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THE ORIGIN OF THE GLAGOLITIC ALPHABET

Abstract

New facts revealing the phonetic and graphic similarities of 20 Glagolitic letters with 20 graphemes from Linear A script, and 23 Glagolitic letters with 23 graphemes from Linear B script, and graphic similarities of additional 13 Glagolitic letters with 13 graphemes from Linear A, and 9 Glagolitic letters with 9 graphemes from Linear B, push back the beginning of the creation of Glagolitic alphabet from 9th Century AD to approx. 18th Century BC. The resemblance of Glagolitic letters to Venetic symbols of 5th Century BC and Scytho-Sarmatian runes of 1st-3rd Century AD shows the transition between the Linear scripts of 2nd millennium BC and the Medieval Slavic alphabet. Evidence is presented that the sacred Slavic script and the archaic writing system of the Aegean region have their common roots in the Neolithic script of the Balkans – ancient Slavic lands.

Introduction

There aren't many societies, which have independently developed their own alphabet perfectly suitable for the peculiarities of their speech. Highly developed cultures, i.e. Greeks and Romans, had to adopt their writing systems from earlier literate traditions.

The opinions about the age differ as well. According to J. Dobrovsky, Glagolitic alphabet was created in 13th Century AD, i.e. centuries after the Cyrilic alphabet was already in use. J. Kopitar disagreed and pointed out that the rounded Glagolitic script is older than the straight Croatian version, after which Dobrovsky recanted his view [1] p. 33.

Facts

An alphabet is something of complex and none of the scripts of different peoples had remained unchanged since the time of their creation. Some characters were changed in form, others fell out of use, with time new characters were added and some were adopted from other alphabets. Description of this process we find in the work of the Old Bulgarian writer C. Hrabar – *O pismenah* (About the characters) [2].

The suggestion that Greek script might have influenced Glagolitic – the sacred Slavic script is tempting, because Cyril, to whom the creation of the Glagolitic alphabet was attributed was born in Thessalonica, Greece. There are also 8 characters of the 9th Century AD Greek cursive script, which was introduced gradually in Greece during the 9th C. AD after the uncial script was used for official documents and correspondence, which show some resemblance to their Glagolitic counterparts of the same time. These are δ , γ , ω , ϵ , ρ , σ , θ , and σ (delta, gamma, omega, epsilon, rho, omikron, theta and phi).

Also few Hebrew characters: \aleph , \beth , \beth , \beth , \varPsi (a, b, p, r, š) show some similarity with their Glagolitic counterparts. The other oriental scripts do not offer any significant matches. Coptic characters ψ , ψ , \uparrow (*shei, hori, ti*) show resemblance with Glagolitic Ψ , ψ , \uparrow (št, h, a) and Samaritan characters \swarrow , \uparrow , \swarrow (š, r, m) could resemble Glagolitic \coprod , \downarrow , Ψ (š, r, št), (Table 2).

Discussion

The Glagolitic Φ and Φ are undoubtedly of Greek origin. Greek character γ resembles the Glagolitic g but that does not mean that Slavs took it from the Greeks. Glagolitic g resembles much more closely a runic character from Old Great Bulgaria (Table. 1). The Glagolitic g (g) differs from O. Blg. g -like character only by its angle towards the base, which could be just a stylistic peculiarity caused by the development. Both, Glagolitic and O. Blg. runic character have equal "curls" (shoulders twisted equally in shape) while Greek g has only one strong "curled" shoulder.

The shape of Greek ρ is like that of the Glagolitic **b** (r), but the Slavic character is turned up side down and in such a way it resembles much more the **ra** of the ancient Linear scripts.

Greek δ looks like a half of the Glagolitic δ (d), but again the ancient Linear scripts offer far better match – dwo. If Glagolitic δ would be derived from the Greek δ , why there would not be simply used the latter?

Greek **o** resembles more Cyrilic **o** than the Glagolitic **3**.

So from all the similar characters between Greek and Glagolitic alphabet only the Glagolitic Φ and Φ can be accepted with certainty as loaned from the Greek alphabet and two characters can hardly be called an inspiration for the whole alphabet.

Let's also not forget that there is a significant difference between Greek cursive script and Glagolitic. Babič promulgates the fact that Glagolitic is built with capital characters (just like Linear A and Linear B) while the cursive Greek alphabet uses lower case characters [1] p. 35.

There is another important fact, opposing the claim of Taylor and Jagić. The lands between Northern Caucasus and the east shores of Black Sea were known as Old Great Bulgaria [4] p. 47-48. In that region, occupied in the past by Scythian, Sarmatian and Thracian tribes are found ancient runic characters, resembling Glagolitic characters \mathfrak{P} , \mathfrak{B} , $\mathfrak{B$

These characters are dated to the 1st - 3rd Century AD. [5]. I have to admit that although resembling strongly the Glagolitic characters, nothing guarantees that the runic characters had the same phonetic value as their Glagolitic counterparts in Table 1. In Southern Bulgaria similar characters were found on a sword dated to the 1st-2nd Century AD [6] pp. 48-59. (This date could deviate considerably from the real age of the runic script, the runes could be much older. To my knowledge the inscribed objects and others found in their vicinity were never dated with the help of the C-14 method, but only tentatively. The conclusions of the scientists were based on the accepted date of the appearance of Sarmatians in Bulgarian lands around 1st C. BC. Archaeological finds and historical sources contradicting this date were ignored (Sarmatians were called members of the great Getic family, inhabiting Thrace since deep antiquity; same Getae, who were called Slavs in 6th C. AD). Nobody has addressed this serious chronological problem. Old Bulgarian artifacts including deer horns with inscriptions are similar to those from the Old Venetic lands. Bulgarian objects were dated to 7th C. AD, while the Venetic ones are from 5th C. BC. The gap is about 1200 years, but the runes are identical to the Venetic characters. This means that there was cultural connection between Veneti and Old Bulgarians before the ancient characters went out of use in the Venentic script in the 1st C. BC. Evidence for the cultural connection is the fact that in the earliest sources Bulgarians were called WNTRI [7] p.21, which I see as Weneteri - Venetic tribe. But Bulgarian scientists interpret WNTRI as Hunogunduri ignoring the anthropological research of M. Popov, who showed that undoubtedly Bulgarians are anthropologically Slavs, not Asian people.

