

‘Unicode Glagolitic Pe’ - Fact or Fiction?

SEBASTIAN KEMPGEN
UNIVERSITY OF BAMBERG,
GERMANY



GLAGOLICA IN UNICODE



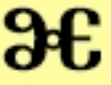


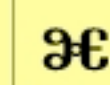


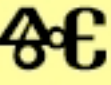


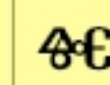


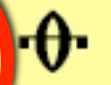


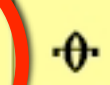





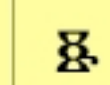


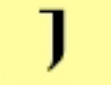


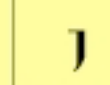





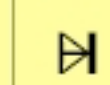





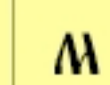






4.1, 2005

	2C0	2C1	2C2	2C3	2C4	2C5
0	ⱦ 2C00	Ⱨ 2C10	ⱨ 2C20	ⱦ 2C30	Ⱨ 2C40	ⱨ 2C50
1	Ⱪ 2C01	ⱪ 2C11	ⱬ 2C21	Ⱪ 2C31	ⱪ 2C41	ⱬ 2C51
2	Ɑ 2C02	Ɱ 2C12	Ɐ 2C22	Ɑ 2C32	Ɱ 2C42	Ɐ 2C52
3	Ⱳ 2C03	ⱳ 2C13	Ⱶ 2C23	Ⱳ 2C33	ⱳ 2C43	Ⱶ 2C53
4	ⱷ 2C04	ⱸ 2C14	ⱹ 2C24	ⱷ 2C34	ⱸ 2C44	ⱹ 2C54
5	ⱻ 2C05	ⱼ 2C15	ⱽ 2C25	ⱻ 2C35	ⱼ 2C45	ⱽ 2C55
6	Ɀ 2C06	Ȿ 2C16	Ɀ 2C26	Ɀ 2C36	Ȿ 2C46	Ɀ 2C56
7	Ɀ 2C07	Ɀ 2C17	Ɀ 2C27	Ɀ 2C37	Ɀ 2C47	Ɀ 2C57
8	Ɀ 2C08	Ɀ 2C18	Ɀ 2C28	Ɀ 2C38	Ɀ 2C48	Ɀ 2C58

8	Ɀ 2C08	Ɀ 2C18	Ɀ 2C28	Ɀ 2C38	Ɀ 2C48	Ɀ 2C58
9	Ɀ 2C09	Ɀ 2C19	Ɀ 2C29	Ɀ 2C39	Ɀ 2C49	Ɀ 2C59
A	Ɀ 2C0A	Ɀ 2C1A	Ɀ 2C2A	Ɀ 2C3A	Ɀ 2C4A	Ɀ 2C5A
B	Ɀ 2C0B	Ɀ 2C1B	Ɀ 2C2B	Ɀ 2C3B	Ɀ 2C4B	Ɀ 2C5B
C	Ɀ 2C0C	Ɀ 2C1C	Ɀ 2C2C	Ɀ 2C3C	Ɀ 2C4C	Ɀ 2C5C
D	Ɀ 2C0D	Ɀ 2C1D	Ɀ 2C2D	Ɀ 2C3D	Ɀ 2C4D	Ɀ 2C5D
E	Ɀ 2C0E	Ɀ 2C1E	Ɀ 2C2E	Ɀ 2C3E	Ɀ 2C4E	Ɀ 2C5E
F	Ɀ 2C0F	Ɀ 2C1F	Ɀ 2C2F	Ɀ 2C3F	Ɀ 2C4F	Ɀ 2C5F

"GLAGOLITIC PE"



8						
	2C08	2C18	2C28	2C38	2C48	2C58
9						
	2C09	2C19	2C29	2C39	2C49	2C59
A						
	2C0A	2C1A	2C2A	2C3A	2C4A	2C5A
B						
	2C0B	2C1B	2C2B	2C3B	2C4B	2C5B
C						
	2C0C	2C1C	2C2C	2C3C	2C4C	2C5C
D						
	2C0D	2C1D	2C2D	2C3D	2C4D	2C5D
E						
	2C0E	2C1E	2C2E	2C3E	2C4E	2C5E
F						
	2C0F	2C1F		2C3F	2C4F	

PE - SOME FACTS



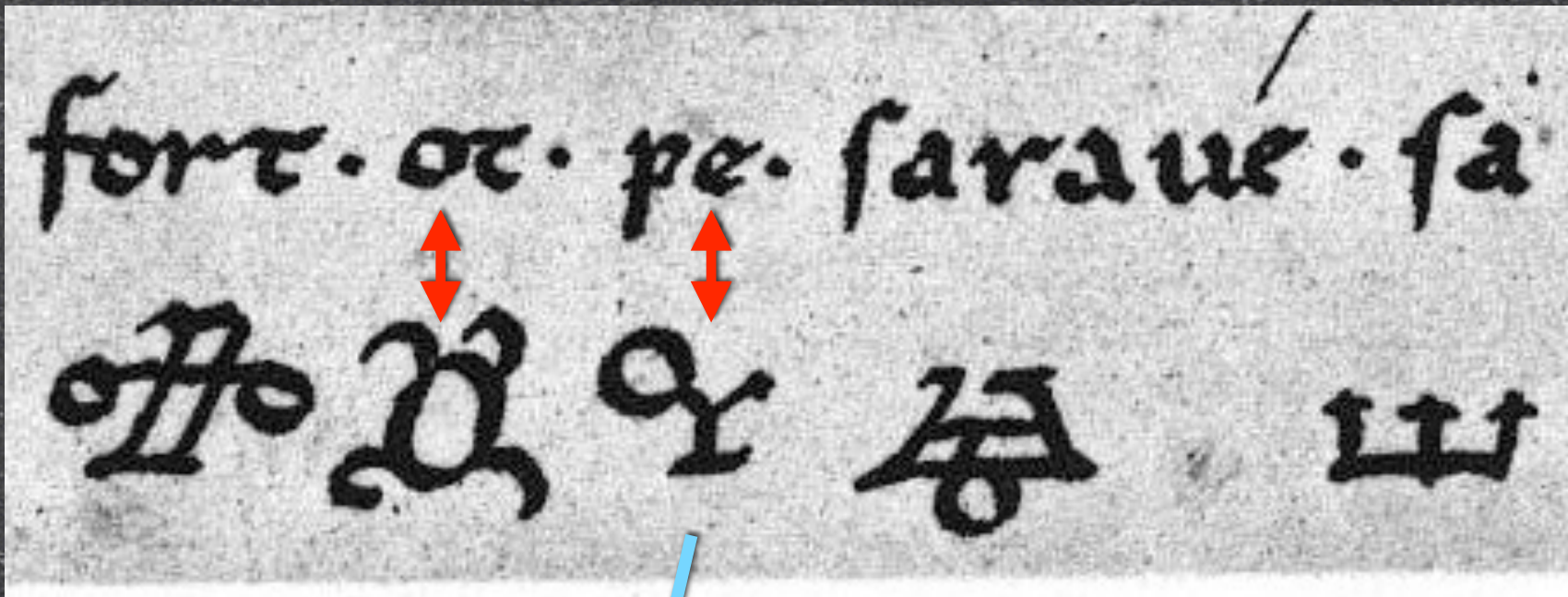
PE
- SOME
FACTS

NO TEXTS

“GLAGOLITIC PE”

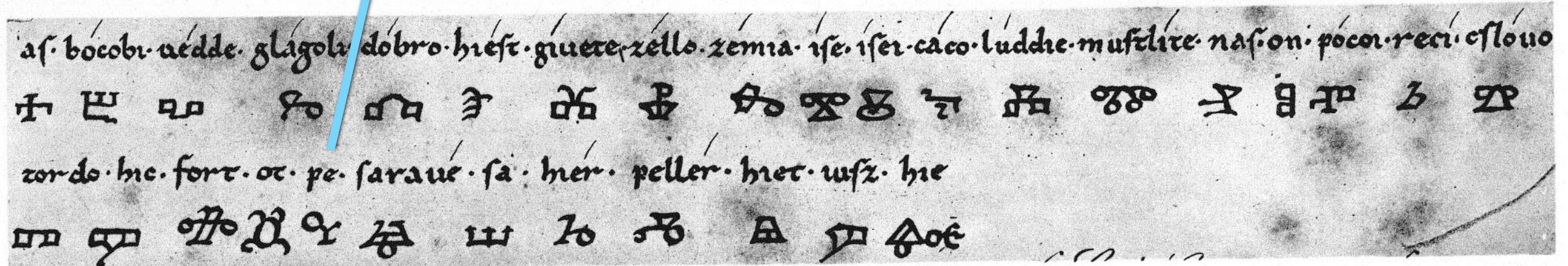
OTHER FACTS?

