the demotic text is the following: And the Decree shall be written upon a tablet of hard stone in the writing of the words of the god, in the writing of letters (or, books) and in the writing of the Ionians, and they shall set it up in the first temples, [and] in the second temples, [and] in the third temples.

From the example of the content of the last line of the decree, which in all probability has the same content with the three texts, due to the different structure of the languages it is not possible to accept that those texts are totally identical.

# Names of Territories and Peoples

In the analyzed text we find names of territories and peoples in the corresponding territories.

#### Names of Territories

Since the text in the stones primarily refers to the territory of Egypt, we find the name of Egypt most frequently, not only when the whole territory of Egypt has to be inscribed, but also the names of Upper and Lower Egypt respectively. In original the name of Egypt is the following:

That is equivalent to English *Egypt*.

This name comes from the analysis of the pharaoh's order written in the last line in demotic text, in the part which gave the territories where, in the corresponding temples of certain gods, the stone was to be placed. The analysis of the text in the last line is shown in detail in the previous chapter.

The name of Upper Egypt in original is: ☐ → аПьЃ [аръјд]
The name of Lower Egypt in original is: → → еЗьЃ [е́гъјд]

In order to prove that our assertion is correct, that the terms  $\mathbf{\hat{h}}\mathbf{3e}$  [ $\mathbf{gjhze}$ ] and  $\mathbf{\hat{f}}\mathbf{b}\mathbf{\Pia}$  [ $\mathbf{gjhpa}$ ] in ancient Macedonian match the terms Lower Egypt and Upper Egypt respectively, a thorough analysis was conducted of the places in the text where in the ancient Greek text these two parts of ancient Egypt are mentioned, and a comparison was made with the places where the two previously mentioned terms were found in the ancient Macedonian text. For instance, the following is written in the  $12^{th}$  line of the demotic text for the terms Lower and Upper Egypt:

Equivalent in English: On/Of Lower and On/Of Upper Egypt, which completely corresponds to the mention of Upper Egypt and Lower Egypt in the ancient Greek text.

#### Names of peoples

In the analyzed text, while stating the names of the pharaoh's ancestors, in the  $22^{nd}$  line of the middle text of the stone, the peoples whom they ruled are also mentioned. After the name of the Philopator, for the peoples whom he ruled was written in the original:

eHaПьЃ aH о eВьJaHeД aH [enapьjgan o evьjaned an]

Read from left to right: На ДеНаЈъВе о На ЃъПаНе [**na denajъve o na gjъpane**], which is equivalent in English – *To the Danai (the Greeks) from Upper Egypt.* 

After the names of his grandfather and grand grandfather, in the 22<sup>nd</sup> row of the demotic text, for the peoples whom they ruled was written in the original:

Read from left to right: На ДеНаЈьВе о На ЃьПаМо ДеНаЈьВе о На ЃьПаНе [na denajьve o na gjъраmo denajьve o na gjърame]

Which is equivalent in English: To the Danai (the Greeks), To the Danai of Upper Egypt (the Greeks from Upper Egypt) and To the Egyptian of Upper Egypt.

It is interesting to consider the third ethnic group besides the Danai and the Egyptian from Upper Egypt, i.e. the Egyptian Danai. This means that besides the Danai ethnic group on the Balkans at the time of the first ruler from the Ptolemy dynasty, there existed a separate Danai entity on the territory of Egypt. Toward the end of the 11<sup>th</sup> line in the demotic text this entity is mentioned in the original as:

Read from left to right: ДеНаЈьВе На ЃьПа [denajьve na gjьра]

In English this denotes the Danai from Upper Egypt, by which their territory was determined.

#### Names of the Gods and their Functions

In the middle text of the Rosetta Stone we find the names and functions of many gods. As a result of their titles, which literally meant a characteristic of the language and writing of the ancient Macedonians, we were able to identify names of several Egyptian gods even in the original way that they were called in ancient Egyptian. In the analyzed text we also found the names, most probably, of all the gods of the ancient Macedonians.