Table 1 represents a comparison between Scytho-Sarmatian runes of 1st – 3rd Century AD and the Glagolitic characters of 9th Century AD.

Concerning the suggestion of Chernohostov that Glagolitic characters represents Christian symbols it appears improbable simply because, as already mentioned, many of these characters (at least 23) were in use by the Old Bulgarian tribes many centuries before the acceptance of Christianity as state religion by the Old Slavs. There is however a possibility that some Glagolitic characters were pre-Christian religious symbols. The cross and the circle are indisputably ancient solar symbols.

About the suggestion of Vondrak, Nahtigal and Fortunatov that Oriental scripts had influence on the Glagolitic script, it looks acceptable at the first glance, because after all there is historical source testifying that Cyril visited the Khazars [1] p.15, who belonged to Judaism at that moment of time.

As already said few Hebrew characters (a, b, p, r, š) show some similarity with their Glagolitic counterparts. However, if we compare Hebrew \times - a, \times - b, \neg - p, \neg - r, and \times - š to the Glagolitic \uparrow , \downarrow , \uparrow , b, \downarrow (a, b, p, r, š) and to the characters of Linear scripts of the

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	Gsv	G	R	SIC	SIL	L		Gsv	G	R	SIC	SIL	L
1	υ	V	20	В	V	V	13	0	0	0	0	О	Ο
2	8	B	တု*	Γ	G	G	14	št	뀌	4	Щ		
3	d	S	R	Д	D	D	15	С	7	>	Ц	C	
4	e	€	7	E	Е	Е	16	Š	Ш	Щ	Ш	Š	
5	ž	8	X	Ж	Ž		17	č	쏭	3	Ч	Č	
6	dz	\$	ঔ	S			18	ъ	જ	8	Ъ		
7	i		X	И	Ι	Ι	19	ě	A	Δ	古		
8	l	X	8	Л	L	L	20	en	Æ	۰C	A		
9	M	झ	36	M	M	M	21	on	30€	ᡐᢗ			
10	n	P	5	Н	N	N	22	jon	& €		Ж		
11	5	Q	Ω	С	S	S	23	üþ	ģ-	Š	УΈ	3	
12	u	99-	22-	У	U	U							

Table 1. Comparative table of Glagolitic characters and Scytho-Sarmatian runes

G. s. v. – sound value of the Glagolitic character

R – Scytho-Sarmatian Runes

SlL - Slavic Latinic

L – Latin character

Aegean region we see that the resemblance of Glagolitic characters to those of the Linear A and Linear B is much closer than to the Hebrew characters (Table 2).

As mentioned above the other oriental scripts do not offer any significant amount of close matches. Coptic characters $\boldsymbol{\psi}$, $\boldsymbol{\mathfrak{p}}$, $\boldsymbol{\uparrow}$ (*shei*, *hori*, *ti*) show resemblance with Glagolitic $\boldsymbol{\Psi}$, $\boldsymbol{\mathfrak{b}}$, $\boldsymbol{\uparrow}$ (št, h, a) and Samaritan characters $\boldsymbol{\check{s}}$, \boldsymbol{r} , \boldsymbol{m} resemble Glagolitic $\boldsymbol{\Pi}$, $\boldsymbol{\mathfrak{b}}$, $\boldsymbol{\Psi}$ ($\boldsymbol{\check{s}}$, \boldsymbol{r} , $\boldsymbol{\check{s}}$ t), (Table 2).

The Linear A and Linear B counterparts of Glagolitic characters ❸ (¹Ь - nr 30), ੴ (Ы - nr 31), ဪ (ON - nr 37), and ੴ (JON - nr 38) are in fact ligatures of different Linear characters (the Glagolitic characters ❸, ੴ, ﴾€ (¹Ь, Ы, ON, JON) themselves are ligatures too). The ligatures were quite common in the Linear A and Linear B inscriptions. Examples can be seen in Fig. 1.

G.– Glagolitic character SIC – Slavic Cyrillic

^{* –} characters 2, 8, 9, 11, 16, 23 are from the work of S. Rjabchikov [5], the rest is derived from the work of I.T. Tanev and M.Minkova [6].

Table 2. Comparison between Glagolitic, Greek, Linear A, Linear B, Hebrew, Coptic and Samaritan alphabet.

