Grapholinguistics in the 21st Century, 2022

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## Application of the Grapholinguistics in the Palaeography. Study Case – Croatian Glagolitic And Cyrillic Palaeography

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#### About Palaeography and Grapholinguistics

-shared field of research – the writing systems

-the goal of the palaeographic research – sometimes positioned outside of the boundaries of linguistics

-the script is replaced with writing

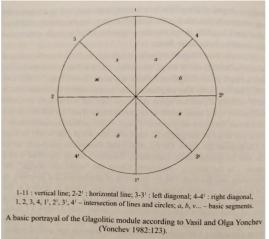
-different methodological approach, the invention of the so-called palaeographic categories

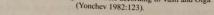
#### Glagolitic Script

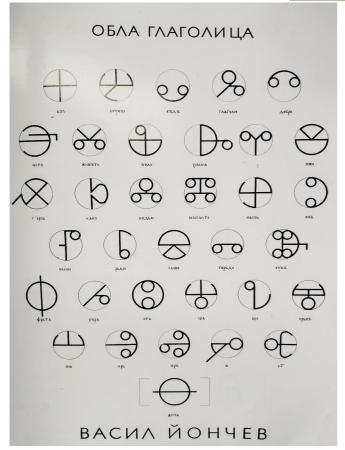
-three kinds of origin theories: exogenous, endogenous and the author's theory

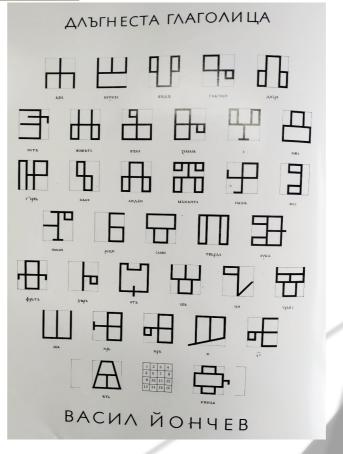
-the author of the script – most probably st. Constantin

-Yonchev's letter module shouldn't be dismissed









#### Formation of the angular Glagolitic Script

ф	A (az)	1	В	O (on)	80
벁	B (buki)	$^{2}$	n	P (pokoi)	90
0.0	V (vidi)	3	Б	R (rci)	100
24	G (glagole)	4	ନ	S (slovo)	200
Ոհ	D (dobro)	5	Ш	T (trdo)	300
Э Ш	E ((j)est)	6	æ	U (uk)	400
	Ž (živite)	7	φ	F (frt)	500
B	З (zelo)	8	la la	H (hir)	600
Ða	Z (zemla)	9	뽀	$\omega$ (ot)	700
ЧЪ	Ï (iže)	10	법	Št, Šć, Ć (šća)	800
8	I (i)	20	V	C (ci)	900
NP, 41P	Ð, J (je)	30	盘, 臣	Č (črv)	1000
2	K (kako)	40	Ш	Š (ša)	2000
Ш	L (ljudi)	50	I	poluglas ((j)er)	3000
í /1	M (mislite)	60	品	Ja, Je (jat)	4000
₽.	N (naš)	70	JD	Ju (jus)	5000

ANGULAR GLAGOLITIC

#### Letter coordination in the linear system

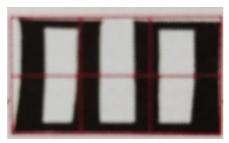
-the *minusculization* process

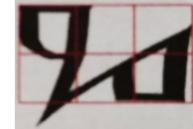
-transition to the four-line linear text organization