#### Names of the Gods for the Ancient Macedonians

According to our research, in the middle text we were able to read the names of most, probably all gods of the ancient Macedonians. It is most characteristic that almost all the gods' names are monosyllabic. Their names and functions are the following:

We concluded the god **Se[dze]** (by his function **god of the summers**) was a supreme god because in the text he is addressed very similarly to a pharaoh, i.e. with two epithets in the superlative, in the original it is the following:

Read from left to right:

НаЈьНаЅеИМеНЦа НаЈьЅеИ МоИ НаЗеВе Бого ЛТоИ

[najьnadzeimenca najьdzei moi nazeve bogo ltoi]

That is equivalent to English: *The most honorable, the brightest according to our way of saying the god of the summers.* 

## The Names of the Gods and Their Functions among the Ancient Egyptians

The style of addressing the Egyptians gods is especially interesting in the text. After the name of the god as he was called in ancient Egyptian, there follows in addition the way he was named in ancient Macedonian. In the original it was written down in the following way:

Read from left to right:

ЃуьПаЦаВе АНаНеЦа Бого А МоИ НаЗеВе Бого Ли

[gjuьpacave ananeca bogo a moi nazeve bogo li]

That is equivalent to English: *The god Ananetsa of the Egyptians (the god of renovation), according to our way of saying the god Lee*, as well as the expression

аЧЛ огоБ aTeHaHA [ahctl ogob atenana]

Read from left to right: АНаНеТа Бого ЛЧа [ananeta bogo ltcha]

That is equivalent to English Ananeta god LTCHa goddess of the light ray/sunrise)

In the ancient Greek text these gods were written as Osiris, which corresponds to Ananetsa, and Isis, corresponding to Ananeta. We think that the gods' names in ancient Egyptian must be different from their ancient Greek names, as well as from their ancient Macedonian names, which is identical with the translation of the hieroglyphic text in [1]. This is additionally proven by reading the middle text of the stone, where we find the gods' names as previously stated.

In this sense, we find in the 23<sup>rd</sup> row of the middle text the direct proof how ancient Egyptian was referring one ancient Macedonians' god, as follows:

Read from left to right:

НаАШте Бого Хо A ВоИ НаЗеВе ГосподаЛТо и НаЗеВе ГосподаЛТо НаРоЦа [naashte bogo ho a voi nazeve godpodalto i nazeve gospodalto naroca]

Which is equivalent to English: Our the God Họ, you adress him The Master and you address him The Master of the scripts hard (The Master of the sacred scripts).

#### Conclusion

The basic assumption of our analysis was that in the middle text of the Rosetta Stone a syllabic script of only the consonant – vowel type is used, with the assumption that the pronunciation of the consonants and vowels are the same as in the contemporary Macedonian language. This assumption means a new direction in studying the demotic script and syllabic scripts from that period, unlike the concept of current scholarship of the wiring for sound of only the syllabic signs with consonants, while at the same time ignoring the vowels.

The research to date has resulted into identification and wiring for sound of the syllabic symbols for 27 consonants and 8 vowels. More than half of the consonants (14) are denoted using asymmetric signs which can be in 8 positions on the writing surface (plane) and in that way syllables of one consonant with 8 vowels can be written in a monosemic (unambiguous) way. The remaining consonants are denoted using symmetrical or slanting signs which can take 4 positions on the writing surface (plane) and thus write syllables of one consonant and 4 vowels in a monosemic (unambiguous) way. Some of these consonants make the fifth syllable with the vowel  $\mathbf{u}$  [ $\mathbf{i}$ ] by using a sign for an isolated consonant (*virama*) and next to it writing on a vertical line, which is the sign for  $\mathbf{u}$  [ $\mathbf{i}$ ]. Of the 8 necessary signs for pure vowels, 7 signs have been identified for writing of isolated vowels, of which the signs for  $\mathbf{u}$  [ $\mathbf{i}$ ] and for  $\mathbf{a}$  [ $\mathbf{a}$ ] are most frequently used. For writing isolated consonant a *virama* was used, whereas for frequently used isolated consonant  $\mathbf{u}$  [ $\mathbf{n}$ ], a slanting line is used.