		_	_	T 4	I D		C	C-	CIC	CIT	,	I	T	T				TT.1	C	C.	CIC	CIT	
	SV	G	Gr	LA	<u> </u>	ļ	Cop	Sa	SIC	SIL	L		sv	G	Gr	LA	-	Heb	Сор	Sa	SIC	SIL	L
1	а	7	d	4	+	K	Δ		A	A	Α	21	ŧ	\square	ढ	C	В			-	T	T	T
2	В	巴		世	巴	5	В	Ξ	Б	В	В	22	u	33	જ	212	22	4	Y		У	U	U
3	ν	V	В	V	Ш				В	V	V	23	f	ф	φ				Φ		Φ	F	F
4	д	n	P			I	1	7	Γ	G	G	24	χ	Ь	z	A	P		þ		X	Н	Н
5	d	Sb	ઽ	77	λ'n	7	Δ		Д	D	D	25	0	0	w	(0				О	О	О
6	е	Э	ε	A	A		Э		Е	Е	Е	26	\$6.	R		щ	Ш				Щ		
7	ž	96		X	X				Ж	Ž		27	С	7		V	V				Ц	C	
8	dz	Š	شوؤر	9	9				\mathbf{s}			28	č	쓩			Ж				Ч	Č	
9	Z	θ	Z	E	þ	T	Z	4	3	Z	Z	29	š	Ш		Ш		v	ሧ	jw	Ш	Š	
10	i	Y	i	4	¥		Н		И	Ι	Ι	30	ъ	තු		09	وء				Ъ		
11	i	ষ্ঠ		8	B				Й	Ι	Ι	31	γ	97		斧	¥				Ы		
12	8.1	M							ħ			32	Ь	ક્ષ		\in	#				Ь		
13	u	5	ĸ	3	子	7	K	P	K	K	K	33	ě.jo	\mathbb{A}		\mathbb{A}	\mathbb{A}				4		
14	e	8	r			7	λ	L	Л	L	L		ju	P			5				Ю		
15	m	死	μ	ઝ્ઠ	ટેર્ડ	5	M	ų	M	M	M	35	ę	€		6	6		1		A		
16	n	P	22	4	Ŧ	7	N	Y	Н	N	N	36	1€	€		ЭA	3P				ЬÀ		
17	0	69	0	2	B	1	0		О	О	О	37	Q	æ		2111	BA				ŀЖ		
18	P	ol-	976	5	5	∇	П	J	П	P	P	38	19	Æ€	4.	PA	AP				Ж		
19	1	ما	90	۵	0	7	P	4	P	R	R	39	li.v	&		တု	ф				У/В		
20	5	8	%	8	8	Q	C	1	C	S	S	40	th	0	0								

sv - sound value

G – Glagolitic character

Gr - Greek cursive character

LA -Linear A character

LB – Linear B character

Heb – Hebrew character

Cop - Coptic character

Sa - Samaritan character

SlC – Slavic Cyrillic

SlL - Slavic Latinic

L-Latin character



Fig. 1. Ligatures of Linear A characters [8], Tables 1, 2, 3.

Summarizing, from Table 2 we can notice that while Greek alphabet offers 8 characters analogous to Glagolitic, Hebrew 5, Coptic 5 and Samaritan 2, the Linear A has 33 and Linear B has 32 characters which matches in form with the Glagolitic characters. That shows convincingly which writing systems are most closely related to each other.

The possible answer to the similarities between Glagolitic, Greek, Hebrew, Samaritan and Coptic has to be sought in the deep past of the Balkans, in the 6th- 4th millennium BC when Vinča, Valci Dol, Karanovo, Gradešnitsa and other related cultures flourished. The creators of those cultures also spawned the first writing system in the world and this seems to have influenced the Linear scripts of the Aegean and the Proto-Canaanic alphabet, from which subsequently evolved Hebrew, Phoenician and Aramaic. Hebrew influenced Samaritan alphabet and Phoenician was the prototype of the Greek alphabet. In turn the Greek alphabet influenced the Coptic one [9].

The migrations of people from Old Thraco-Scythian lands to Crete, Levant and even Egypt (First Intermediate Period) in $3^{\rm rd}$ and $2^{\rm nd}$ millennium BC is confirmed by the archaeology. The distribution of peculiar types of pottery (linear/band pottery, corded pottery) and the appearance of new type of burial (with equine sacrifice), new type of house etc. are clear indication of the arrival of new population in Aegean Region, Levant and Northern Egypt during the Early Bronze Age. J. Best connects those early migrations with the expansion of the Kurgan Culture [10]p. 49-51. Recent genetic research shows that certain genetic marker (**R 1**), typical for the creators of the Kurgan Culture is currently found among the Slavic population. This marker is present also among the people in India and Western Asia (Linear pottery appeared there in the late $3^{\rm rd}$ millennium BC, more than 3000 years after its appearance in South-Eastern Europe), but is rare in Western Europe [11].

It is logical that the migrants, who came from South-Eastern Europe to Aegean region and Anatolia in 3rd and 2nd millennium BC would bring with them also their writing system and in this way would spread the knowledge of the script among many other people, who in their turn would create their own alphabets, suited better for their own language. In course of time the differences between the script brought from the Balkans and those of other writing systems derived from it would become bigger and bigger, but nevertheless some signs would retain certain similarity. For example the Linear B si corresponds in form to Glagolitic š, Phoenician š and Hebrew š. The Linear B ra corresponds in form to Glagolitic r, Phoenician r and Greek r. The Linear B twe corresponds to Glagolitic t (tvъrdo) and Canaanic t. And in turn, the Linear B si, ra, two resemble very strongly the graphemes from the considerably older Vinča script.

Table 3 presents a comparison between the Neolithic script of the Balkans and the ancient writing systems of the Aegean region. There we can see that there are 36 matches between NSB (Neolithic Script of the Balkans) and Linear A, and 30 matches between NSB and Linear B.

Although there are more than 5 thousand years between the Neolithic script of the Balkans and the Glagolitic variant of 9^{th} Century AD, there still can be seen common features between the two systems. These matches have also counterparts in the Linear scripts (Table 4).

Table 3. Comparison between Neolithic script of the Balkans and the Linear scripts of the Aegean region

	NSB	LA	LB	3	NSB	LA	LB	,
1	0	0	0		V	⋀	Λ	19
2	0	(3)	0		Δ	A	A	20
3	Y	Y	Y		<	<	<	21
4	Y	4	4		D	A	5	22
5	:1:	#	: :		F	F	F	23
6	非	訓	ाः		4	Y	۲	24
7	X	X	X		‡	*	+	25
8	P	7	7		Ш	m	ш	26
q	口	2	ما		×	X	文	27
10	+	+	+		M	弘		28
11	*	*	*		V	V	V	29
12	Ħ	Ħ	甘		0	日		30
13	ם	П			١	9	4	31
14	S	2	2		95	36	4	32
15	Ŧ	Ŧ	Ŧ		7	ł		33
16	E	ε	E		8	ъ		34
17	4	Ф	4		4	神		35
18	T	T	T		1	7		36

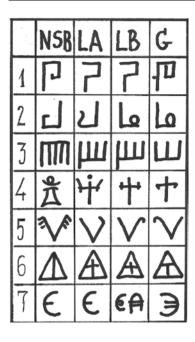
NSB – Neolithic script of the Balkans [12,13]

LA - Linear A character

LB - Linear B character.