PARIS ABECEDARIUM

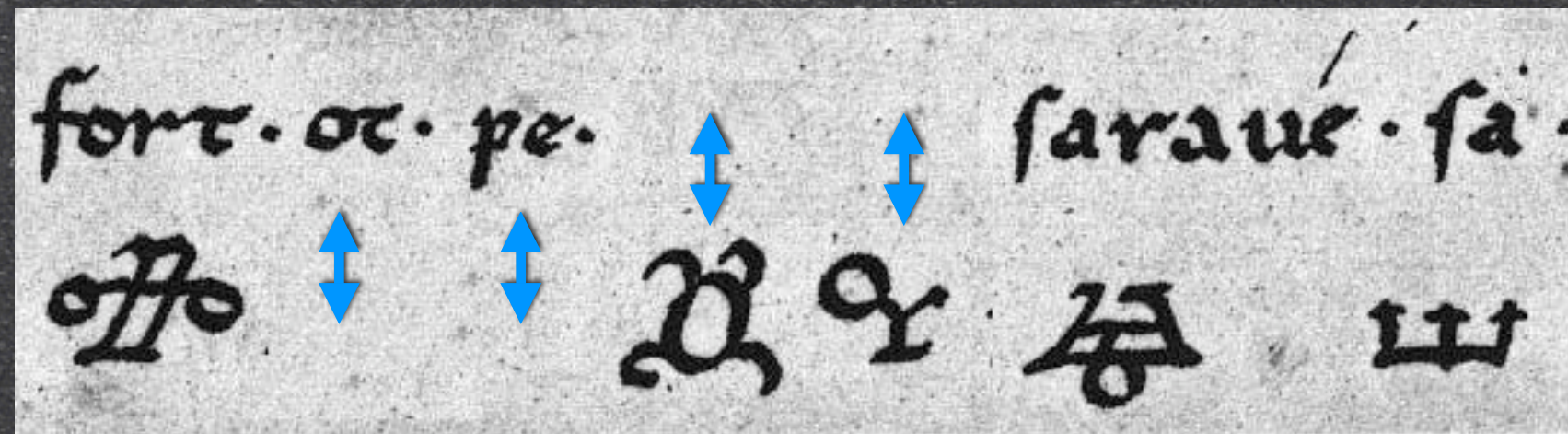
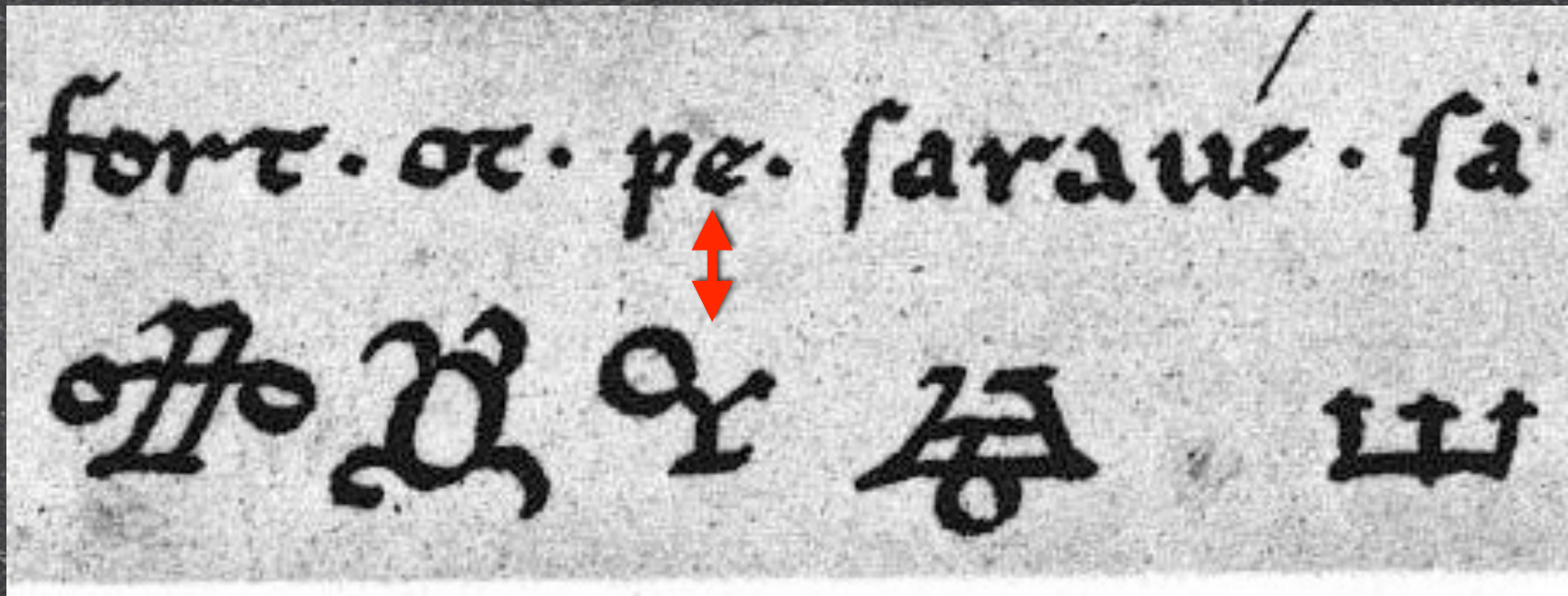