Besides writing the signs one next to another, the signs were also written one over another or one on another, where the sound value of the basic signs was not changed, but they were interconnected with the preposition **Ha** [**na**] (equivalent to English prepositions **on, at**) (ligatures). The frequent use of the preposition **Ha** [**na**] is even today a characteristic of the Macedonian language.

Wiring for sound of the basic signs of the analyzed text and defining the noted rules for the writing of ligatures was carried out by an iterative procedure of singling out and recognition of about 220 words and lot of these have preserved their meaning in some dialects of the contemporary Macedonian language.

Although we do not consider that we had found out all the secrets of the analyzed script and moreover learnt the used language, according to the presented results we can say that the middle text of the Rosetta Stone was written in a script and language of the masters of Egypt at that time, i.e. ancient Macedonians.

This text refers to the same event as the two other texts on the stone, but no identity should be sought and the identity cannot be founded. We say this because we have concluded, by deciphering the order written in the last line of the text that the records were written in scripts and languages of 3 social circles, the **Supreme Priests**, the **Alive Masters**, and the **Danai**. The script and the language of the ancient Macedonians was the official script and language of the Macedonian Empire or as it is known in contemporary scholarship, the 'script and language in which the laws and the official documents were written.' The mistake in current scholarship is that to learn the middle text of the Rosetta Stone it prefers the ancient Egyptian language (called new Egyptian in the available literature) and the area of Egypt, but not ancient Macedonian language and the area of the Balkans.

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## Povzetek

## Ugotavljanje pisave in jezika antičnih Makedoncev

Predpostavljava, da je bilo srednje besedilo na kamnu iz Rosette napisano z zlogovno pisavo vrste soglasnik-samoglasnik. Ugotovila sva znake za 27 soglasnikov. S postopkom zrcaljenja in vrtenja na pisalni površini sva nedvoumno povezala znak za soglasnik s po 4 ali 8 samoglasniki. Ugotovila sva tudi znake za posamezne samoglasnike in nekatere soglasnike, čeprav nastopajo redko. V proučenem besedilu so zlogovni znaki napisani ne le eden ob drugem, temveč pogosto tudi eden nad drugim v obliki povezav. Določila sva tudi nekaj slikovnih znakov.

Zlogovnim znakom, samostojnim soglasnikom in samoglasnikom ter povezavam sva določila glasovno vrednost s pomočjo starinskih izrazov v sedanjih makedonskih narečjih. Besedilo je pisano neprekinjeno z desne na levo, brez presledkov med besedami in brez ločil med stavki. V njem sva ugotovila več kot 200 besed, ki so obdržale svoj pomen v nekaterih sedanjih makedonskih narečjih. Ugotovila sva tudi nekaj slovničnih pravil, ki nastopajo tudi v sedanjem makedonskem jeziku, kot tvorbo presežnika prislovov s predpono **haj- [nai]**; množinsko obliko samostalnikov na **μ [i]**; določno in nedoločno obliko samostalnikov; pogosto rabo predloga **ha [na]**, kot tudi tvorno in trpno obliko glagolov. S pomočjo ugotovljenih zlogov, njihove glasovne vrednosti in z določitvijo pravil pisanja sva ustvarila nedvoumno metodologijo, kako ugotoviti besede in kako brati napisano.

Rezultati kažejo, da je v srednjem besedilu na kamnu iz Rosette veliko podrobnosti, ki jih ni v grškem besedilu. To potrjuje pravilnost mišljenja iz časa Thomasa Younga (1822), da je srednje besedilo prvotno. Najina raziskava kaže to bolj določno z ugotovitvijo, da je bil faraonov ukaz v srednjem besedilu kamna iz Rosette prvoten in da je napisan v jeziku takratnih Makedoncev z znaki **živečih gospodarjev tistega časa**, to je z uradnimi znaki in v uradnem jeziku države, ki so ji vladali več kot stoletje.