My suggestion is that the ancient writing system of the Balkans was the inspirational source of many alphabets and this is confirmed by several other researchers. R. Pešić, who analysed the Neolithic writing system of the Balkans noticed well that Phoenician alphabet shared 10 characters with the much older Vinča script [14] p. 513. It is quite logical to accept that the people who have inspired Phoenician alphabet must have come from the Balkans. In the recent years increasing number of scientists admitted that Cadmean myth belongs more properly to Paleo-Balkan cultures than to the Orient [15] p. 60. Diodorus Siculus, cited by G. Sotirov [16], confirms that Pelasgians were the first, who used the Cadmean letters.

Another scientist, V. Georgiev, who was analysing the Neolithic seal from Karanovo, found out that 8 characters from this ancient artefact show similarity with 8 characters of the Cretan hieroglyphic script. Georgiev noticed also that 6 characters from Gradešnitsa tablet resembled other 6 characters of the earliest Cretan writing system [17] p. 157.



N.S.B. - Neolithic script of the Balkans

LA – Linear A character

LB - Linear B character;

G. - Glagolitic character.

Because Gradešnitsa and Karanovo scripts are significantly older than the earliest Cretan script, it can be concluded that the Neolithic cultures of the Balkans have influenced the ancient Minoan writing.

According to V. Georgiev, the cultures of Vinča, Karanovo and others related to them were created by the Thracians and Pelasgians [17] p. 192 and exactly these Thracians and Pelasgians were among the creators of the Minoan culture, according to Hrozny [18] pp. 219, 220. It should not be forgotten that, according to Herm [19] p. 61, Thracians and Pelasgians had become part of the Phoenician ethnos: an amalgam of Sea People and native population of Canaan.

From archaeological point of view the migration of Thraco-Pelasgians into the Aegean region (and Asia Minor) can be evidenced by the so called band ceramics, which in Crete is represented by the polychromatic pottery of Camaros with spiral decorations, showing transition from geometrical motives to motives taken from nature [18] pp. 219, 220. Vessels with such motives are present on Crete from around 20th-19th Century BC but on the Balkans they were in use as early as 5th millennium BC [20] (objects 11 and 12).

Thracians and Pelasgians belonged to the same great ethnos. According to the ancient tradition the oldest inhabitants of South-Eastern Europe - Pelasgians were divided into 3 main groups:

- **Illyrians** (Veneti belonged to this branch) living from Epirus up to the river Po,
- Thracians possessing the lands between Aegean Sea and the Carpathian mountains and
- Classical Pelasgians inhabiting Crete, parts of Asia Minor and continental Greece
 [21] pp. 23-24.

Table 5. Comparison of the sound value of the Glagolitic characters and the sound value of Linear A and Linear B characters

	Glagolitic	Linear A No the sound value [8]	Linear B No the sound value [8]
1	A	29 - A	21 - A
2	В	35 - B(?)	62 - B
3	V	* - #	8 - WA
4	G		
5	D	63	* - DWO
6	E	1 - E	1 - E
7	Ž	36 - Z0	24 - ZO
8	DZ	28 - JA	52 - JA
9	Z	38 - ZE	16 - ZE
10	I	30 - I	45 - I
11	I	37 - KI	15 - KI
12	G, J		
13	K	41 - KU	32 - KU
14	L		
15	M	95 - MA	51 - MA
16	N	76 - NE	* - NE
17	O	52 - O	27 - O
18	P	75 - PO	38 - PO
19	R	45 - RA	54 - RA
20	S	37 - KI	15 - KI.
21	T	97 –TA	* - TWE
22	U		
23	F		
24	Н	43 - U	19 - U
25	0	49 - QE	63 - QE
26	ŠT	12 - SE	13 - SE
27	С	42 - MI	34 - MI
28	Č	SI	41 - SI
29	Š	* - #	
30	Ъ	* - #	64 - AI
31	Y	* - I	45 - I, <i>64</i> - AI
32	Ь	50 - #, 29 - I	4 - #
33	Ě, JA	3 - WI	9 - WI
34	JU		36 – JO
35	EN	5 - #	64 - AI
36	JEN	* - E	1 - E, <i>64</i> - AI
37	ON	52 - O, 1 - E	27 - O, 1 - E
38	JON	36 - ZA, 1 - E	24 - ZA, 1 - E
39	IŽICA	15 - QA	10 - QA
40	TH		

^{* –} not numbered character;

^{# –} sound value not determined

^{(?) –} disputed sound value

⁶⁴⁻ Chadwick's numeration and sound value

	G	Gsv	LAsv	LA	LBsv	LB			G	Gsv	LAsv	LA	LBsv	LB
1	十	α	a	#	а	+	-	13	P	P	ро	5	РО	5
2	世	В	ba	凹	ва	凹		14		r	ra	ما	ra	6
3	V	υ			wa	出		15	W	t	ta	C	twe	В
4	$\overline{\mathcal{V}}$	d			dwo	Ř	The Continue of the Continue o	16	f	ر کل چن	se	Щ	se	Ш
5	3	е	e	A	е	A		17	성	č	si	4	si	A
6	\$	dz	Za	9	za	9		18	A	ě, ja	wi	A	wi	A
7	0	7	ze	يظ	ze	₽=		19	Da	Ju	, .		10	5
8	T	i	i	4	i	¥		20	€	ę	we	E	ai	6
9	7	K	KU	4	ĸu	7		21	Æ	Q	0,0	AS	όe	64
10	罗	m	ma	8	ma	22		22	€	јę	e (Je	AE	éai	AE
11	P	n	ne	F	ne	4		23	Æ€	10	za e	PA	1	PA
12	9	0	0	3	0	21	-							