MISTAKES,
MISTAKES

16

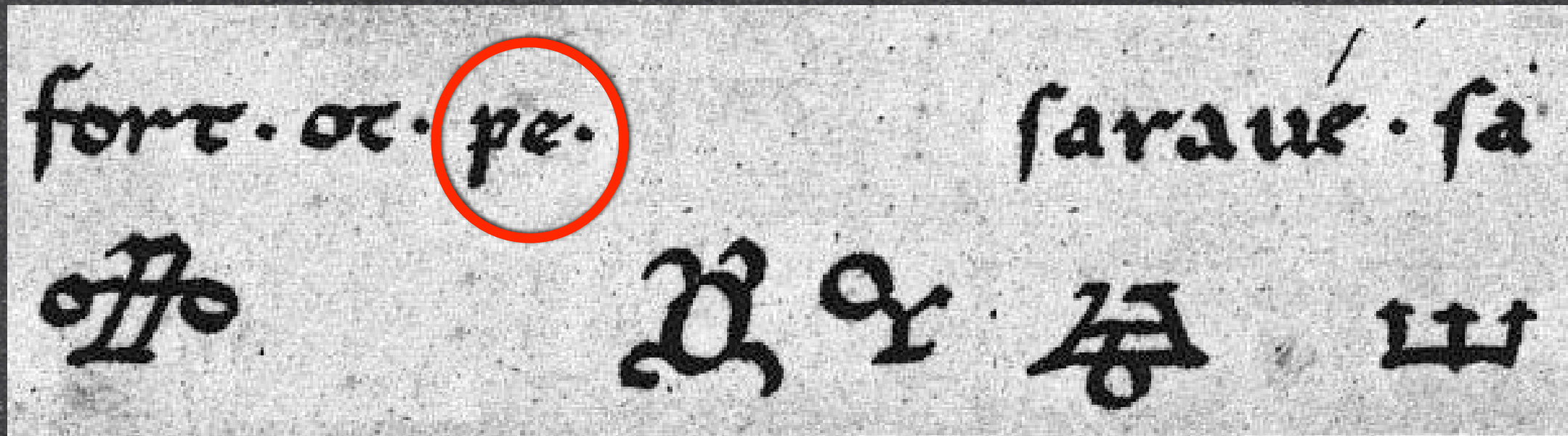


PARIS ABECEDARIUM



MISTAKES
CORRECTED

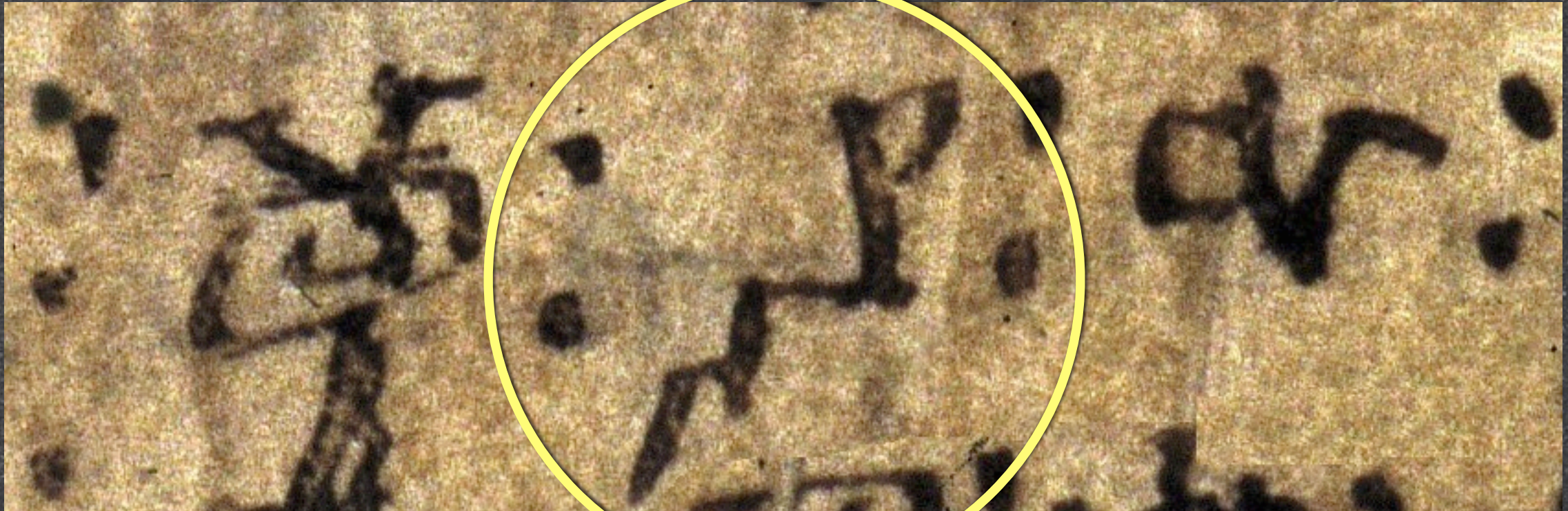
PARIS ABECEDARIUM



A NAME, BUT NO
SHAPE

MUNICH ABECEDARIUM

GLAGOLITIC PART

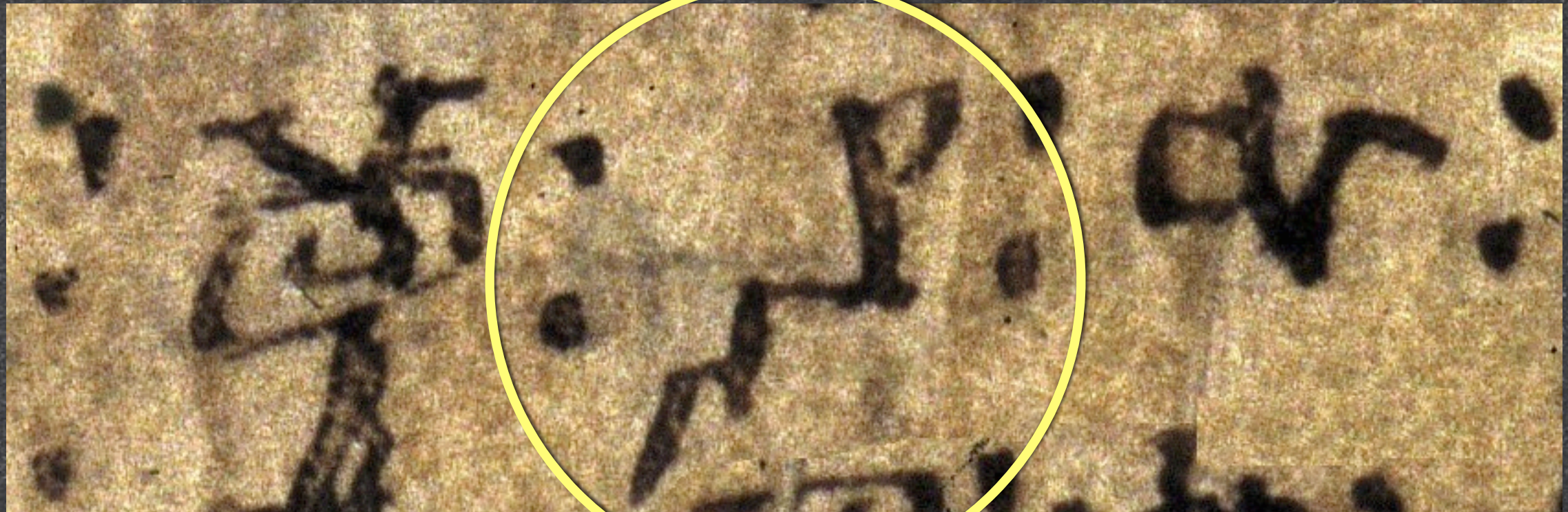


2C1A

2C1A

MUNICH ABECEDARIUM

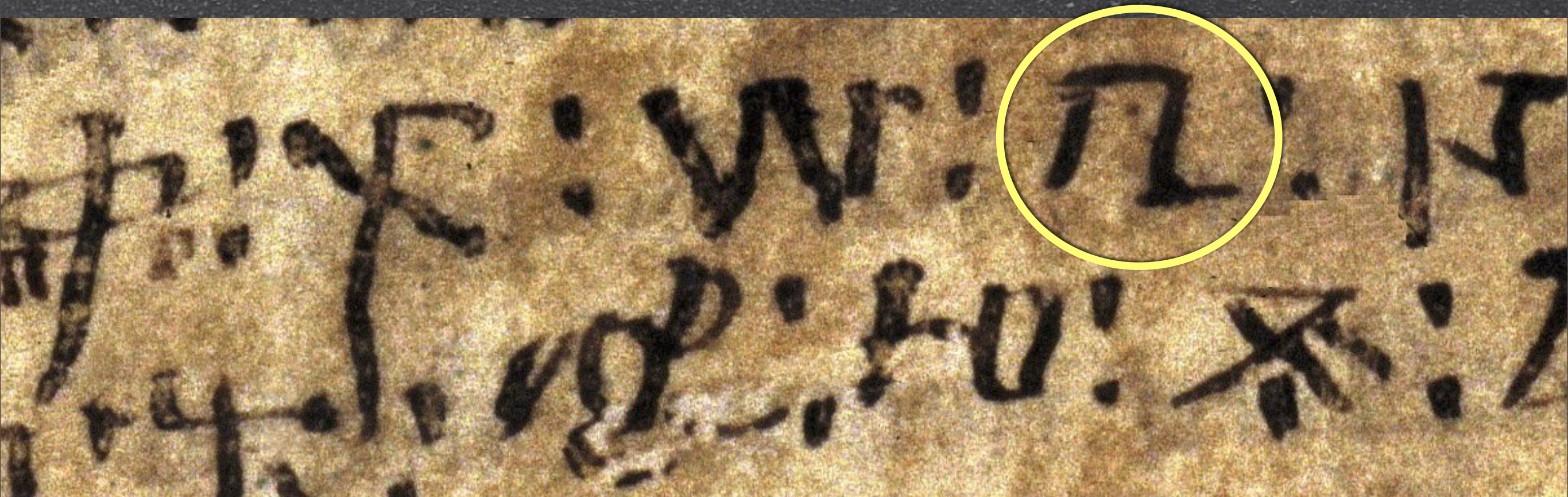
GLAGOLITIC PART



PRAGUE FRAGMENTS

MUNICH ABECEDARIUM

CYRILLIC PART

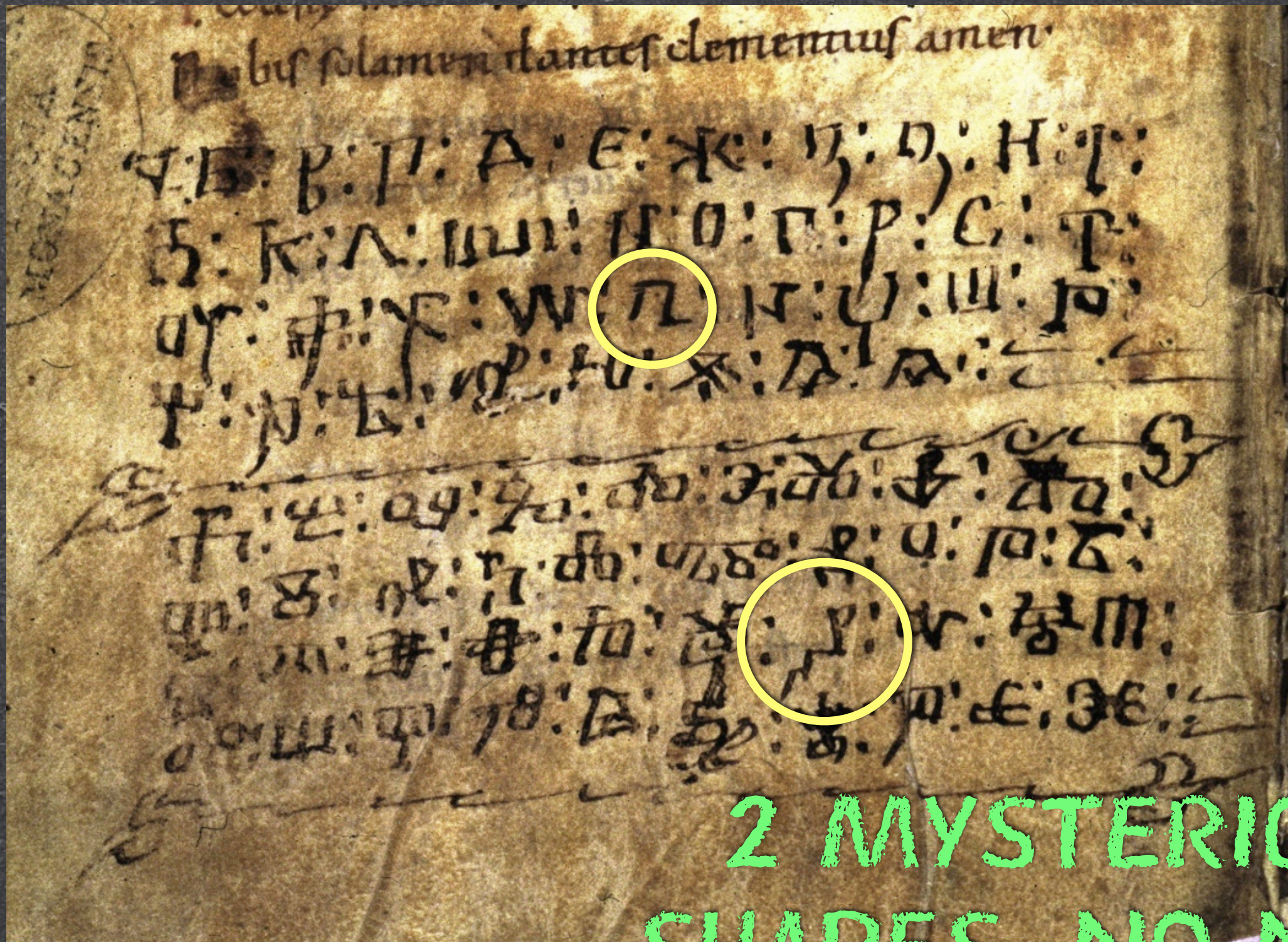


"SECOND P"