-creation of the new letter module









## Morphological changes in the script and the use of ligatures

-the process of the minusculization – transition from rounded to angular letter lines creating the change in the letter fields – bigger

use of ligatures

SOME GLAGOLITIC LIGATURES

品Э jaže 昭招 ml fth. pod fff11 am ① jeje 铅铅 mlč [阳 pot |||||| tv 世1 bl ⑦ ježe 们 mo [11] poto [111] tvo Щ bo f jur 🚻 ms 🎁 potr Mi tyr br JUII jutr TTP mž JUII povr NIL vd go 弋 ko 铅 mĩi 巾 pr 屾 vì 28 gr Ik li P no TIII prv III vo 25 19 ho III to III of III pt III vod hr IIII It XX oli A so III vr 历 il IIII lv XII olju IIX ti IIIII vt dt. ili ∭U lju Ä ot MM tl PAG zl 88 it IJJJL ljud |IJI pl III to |JH zo 811 II D po III tr iže 🖽 ВЭ JH zr

#### Graphetic organization

-the changes in the letter forms take place during changes in the visual transposition of texts.

-in the liturgical angular Glagolitic punctuations were written frequently in the bottom middle of almost every blank space

-another use of punctuations – numeral marking

כסויע שווואישה אבחנת ליחתלידעום באש ATTURE T. The C ARDICAL . T. IN MAN LAW . B & B & . JUNE BERGEWIN ERGO CWA . IMOD OFF יערואפרא פאר לא ועדאים בצא वार अक्त साम मार्ग हा हा हा हा हा हा हा है के साम कि साम awinette em incame atte ENTO WE ADDI . IOURIEUNO INTE השוצאמווע ניפגוי חזרים אומשא unter Erog cutates is annual LA LA DELS DURIENES KARD RAPH TH TUTED CEW BLOCKANG. BTTADB INCITIO סלובולותלך עיארצים נהגאגוצניו איי נותא אין אותה ולאגמערא נגן נשווף ניון אווינין. מווגההצוות כבא כעים אהל ולוונהתנים -- כוושוויא היוה כוח עוואצא אהר וא

#### The use of abbreviations

-a method of saving time and space

-the magnitude of difference in its use between observed scripts became visible after the grapholinguistic-based research

#### Tablica 2. Inventar najčešćih kratica LondAp Table 2. List of most frequent abbreviations in the LondAp

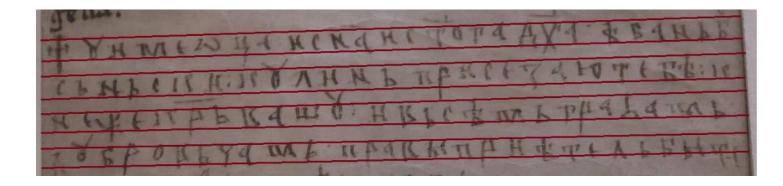
Primjer	Transliteracija i vrsta kraćenja	Pozicija u tekstu
QL	<i>c(êsa)r</i> Kontrakcija	Ia: 7. r., Ib: 1. r., 7. r., IIa: 3. r., IIIa: 13. r., IIIb: 7. r.
VGAUUDAJOON	<i>c(êsa)rstvuetь</i> Kontrakcija	Ia: 6. r.
enfi	<i>b(og)a</i> Kontrakcija	Ia: 10. г. <i>b(ogo)ть</i> , Ib: 3. г., 5. г., 14. г. <i>b(ož)e</i> , IIb: 7. г., IIIb: 2. г.
Lati	<i>h(rъst)a</i> Kontrakcija	IIa 5. r., IIIa 12. r.
Stolat	<i>is(u)h(rьst)ь</i> Kontrakcija	IIa: 2. r., 6. r., IIIb: 6. r., 14. r.
908-	g(ospod)i Kontrakcija	Ib: 14. r., IIa: 1. r., IIIa: 6. r., IIIb: 14. r.
Alla	g(ospode)vê Kontrakcija	IIIa: 5. r., IIIb: 13. r.
Set 1	g(ospodi)nь Kontrakcija	IIIa: 9. r.
Outqual whether	<i>zap(o)vêdaû</i> Kontrakcija	Ib: 11. r., IIIa: 2/3. r., 13. r., IIIb: 7. r.

#### Cyrillic script

-based on the Greek Uncial Script, it developed during the First Bulgarian Empire (end of the 9<sup>th</sup> – early 10<sup>th</sup> ct.)