Table 6. Glagolitic characters similar in form and sound value to Linear A and Linear B characters

G – Glagolitic character

Gsv - Glagolitic character sound value

Lasy - Linear A character sound value

LA – Linear A character

LBsv- Linear B character sound value

LB - Linear B character

Because in the Late Antiquity the Thracians were equated with the Slavs [4] p. 14, it is quite logical to assume that Pelasgians and Illyrians – kin of the Thracians can be considered as Slavic branches too.

Having all this in mind I decided to make a detailed comparison of the Glagolitic alphabet with Linear A and Linear B script. When I did it I noticed that 33 characters from Linear A script had surprising similarity in form with 33 characters of the Glagolitic alphabet (Table 2). Table 5 represents a sound value comparison between Glagolitic, Linear A and Linear B languages.

Table 6 and Table 7 show more clearly the phonetic and shape similarities between Glagolitic and the Linear A, B scripts. Table 6 represents Glagolitic characters, which

Table 7. Glagolitic characters similar in form to Linear A and Linear B characters, but differing in sound value

Ger LASV Ž. 10 10 Κi Κi 5 Κi 0,0 u u Χ qe O qe C. mi mi Ś Ъ FK. Ь X qa q,a U.V ν *

G – Glagolitic character

Gsv. - Glagolitic character sound value

LAsv - Linear A character sound value

LA - Linear A character

LBsv - Linear B character sound value

LB – Linear B character

- * the character has not determined sound value
- Remark: Glagolitic characters **%**, **м**, **&**, F, **他** (g, g', l, f, th) do not have any match in the Linear scripts; neither in form, nor in sound value.

have similarities in form and phonetic value to the Linear A and Linear B, while Table 7 represents Glagolitic characters similar to characters from Linear A and Linear B in form, but differing in phonetic value.

After discovering that 20 Linear A character and 23 Linear B characters are similar to Glagolitic characters not only in form, but also in sound value, the comparison was made with the Old Bulgarian Runic system. There can be seen that all the 13 characters from the Pliska rosette (attributed to the Old Bulgarians) are amazingly close in form to 13 characters of Linear A. Linear B offers also 13 matches with the runic script from Pliska (two Bulgarian runes resemble Glagolitic characters \(\mathbf{V}\), \(\mathbf{\textit{A}}\) (** and \(\mathbf{e}\)), (Table 8).

Except Pliska rosette there are other Old Bulgarian runes having matches in the Linear Scripts, Table 9.

The degree of form and phonetic similarity between Glagolitic and Linear A and B is too high to be a coincidence, although there are some phonetic deviations, for example: Linear B **JO** and Glagolitic **JU**; Linear B **JE** and Glagolitic **Ž**. These deviations can be explained



Table 8. Comparison of Pliska runes to Linear scripts of the Aegean region

P – runes from Pliska rosette LA – Linear A character LB - Linear B character.

Table 9. Comparison of the form of Old Bulgarian runes and Linear scripts of the Aegean Region

BR – Old Bulgarian runes LA – Linear A characters LB – Linear B characters.

Table 10. Comparison of Cyrpiotic (Linear C) characters with similar ones (in from and sound value) from Linear A and Linear C - Cypriotic script from the Minoan period

	Cypr.	Csu	LAcu	LA
1	+	lo	10	+
2	Ŧ	na	na	1
3	+	pa	pa	+
4	2	Po	po	7
5	17	ri	ri	7
6	1	ti	ŧi	1
7	F	to	to	干
8	V	sa	કવ	Y
9	Ш	se	se	٣

Cypr – Linear C character Csv – Linear C character sound value Lasv - Linear A character sound value LA – Linear A character.

by the huge time gap - aprox. 2500 years between the Linear scripts and Glagolitic of 9^{th} C. AD. No one can expect that the Slavic phonetics of 9^{th} Century AD would be exactly the same as the Slavic phonetics of almost three millennia earlier. In such a long time changes occurred in any language.

Despite the slight (for such big time gap) differences, Glagolitic script shows much greater resemblance to Linear A and Linear B than the so-called Linear C (also known as Minoan Cypriotic) to Linear A and Linear B. 20 Linear A characters and 23 Linear B characters are similar to Glagolitic characters in form and sound value, while Linear C has only 9 characters similar in form and sound to Linear A characters – the script, from which Linear C originated [22] p. 54, Fig. 34 (cf. Table 10).

Because Glagolitic, as well as the runic script of the Old Bulgarians and that of the Scytho-Sarmatians, show amazing closeness to the ancient writing system of the Aegean region the only logical conclusion is that Glagolitic is undoubtedly related to the Linear A and B, created by the Thraco-Pelasgians (Ancient Slavs) in the 2nd millennium BC, which, on its turn, was derived from the much older Neolithic script of the Balkans (Table 3, Table 4).

But although the similarity and the relation of Glagolitic and Old Bulgarian runes

with the Linear A and B can not be denied, there remains a quite serious problem to be explored – there is not an attested continuation between Linear scripts of Crete (18^{th} - 12^{th} Century BC), Scytho-Sarmatian runes (1^{st} – 2^{nd} Century AD) and Old Bulgarian runic system (4^{th} - 8^{th} Century AD). The gap is more than 1200 years, and in this period are no attested (at least until now) documents, written with (Proto) Glagolitic characters.