2C1A

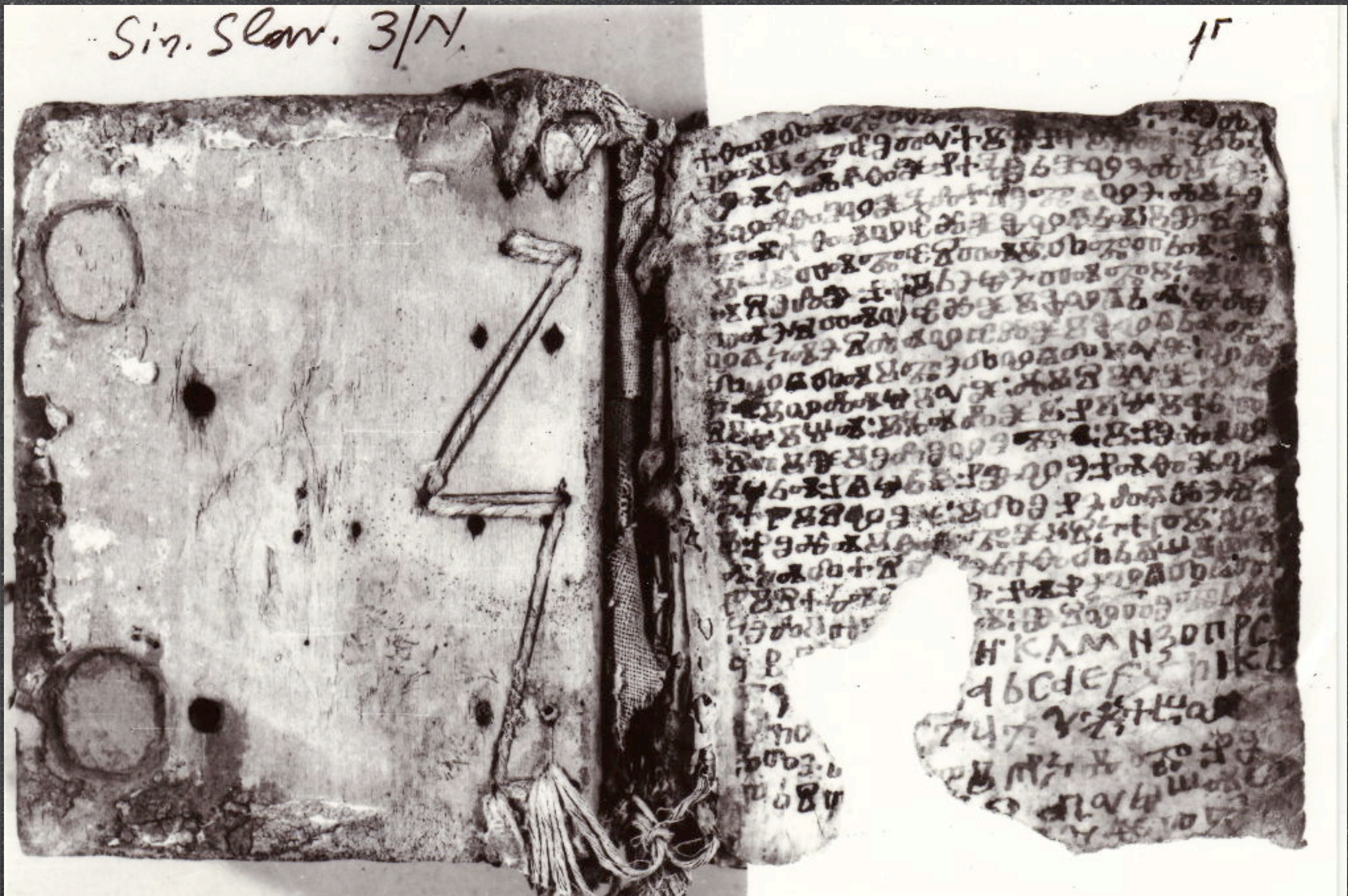
MUNICH ABECEDARIUM



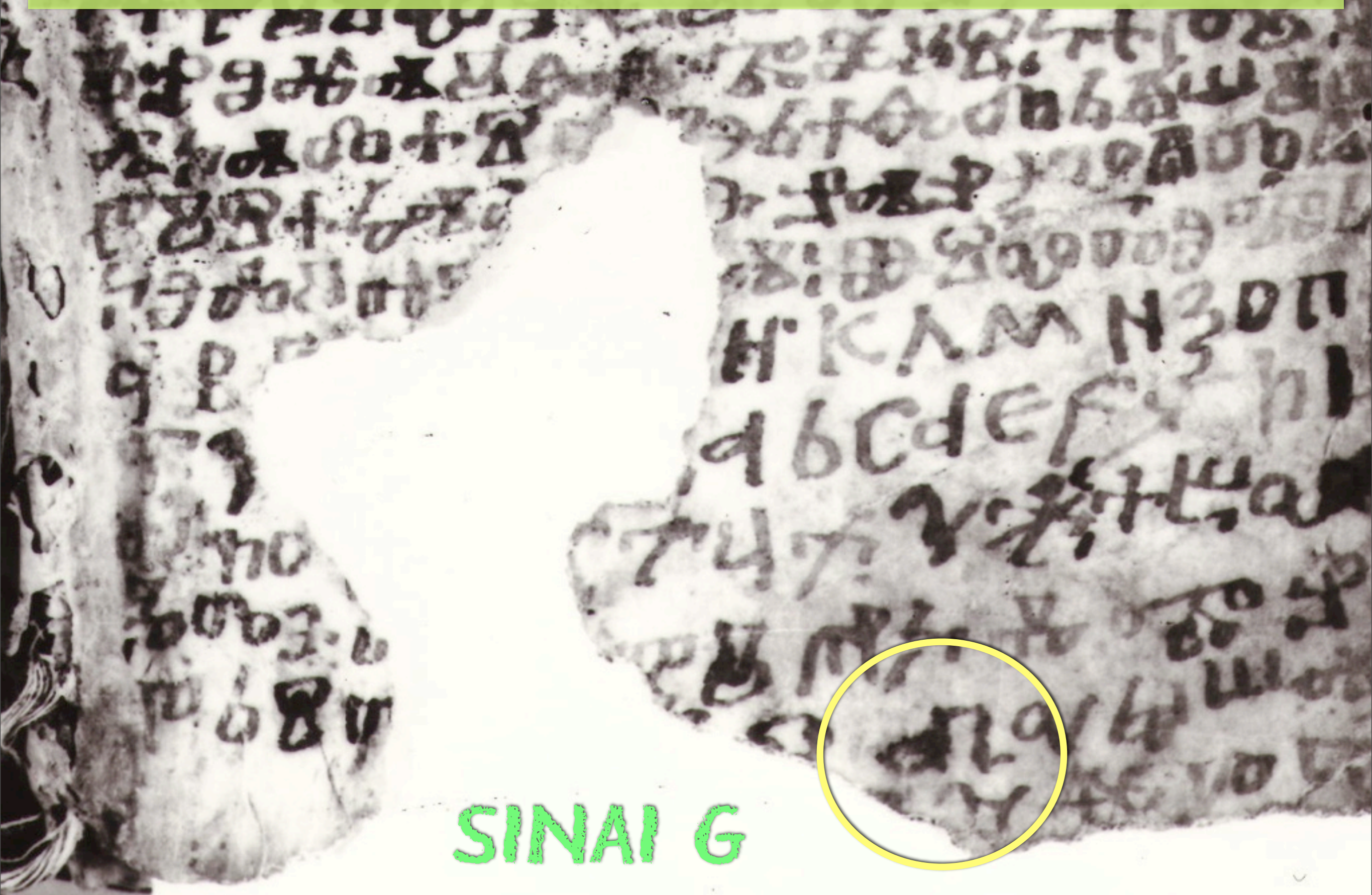
2 MYSTERIOUS
SHAPES, NO NAME

ABECEDARIA SINAITICA

Sin. Slav. 3/N.