-the script's minusculization in the 14<sup>th</sup> ct. is the most interesting dynamic regarding the Croatian medieval literacy

-research focus – development processes in the graphy and the script of the Cyrillic charters and documents from Dubrovnik's Slavic medieval office





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			and the second second second



#### **Diplomatic minuscule**

-graphologically different from the *Ustav*, a two-linear based solemn version of Cyrillic, mainly used for liturgical purposes

-the transition from the two- to four-line linear text organization conditioned the morphology of a significant number of letters in the script which can be observed from the end of the 12<sup>th</sup> ct Imnore part - fila - for fa am. Cgo ban culin tokne huro comm Germalio - eibi ragulet i veru amien fore porno - ree ta usben pacem manurene - amienta uera. - ofraguleof rora file - colerentia uera recipere abig ulla datione nili gi fua puolurate m donu dare uoluer a. - aput nol du fuerir manutenere - cofilia est plere ur nee plone ad nem poste abig fraude - malo Igenio fieme of aduner - hec fea. m eui arelia.

WY NHALLO HA HENGHE TOTA AXA- & BANAS CAMPERS HERE VHMP REACES TO LE BRIE H GREITPEKAWOIHKERCENKEPHALANAE TO BPORLAY ON & ILPARKIAH HEYELLEBAT אסד לאף אדו איז איז איז איז איז איז אלב איז איז א AFERATE CORDANA H TIPALED BE AD ROLLETA # 15 22 5 X K K B: KE CH HO EPO KE TANE SCHP + XOAE: NO MOINO BAAHANH+O: TPENTE ICE THEATER IS POR A STORE A BALLE HOUSE HICHO WHELL HOU BOLLENSPORE KILAN Harbert HE TAL BIR BAR HE E BEY BKER ICOL ZEAFAH PATIER POTARIES TO AA "KOHOBEKOAORENOICAONE" H HAHM BALTBY AL STORAGE XEY TO THE HICOLL CHAF: HAPLEDAB VONTHEBUAD: AATI Harberrer HEHHER NO MADIESISATEDEENE + E to AN HOPE MADTE BUY SHELT PAYS AUTAMPH WALCING TAICOMARELNE MANTHENER POTAMENTER PARTE FIAMBICS CAME: THEAXE CHAPTER HAT ROLLADKE BAROILLESSEPTON CORAN HEDICH-REBTOINEDERSTRATIONS BETERSTE NUELEBE 42 LICON. ABBRATICIESTRATICIESTA KITATE - HARANA TOPPOTT





#### Charter of Tzar Ivan Asen the II.













#### Standardization of the diplomatic minuscule

-it took place in the 14<sup>th</sup> ct.

-the last morphological change that can be related to the coordination process – the rotation of the letter *b* for 90 degrees to the right

-the morphological characteristic of the line elongation is visible in numerous letters

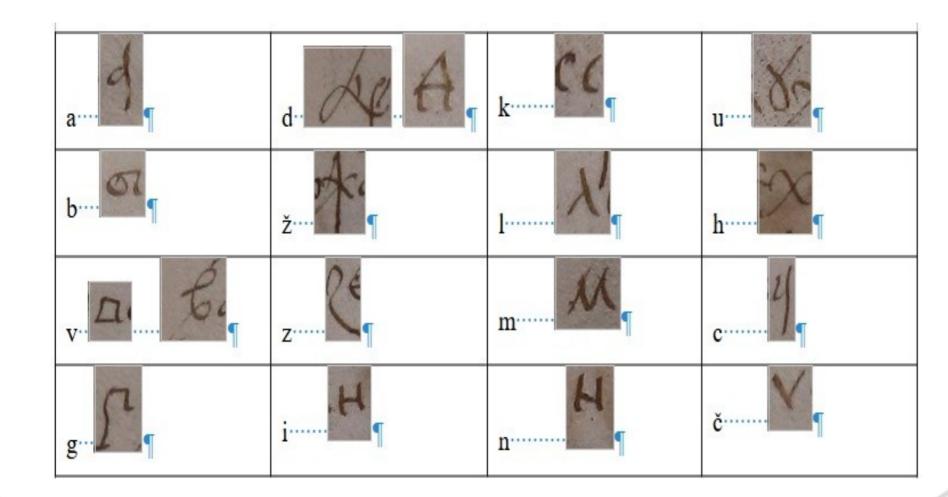
-another graphical characteristic that emphasizes the relationship with the cursive script – the binding of letters