That chronological problem can be explained readily by the nature of the materials on which the inscriptions were made. In fact the Linear A and Linear B tablets were preserved till modern times only by pure chance. They were made of unbaked clay, and only because they were exposed to unintentional flames they were fire-hardened. This new condition allowed them to survive through the ages. Actually the majority of documents written with Linear scripts were not meant to last long, perhaps only one year, or two [22] p. 33.

If the ancient Slavs used also perishable materials (for example wood, bark, and/or animal hides) it is quite normal that the oldest documents have not survived. Only from the moment when stones and metal objects were inscribed did literacy become preserved for ages.

According to Chadwick the Linear B characters were to be written with the help of brush and ink (paint) [23] p. 27. Judging by their elegant rounded form it is not hard to recognise that Glagolitic also was intended to be written with pen or brush on smooth material such as animal hide.

We know about the use of animal hides in the distant past from Herodotus. He testifies that in the antiquity goat and sheep hides were used to write on and this material was still in use (5th Century BC) in the non-Greek lands [24] V-59. The father of the history didn't specify which exactly were those non-Greek countries, but we know that the neighbors of the Hellenes were the Thracians, Pelasgians and Macedonians.

The ancient Slavs (called Thracians in the antiquity according to Simokatta cited by Tsenov [4] p.16) above the Haemus Mountain were cattle breeders. For such people the animal hides wouldn't be expensive material. On the contrary they would be the most practical and cheap material for writing. But as already mentioned, this material is perishable and nothing has survived. Similar example can be given with the "wooden books" of the Hittites. None of those books has survived the ages, because of its perishable nature [25] p. 128, while the stone and metal objects inscribed with Hittite hieroglyphs withstood the destructive influence of rain, sun, wind and even fire.

The temporary endurance of the animal hides didn't trouble our ancestors because the validity of the documents was short (few years) and after this period the documents of administrative character would be destroyed anyway (burned) by the owners (Just like Mycenaeans did with most of their records [22], p. 33). With the coming of the Christianity the situation changed, the religious texts were regarded as sacred and were carefully preserved.

Another reason for the absence of Glagolitic documents between the 12th Century BC and 1st Century AD could be the insufficient search. At the beginning of the 20th Century nobody had suspected that in Bulgarian soil there would be found 6000 years old objects like Karanovo seal and Gradešnitsa tablet. Neither had anyone thought that on the Bulgarian

territory there would exist examples of Linear scripts. But in the second half of the 20th Century objects inscribed with Linear A [26] and Linear B script [27] p. 3 were found in different places in Bulgaria. In 2006 the archaeologists Ovcharov found a tablet with script 7000 years old [28] p. 15.

It is very hard to determine when exactly the proto-Glagolitic writing system was created. Judging by the fact that Glagolitic of 9th Century AD has the most matches with Linear B, it can be said that the most ancient form of Glagolitic script began to emerge around 18-16th Century BC and was further developed through the ages by various Slavic tribes.

If around 15th Century BC the Old Slavs from South-Eastern Europe used proto-Glagolitic characters, they were probably syllabic just like those from Linear A and Linear B. In later times the writing system was developed and the characters, instead of representing syllables as in the proto-Glagolitic, assumed the value of single sounds. Such a process is explained very well by Chudinov [29] p. 500.

After the ascendancy of the Greeks and Romans in the lands between Danube and Aegean Sea the ancient script could be maintained only in the territories between Danube and Caucasus, inhabited by Sarmatians, Scythians and Thracians (Sinti and Meoti lived in 1st Century AD on the eastern shores of the Black Sea).

The journey of Cyril to the Pontic steppes (dominated in his time by the Khazars) would allow him to come in contact with the Glagolitic-like runes and most probably those runes become the inspirational source for the Glagolitic. Before that moment Cyril couldn't have known about the existence of script resembling Scytho-Sarmatian runes (like the ancient Aegean Linear scripts), because to the best of our knowledge the Greek scholars of 9th Century AD were not aware of the Minoan and Mycenaean writing system.

The reason for Cyril to choose the writing system of the Sarmatians, Scythians and Northern Thracians was perhaps because their speech was closest to that of the Slavs around Thessalonica. We know that the Thracian tribes Sinti inhabited Southern Thrace and Aegean region in antiquity [30] (VII fragment 36, 45, 45 a), but another branch of Sinti occupied the eastern shore of the Black Sea [23]-IV-28, (that region was ruled by the Khazars in the 9th Century AD). Except the Sinti also Moesians (equated numerous times with Old Bulgarians) occupied different territories: Asia Minor, Northern Bulgaria and Southern Rumania. It is said that Alexander the Great had defeated Moesians and forced them to migrate northwards [31] (Homatian, cited by Zhivkov).

Because of its isolation (far from Greeks and Romans) the language of these ancient Slavs (who lived northwards of river Danube) would have remained less contaminated. The isolation would have allowed them to preserve also the archaic script, which after a long development was well adjusted to the peculiarities of the Slavic speech. Cyril would have needed only to perfect this writing system so that it would be useful to all the Slavs. Thanks to his high education and travels in the lands occupied by Slavs, Cyril would have the acumen, which would allow him to forge a common Slavic script having an ancient tradition.