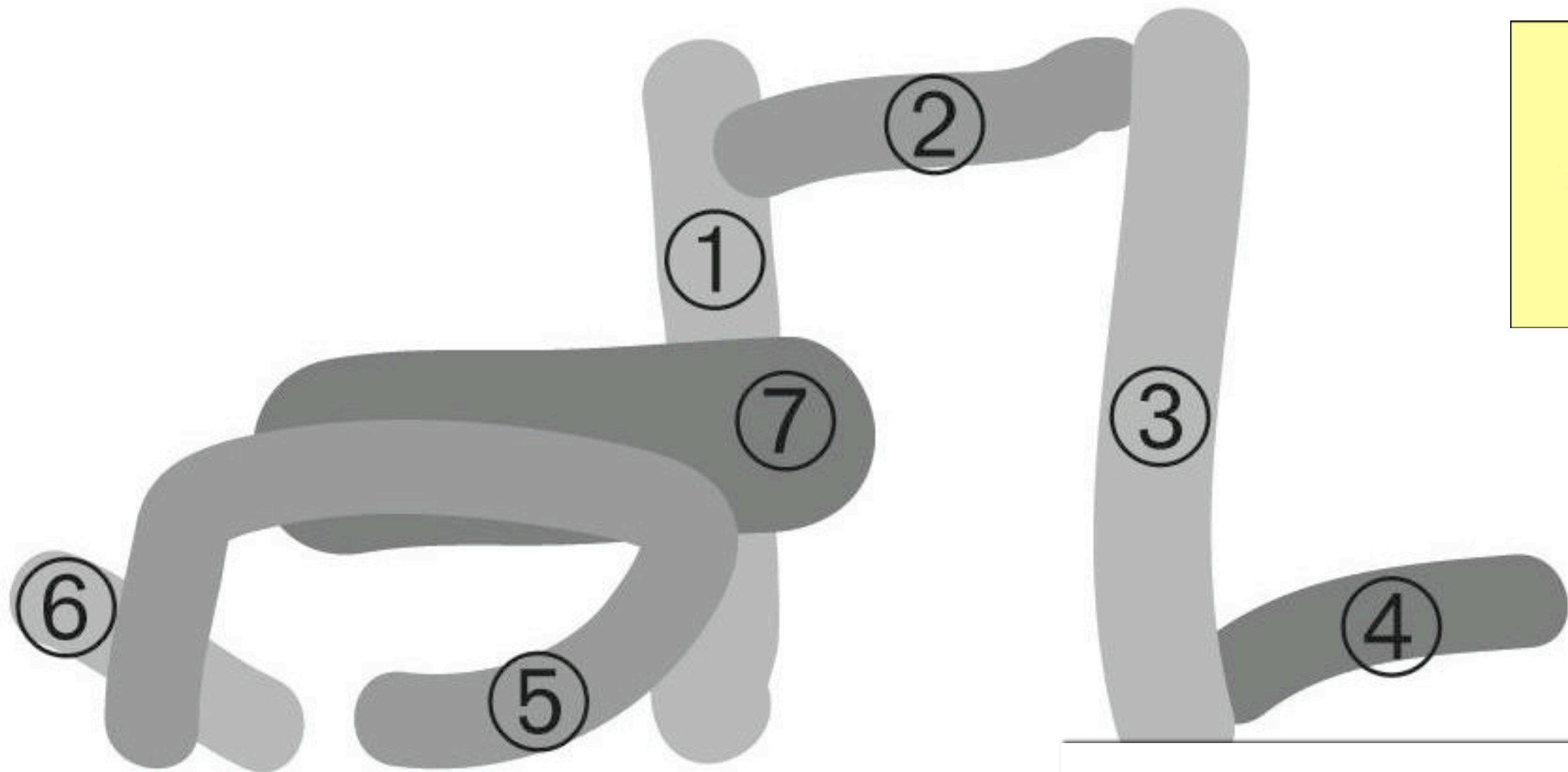


ABECEDARIA SINAITICA



SINAI G

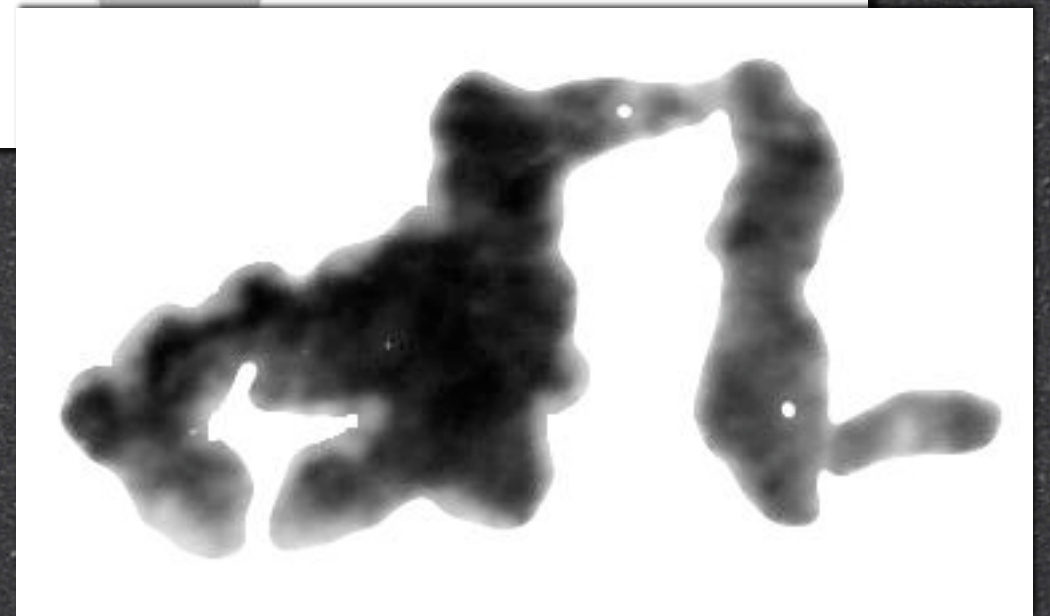
"PE GLAGOLITIC"

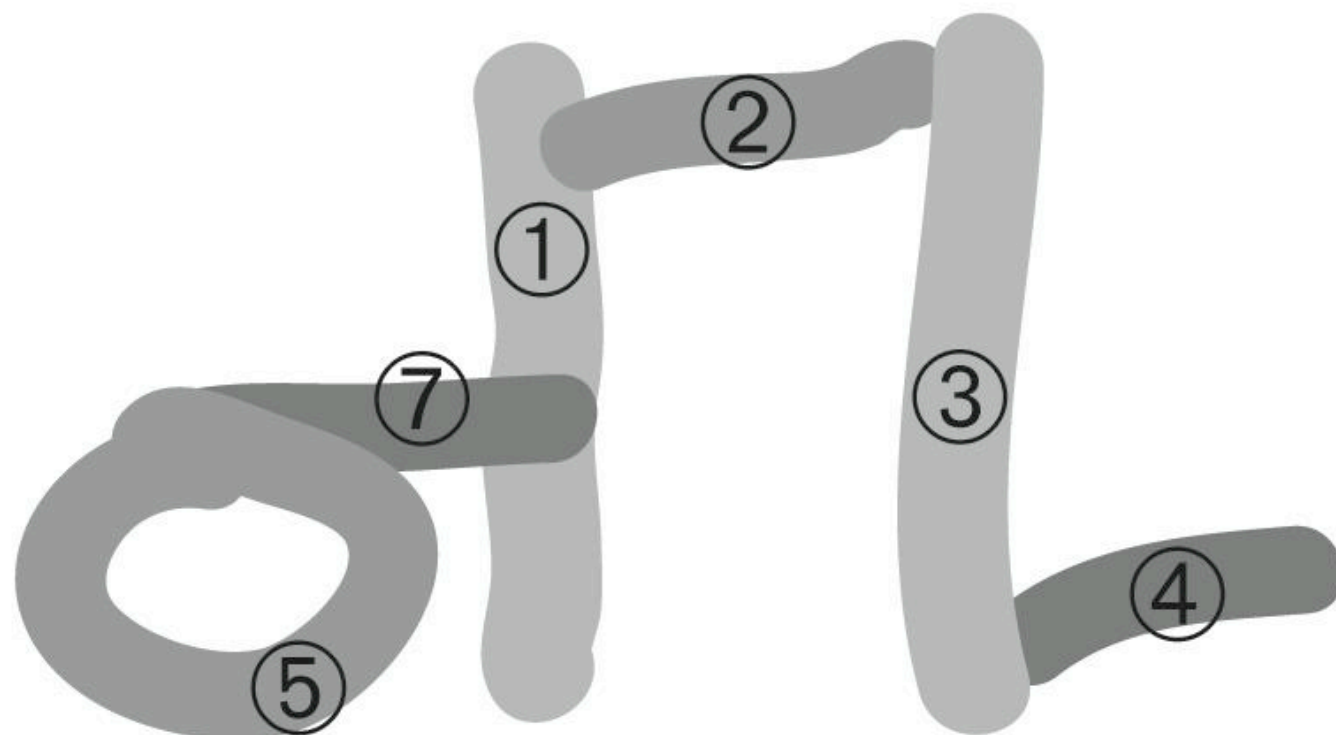
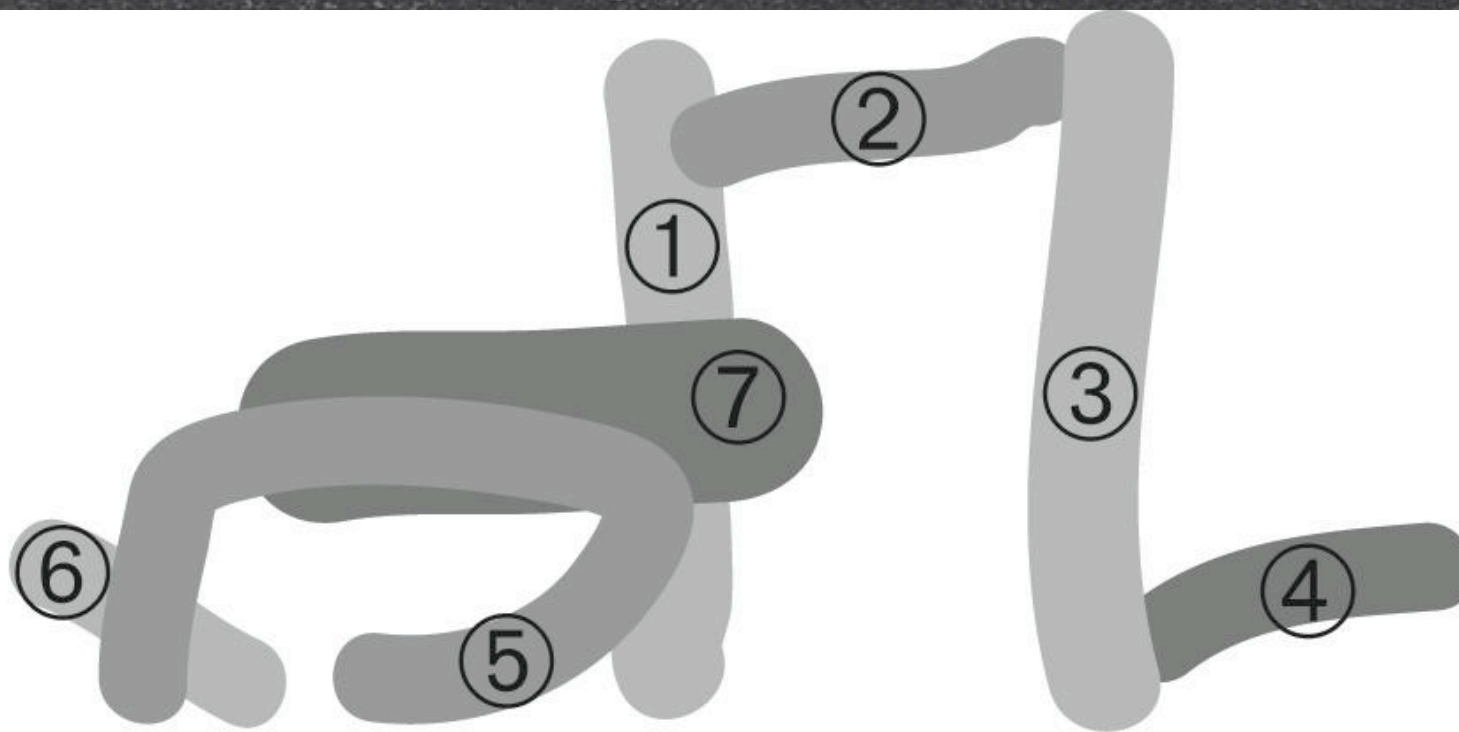


2C1A

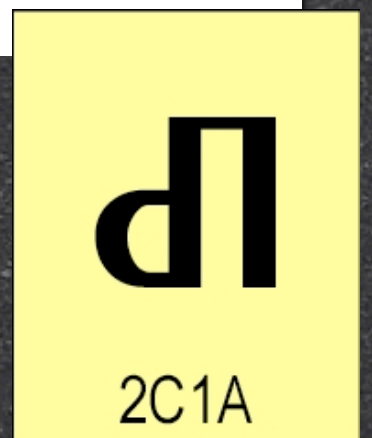
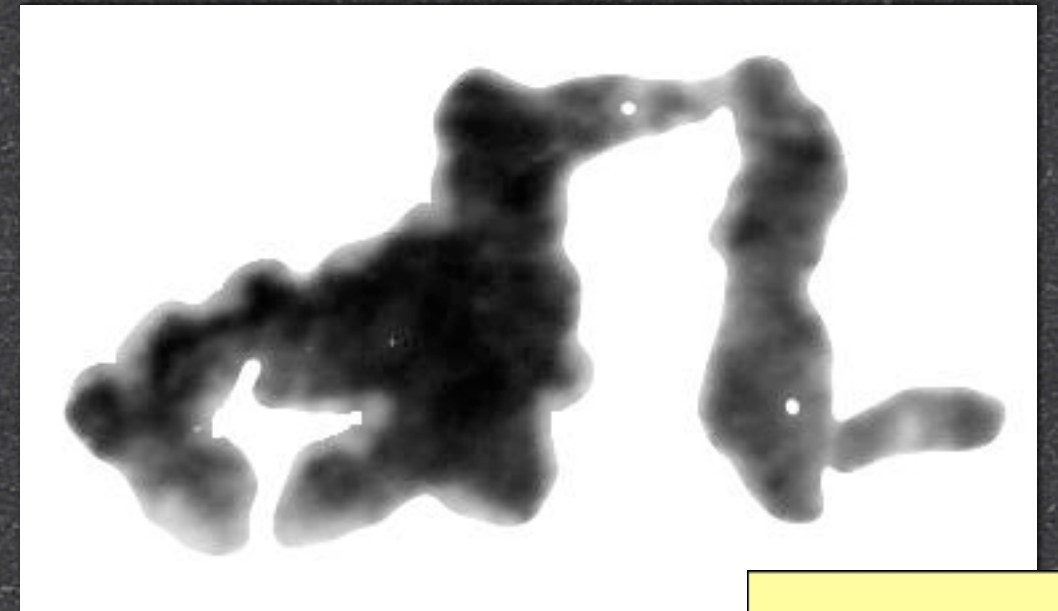
2C1A