de Bener 1 1991 adi 25 20000 HAME & IL HCHAIG HCAEd IN Sod JANHAL MANARE CARE CALERE autitad and ones to the state of a red sagonatud res wad sound rond roundford cob HECOMO, TO NOVE dom'S HATTO AHOAHMOND. CO MHIZONUAHS Exdementato of due denutrico depuné Snoxedus ante pereno Huenondoro oridro dagungino por Radine I. edit dandie edustro E. edustad. and

NENDER HROH HX MO AFOR Encoderd in preservation desponsioned uneso the pit in au ROUNON HANNE PRIMO SOD Aneno uduo ne with i mpon yEm ododod to the putting the PONENH ORAMPORH-Ма прави нашетропоче носо сабани нидиола рекинеранарон посна does 6mond rectingo HOCOLIVH-O. HUR LOND CHIOL - Comentinie HE The Month Month into some reque requeriperior de contratione en monto

The Ragusans confirm the receipt of despot Đurađ Branković's assets, 25. 1. 1441. Scribe Nikša Zvijezdić, fragment

The Ragusans plea to countess Milica, despot Vuk and Stefan to watch out for their merchants captured by Turks, 1. 10. 1397. Scribe Rusko Hristoforović, fragment

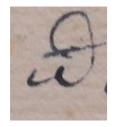


#### Abbreviations

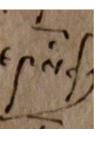
-the frequency of abbreviations (specially ligatures) is relatively small compared to the Glagolitic script

-the most used abbreviations were superscripts, contractions, and the combination of superscript and contraction

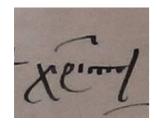
-the commonly spread examples include some of the liturgical names and adjectives (*h*(*ri*)*sta*, *s*(*ve*)*tihь*, *m*(*i*)*l*(*o*)*stь*, *g*(*ospo*)*d*(*i*)*nь*), which can be related with the Jewish tradition of avoiding the pronunciation of God's name (jhvh)



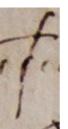
#### *ōt*, superscript



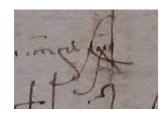
*g(o)<sup>s</sup>(podi)na*, contraction+superscript



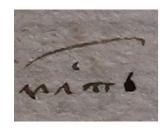
hr(i)sta, contraction



rê, ligature



s(ve)t(a)go d(u)ha, contractions



*m(i)l(o)<sup>s</sup>tь*, contraction+superscript

# Punctuation and capitalization, use of blank space and separation of the words in texts

- somewhat similar to the Glagolitic script
- -the Cyrillic script had a smaller transition in the minusculization process, so we can see the abandonment of *scriptura continua* earlier than in the Glagolitic
- -initials appear in a much smaller scale when compared to the Glagolitic script
- -besides numerals, punctuations are also used in the text to end sentences and more extensive text chapters

10 plao. orbusino. alaseroty HANN N so a go po po . To. TOCO ITT BONK . alli LA MASA LEMA CAN TH YAPANLA Esmacoub. Lank

Trade agreement between theRagusans and Sultan Mehmet the II.,7. 5. 1480., Istanbul (fragment)

#### Instead of the conclusion

-the presented examples are just a fraction of the conducted grapholinguistuically-based palaeographic research

-the intention was to present a solid blueprint of the topic and promote the use of grapholinguistic method, which is relatively new in the frame of the Croatian medieval palaeography



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### Thank you for your attention!!!



(The end)

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