Present explanation of the origin of the Glagolitic alphabet is quite different from that created by Taylor and his contemporaries, because in the time they finished their research

(Taylor – 1880, Jagić – 1884, Vondrak – 1893, Fortunatov – 1890) the Aegean scripts were still not yet systematized and deciphered. The sound value of the Linear B signs became known at the end of the 1950s and beginning of the 1960s. The 20th Century writers Nahtigal (1941) and Kiparsky (1964) were not specialized in Aegean scripts and couldn't have known about the form and sound value similarity between the Linear scripts and Glagolitsa. The authors, who studied the Glagolitic script were ignorant of many other very important facts:

- 1. That Scytho-Sarmatian runes of 1st-3rd Century AD resemble very much the Glagolitic letters [6] p. 48-59. That information became available in the 21st Century (2006).
- That in deep antiquity the Greeks considered Scythians and Sarmatians one ethnos
 [32] II, 2.1-2 and Procopius testifies that Sarmatians were a branch of great family of
 Thracian Getae [33] III, II, 2-8, who were identified as Slavs (Tsenov [4] p. 14, citing
 Simokatta)
- 3. That Sarmatians had the same anthropological base as the Old Bulgarians [7] p. 50. and the same Bulgarians were defined as belonging to the Slavic ethos by anthropologists in the 1930s [34] p. 170.
- 4. That Scythians were considered as ancient Slavs for centuries by the scientists of the Tsarist Russia [35] p. 154. (Unfortunately after the October Revolution these works were suppressed).
- 5. That Thraco-Pelasgians had their own script long before the Trojan War (D. Siculus, cited in [16]).
- 6. That Linear scripts of the Aegean region were influenced by the Neolithic script of the Balkans, Table 3.
- 7. That the Thraco-Pelasgians were creators of the Minoan culture [18] p. 219.
- 8. That Thracian personal names and theonyms are found in Linear A and Linear B inscriptions. [15] p. 17-21, not to forget the ethnonym ENETIJO [36] p. 543.
- 9. That the people, who in the deep antiquity migrated to Crete must have come with large dug-out canoes (similar to those used by the modern Macedonians at lake Prespa) [37] p. 91.
- 10. That in the Neolithic times such dug-out canoes were in use in the territories of the Venetic people, who inhabited the region between the Alps and the Adriatic sea. [38] p. 79.
- 11. That the Slavic Macedonians are genetically closer to the Cretans than the Greeks [39]
- 12. That in the Old Venetic lands (Padua) Glagolitic-like signs existed in 5th Century BC as can be seen from a Venetic inscription PA 28. (The sign resembles the Glagolitic letter Ž (*Život*) [40]. Also signs from Villa Nova pottery [14] p. 57 resemble Linear A signs [8], Table 3.

And last, but not least – the linguistics proves about the ancient Slavic migration. In the beginning of the 20^{th} Century, R. J. Conway discovered interesting parallels between Venetic and Eteo-Cretan language [41] p. 125. Hrozny discovered connections between the Cretan toponyms and toponyms from the lands of the Thraco-Pelasgians as well [18] p. 219-220.

Not being aware of so many important details, the scientists who studied Glagolitsa in the 19th and 20th Century based their claims on insufficient and very limited data, that is why they failed to discover the true origin of the Glagolitic alphabet.

Conclusions

The resemblance of 33 Linear A characters (20 in form and sound, 13 only in form) and the resemblance of 32 Linear B characters (23 in form and sound and 9 only in form) with characters from the Glagolitic script is not just a remarkable coincidence, but one of the many pieces of information, which are confirmations for the presence of the Slavic people in South-Eastern Europe in the deep antiquity. Although driven out of their lands, those Old Slavs retained their script and even developed it in the new abodes – further in the North (the lands between east shore of Black Sea and Caucasus), away from their adversaries.

The "creation" of the Glagolitic alphabet in the Middle Ages was only a rewriting, a kind of renaissance. Most probably Cyril choose the runic script of the North Thracian tribes because their speech was preserved unspoiled by foreign influences.

Hopefully, further research will provide us with more data about the real age of the Glagolitic alphabet. Ancient manuscripts, or artifacts inscribed with Glagolitic characters would show the developing of that peculiar Slavic script. Good hope gives us the discovery of the so called Copper Book, inscribed with signs from different ages: Vinca, Linear A, Glagolitsa [42]. This peculiar object is with certainty not the only one, which will be found in the Slavic lands.

What we have today isn't little. We have not the whole story, but even the fragments are convincing testimony for the high level of the culture of our ancestors – the Old Slavs.

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References

- V Babič, *Učbenik stare cerkene slovanščine*, Filozofska fakulteta Univerze v Ljubljani, Oddelek za slovenistiko, Ljubljana 2003, pp 33-36
- 2. http://en.wikipedia.org/wiki/Chernorizets_Hrabar Aug. 2007
- 3. H Lunt, Old Church Slavonic grammar, Mouton & Co., Printers, The Hague, 1996, p. 16
- 4. G Tsenov, *Praotechestvoto i praezika na Bulgarite*, Heliopol, Sofia, 2005, р.р. 47-48 (Г. Ценов, *Праотечеството и праезика на българите*, Хелиопол, София, 2005)
- 5. S Rjabchikov, *Preliminary report on the Proto-Slavonic writing system*: http://www.public.kubsu.ru/~usr02898/sl27.htm Aug. 2007
- I Ivanov. M Minkova (ed. I. Karajotov), Ortografichna analogija mezdu glagolicheskite bukvi i sarmatskite runi, po materiali ot mogilata Roshavata Dragana, mestnosta Chatalka, Starozagorsko, Izvestija na muzeite ot Jugoiztochna Bulgaria, Burgas, 2006, p. 48-59