SINAI G •
STROKES





PE
GLAGOLITIC

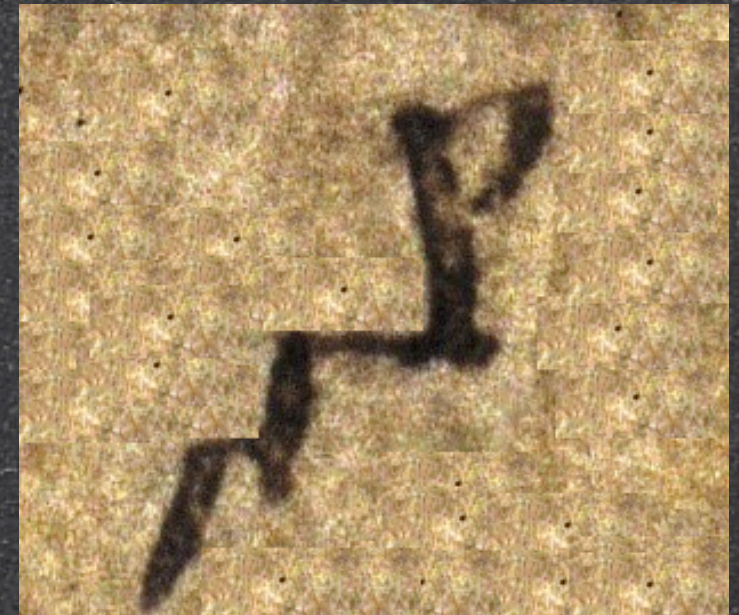
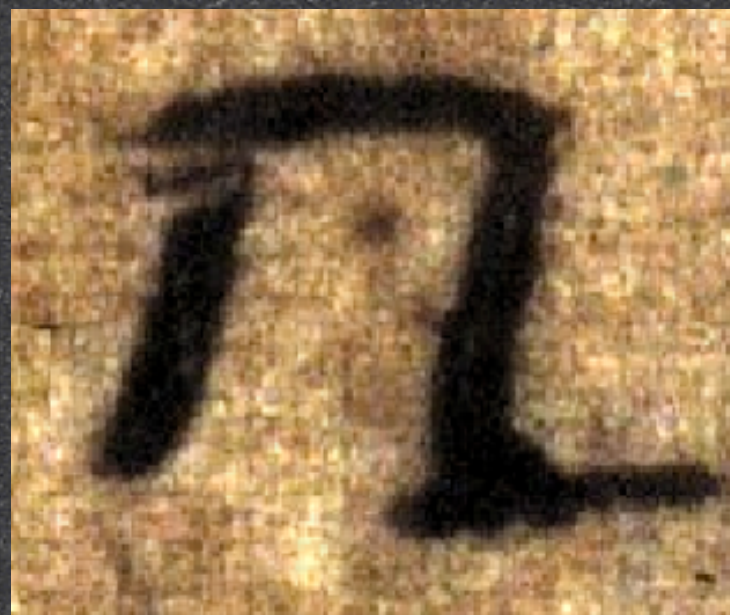
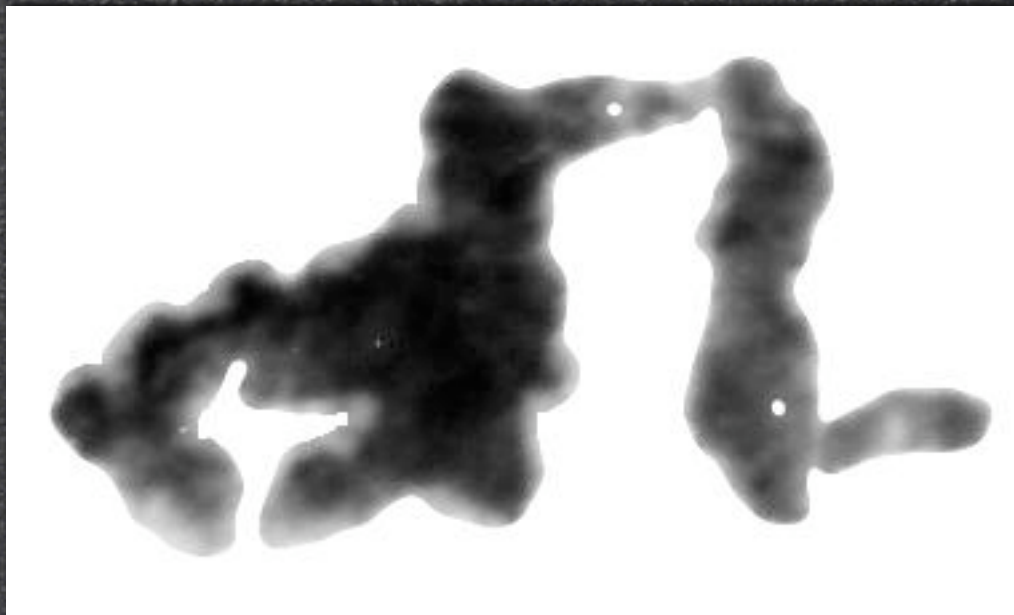


SINAI G •
STROKES

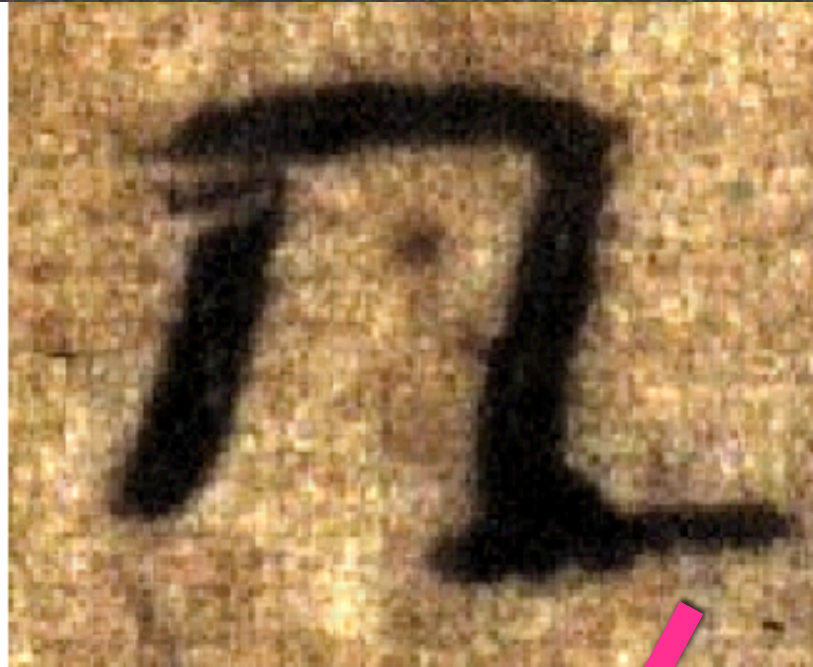
FACTS SO FAR

A NAME („PE“, PARIS ABC + ...)

TWO (OR THREE?) GLYPHS



MINOR RESULT



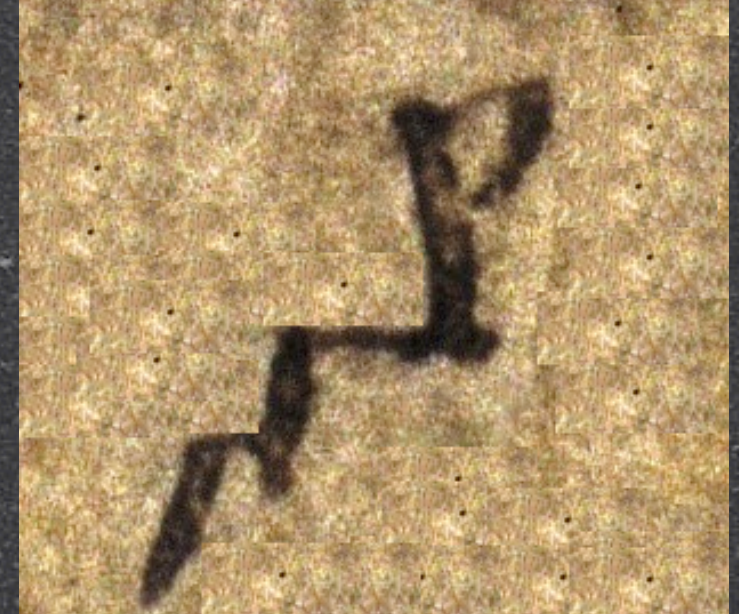
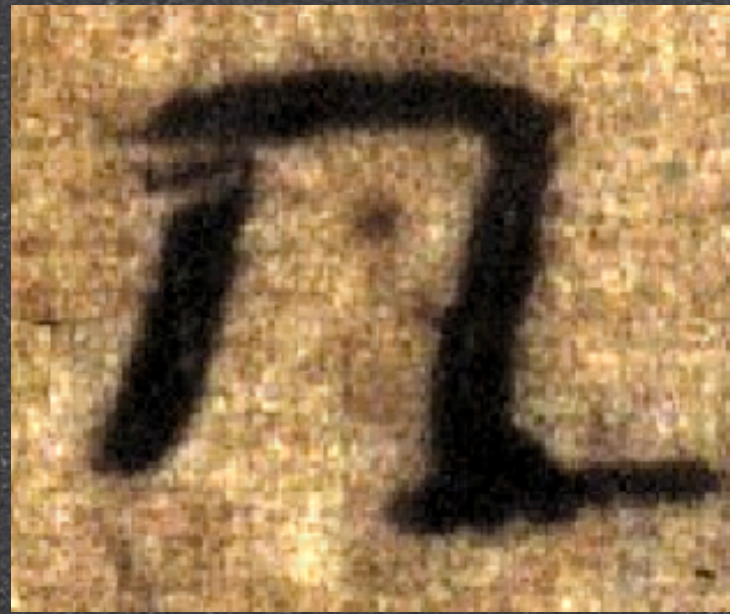
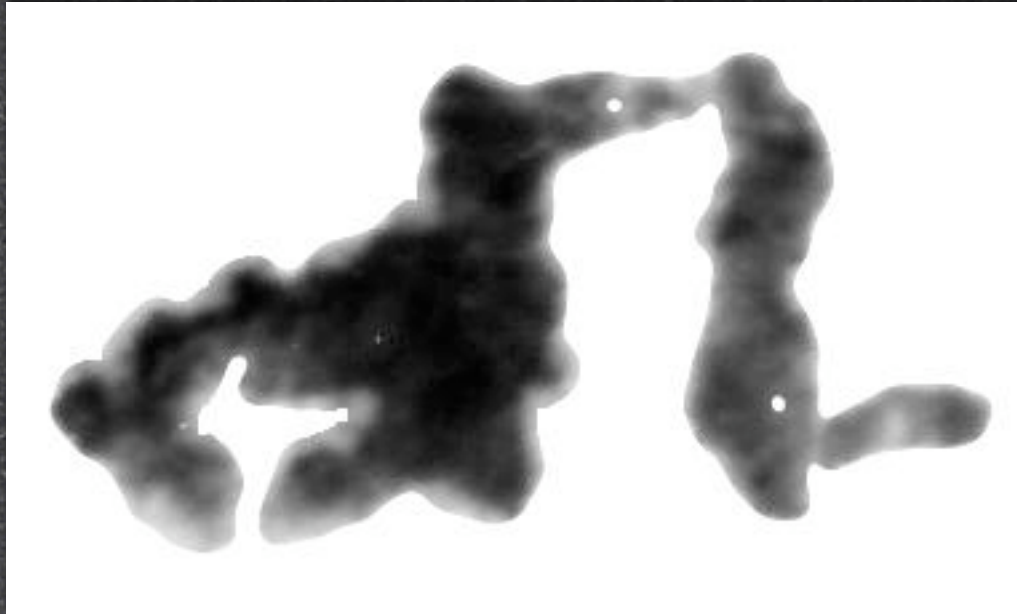
2C1A

SINAI PE

RE-DESIGN
OF UC CHAR



GENERAL PROBLEM



WHICHEVER GLYPH IS CHOSEN
FOR UNICODE PE GLAGOLITIC,
IT WILL REPRESENT EITHER
NONE OF THE ACTUAL GLYPHS
OR AT MOST ONLY ITSELF

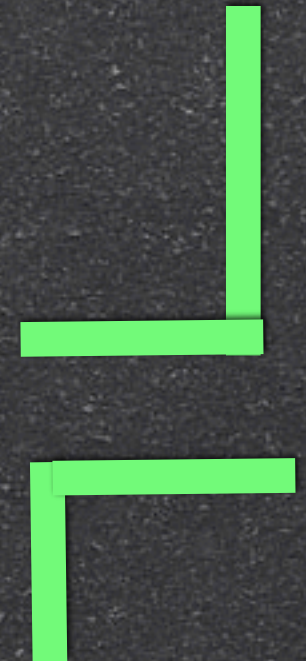
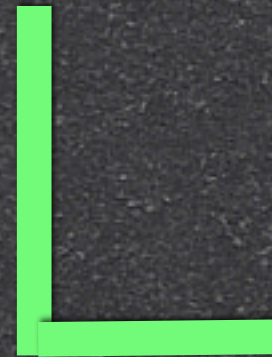
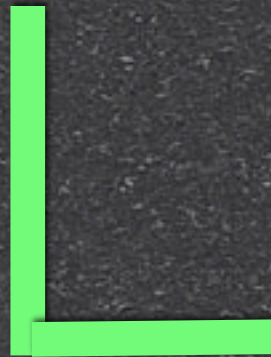
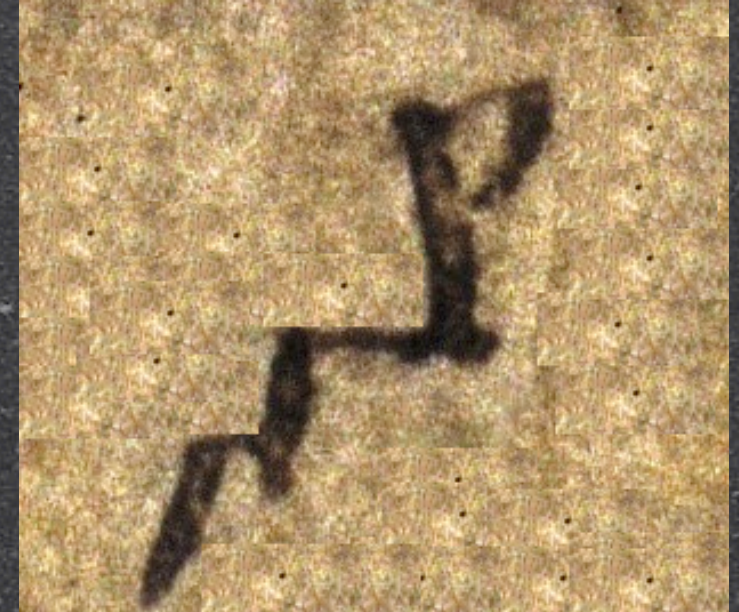
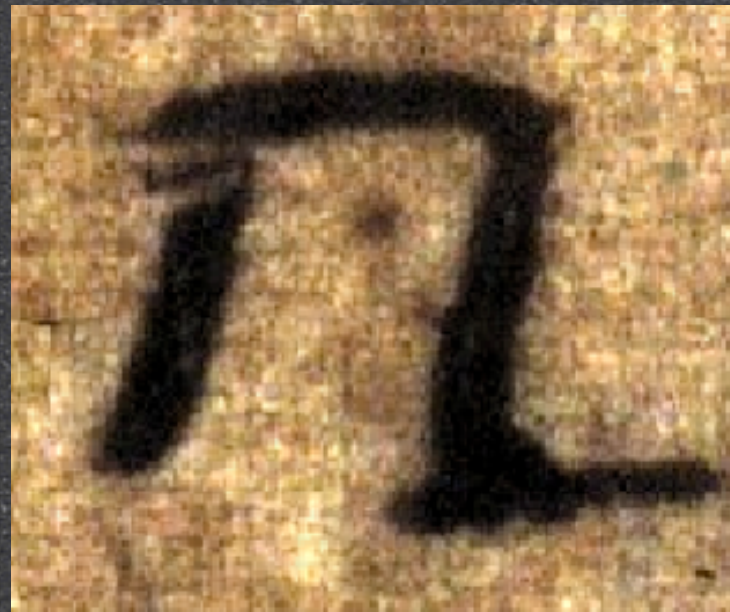
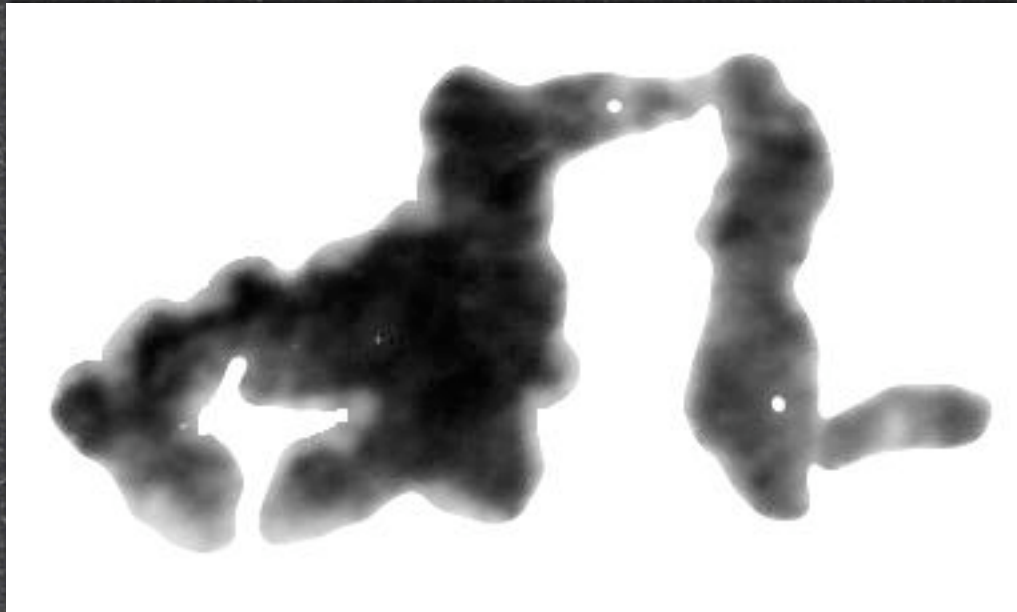
PRINCIPAL PROBLEM