- G Bakalov, P Delev, A Stamatov, A Fol, Podbrani Izvori za Bulgarskata Istoria, Tangra, TanNakRa, Sofia, 2002, р. 50 (Г Бакалов, П Делев, А Стаматов, А Фол, Подбрани Извори за Българската История, Тангра, ТанНакРа, София, 2002), р.21, р.50
- 8. *Inscriptions in the Minoan Linear Script of Class A* (ed. W C Brice, from the notes of A Evans and J Myres), Oxford University Press, London, 1961
- 9. http://proel.org/alfabetos/copto.html Aug. 2007
- 10. S von Reden, J Best, Auf der Spur der ersten Griechen, Woher kamen die Mycener?, DuMont Buchverlag, Köln, 1981, p.p. 49-51
- 11. www.en.wikipedia.org/wiki/Kurgan_hypthesis#Genetics
- 12. http://www.omniglot.com/writing/vinca.htm -date of last insight- Oct. 2007
- 13. http://www.prehistory.it/ftp/winn.htm -date of last insight- Oct. 2007
- 14. J Šavli, M Bor, I Tomažič, *Veneti First Builders of European Community*, Editiones Veneti, Wien, 1996, p. 513
- 15. К Porozhanov, Obshtestvo i darzhavnost u trakite, Studia Thracica 6, BAN, Sofia, 1996 (К Порожанов, Общество и държавност у траките, Студиа Тракика 6, БАН, София, 1996)
- 16. http://www.ziezi.net/sotiroff.html#4 (ref.nr.54) Aug. 2007
- 17. V Georgiev, *Trakite i tehnija ezik*, BAN, Sofia, 1977, p.p. 157-192 (В Георгиев, *Траките и техния език*, БАН, София, 1977)
- 18. B Hrozny, Ancient History of Western Asia, India and Crete, Artia, Prague, p.p. 219-220
- 19. G Herm, Die Phöenizier, Econ Verlag, Düsseldorf, 1974, p. 61
- 20. *Muzei I Pametnitsi na Kulturata v Nova Zagora* (katalogus), Meditsina i fizkultura, Sofia, 1983 (*Музеи и паметници на културата в Нова Загора*, Медицина и физкултура, София, 1983)
- V Duruy, The World of the Legendary Greece, Leon Amiel Publ. Edition Minerva, Geneve, 1975, p.p. 23-24
- 22. J Chadwick, Linear B en verwante schriften, Fibula/Uniboek, Houten 1990, p.p. 33-54
- 23. J Chadwick, The Mycenaean world, Cambridge University Press, Cambridge 1976, p. 27
- 24. Herodotus, Histories, Wordsworth Editions Limited, Hertfordshire, 1996, V-59
- 25. O R Gourney, The Hittites, Richard Clay & Company, Ldt Bungay, Suffolk, 1964, p. 128
- 26. http://www.croraina.com/thracia/ovchaorov/index.html Aug. 2007
- 27. A Fol, K Jordanov, K Porozhanov, V Fol, Ancient Thrace, Balkan Press, Sofia, 2000
- 28. J Dimitrova, Napipvat choveshko zhertvoprinoshenie varhu plocka s pismenost na 7000 g., *24 Chasa* (Bulgarian newspaper), 4 Augustus, 2006, p. 15. (И Димитрова, Напипват човешко жертвоприношене върхуплочкасписменостна 7000 г. *24 Часа*, 4 август, 2006 стр. 15)
- 29. V A Čudinov, Zagadki Slavjanskoi Pismenosti, VECHE, Moskva, 2002, p. 500 (В А Чудинов, Загадки Славянской Письмености, ВЕЧЕ, Москва, 2002)
- 30. Strabo, Geography VII, Harvard University Press, London, 1995, fr. 36-45a
- 31. D Homatian, cited by E Zhivkov in: http://www.ziezi.net/sotiroff.html#8 -Aug. 2007
- 32. Strabo, Geography II, Harvard University Press, Cambridge, 2000, II, 2.2-1
- 33. Procopius, History of the wars, Harvard University Press, Cambridge, 2000, II-2-5
- 34 G Tsenov, Krovatova Bulgaria i pokrastvaneto na Bulagrite, Zlaten Luv, Plovdiv, 1998, р. 140 (Г. Ценов, Кроватова България и покръстването на Българите, Златен Лъв, Пловдив, 1998)
- 35. A L Mongait, Archaeology of USSR, Penguin Books Ltd, Harmondsworth, Middlesex, 1961, p. 154
- 36. J Chadwick, Documents in Mycenaean Greek, Cambridge University Press, Cambridge, 1973, p. 543
- 37. R W Hutchinson, Prehistoric Crete, Penguin Books Ltd, Harmondsworth, Middlesex, 1962, p. 91
- 38. Steps into the Past Treasures from the archaeological collection of the National Museum of Slovenia. p. 79.
- 39. A Arnaiz-Villena, K Dimitroski, A Pacho, J Moscoso, E Gómez-Casado, C Silvera-Redondo, P Varela, M.Blagoevska, V Zdravkovska, J Martin, HLA genes in Macedonians and the sub-Saharan origin of the Greeks, *Tissue Antigens* 2001, 57, 118–127; cf.: http://www.makedonika.org/processpaid.aspcontentid=ti.2001.pdf

- 40. http://www.members.tripod.com/adolfozavaroni/padua.htm
- 41. R J Conway, Annual of the British School at Athens, year 1902, p. 125
- 42. http://makedonskosonce.com/broevis/2003/sonce/451/Text08.htm

Povzetek

Izvor glagolice

Glasovna in oblikovna podobnost 20 glagolskih črk z 20 znaki linearne pisave A (črtne pisave A) in 23 glagolskih črk s 23 znaki linearne pisave B (črtne pisave B), kot tudi oblikovna podobnost dodatnih 13 glagolskih črk s 13 znaki linearne pisave A (črtne pisave A) in 9 glagolskih črk z 9 znaki linearne pisave B (črtne pisave B) pomenijo, da je treba prestaviti začetek ustvarjanja glagolskih znakov iz 9. stol. po Kr. v približno 18. stol. pr. Kr. Podobnost glagolskih črk z venetskimi črkami iz 5. stol. pr. Kr. in s scito-sarmatskimi runami iz 1. do 3. stol. po Kr. nakazuje prehod od črtnih pisav v 2. tisočletju pr. Kr. do srednjeveške slovanske pisave. Tako cerkvena slovanska pisava kot tudi stare pisave egejskega področja imajo svoj skupni izvor v neolitski pisavi na Balkanu - v nekdanjih slovanskih področjih.