α α α α α λ Α Α α α α α α α

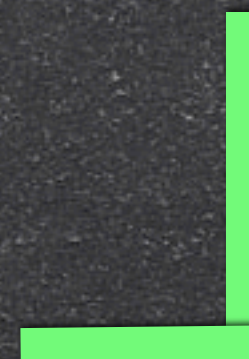
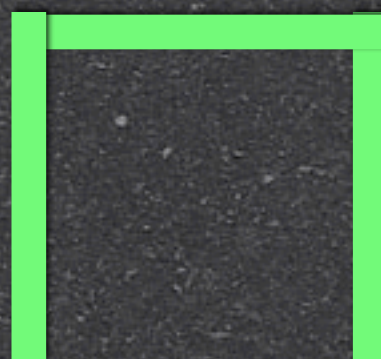
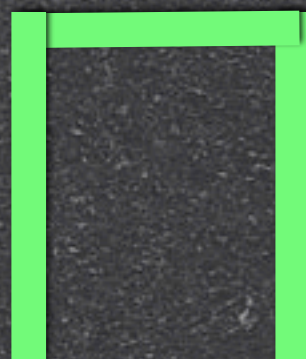
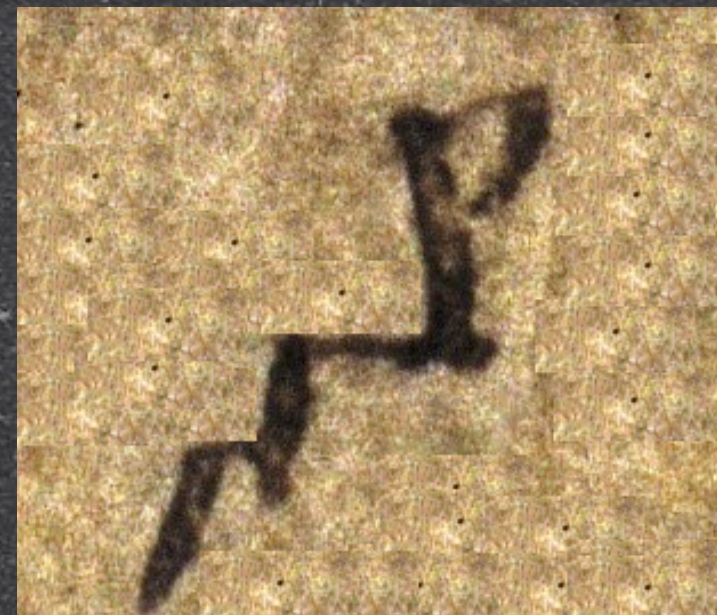
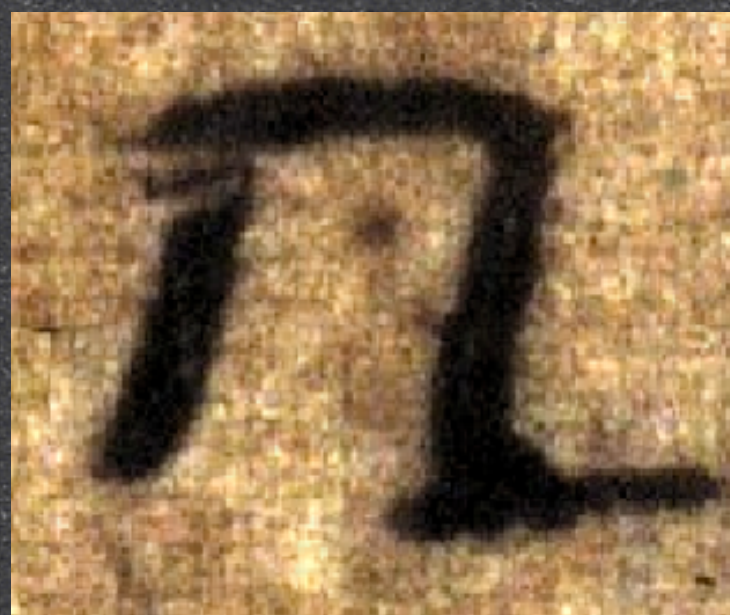
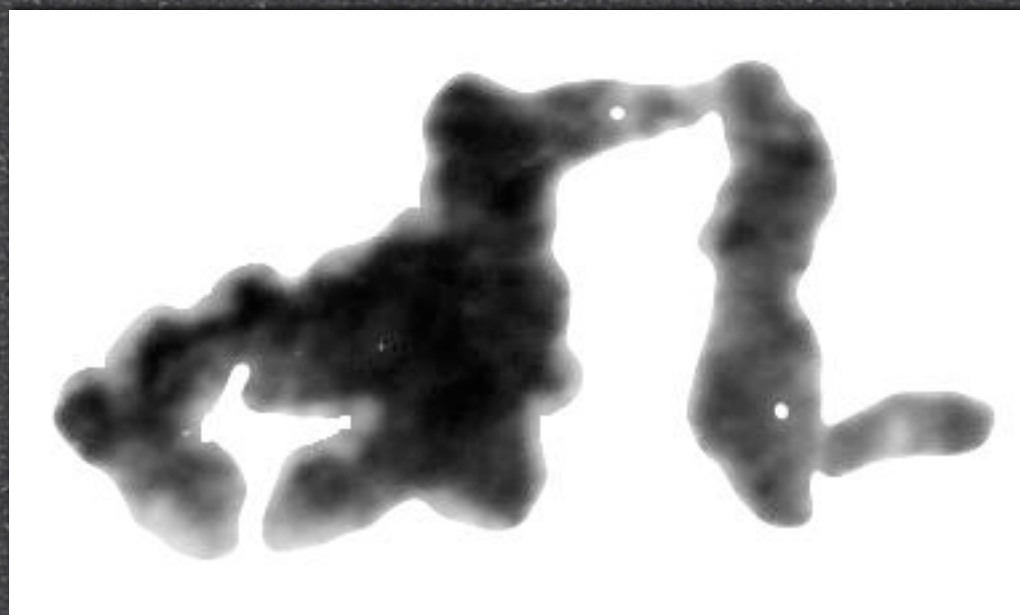
GLYPHIC VARIATION

HOW TO DERIVE A CANONICAL SHAPE?

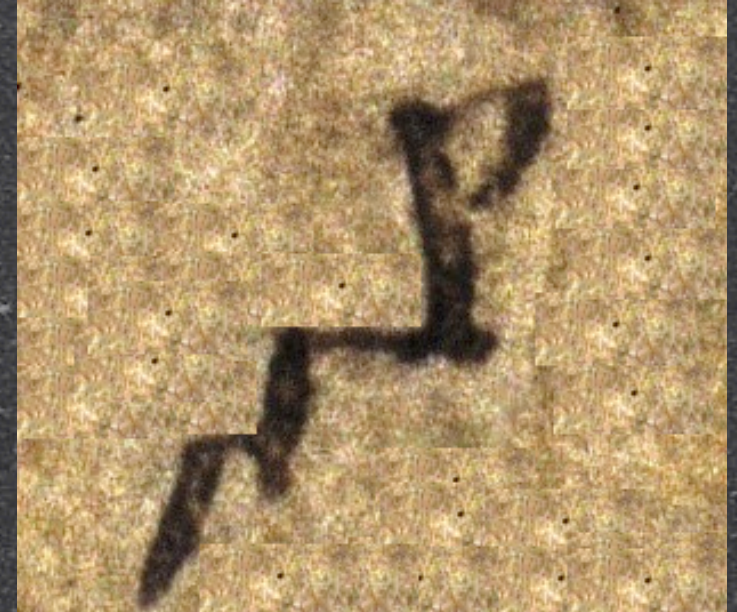
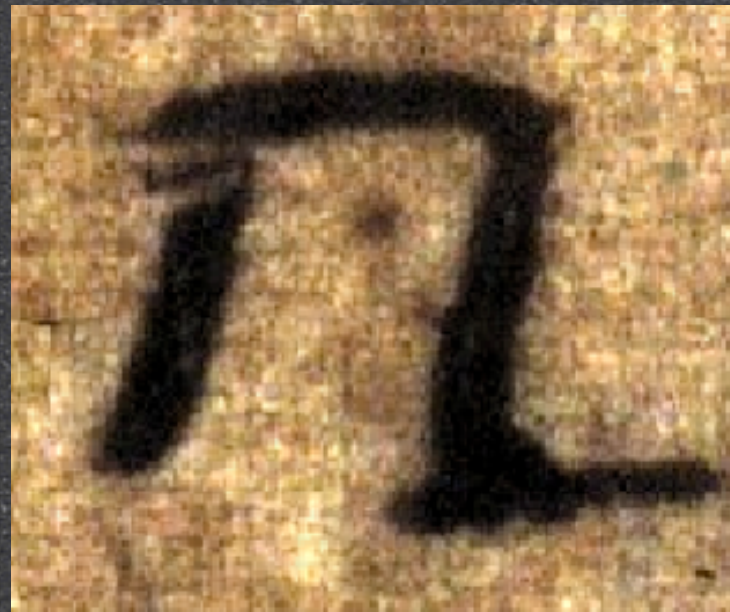
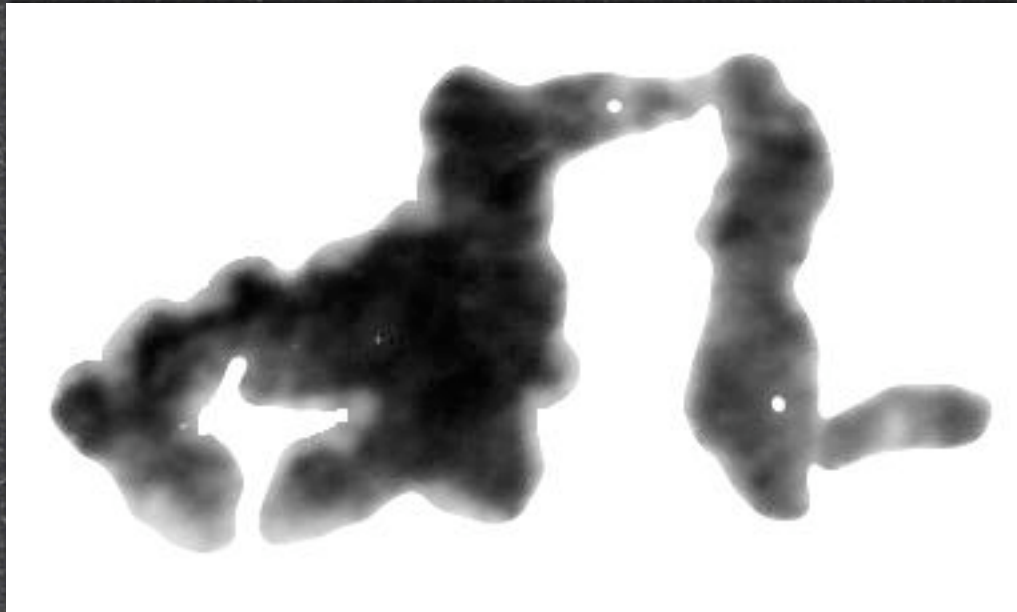
COMMON TRAITS



COMMON TRAITS



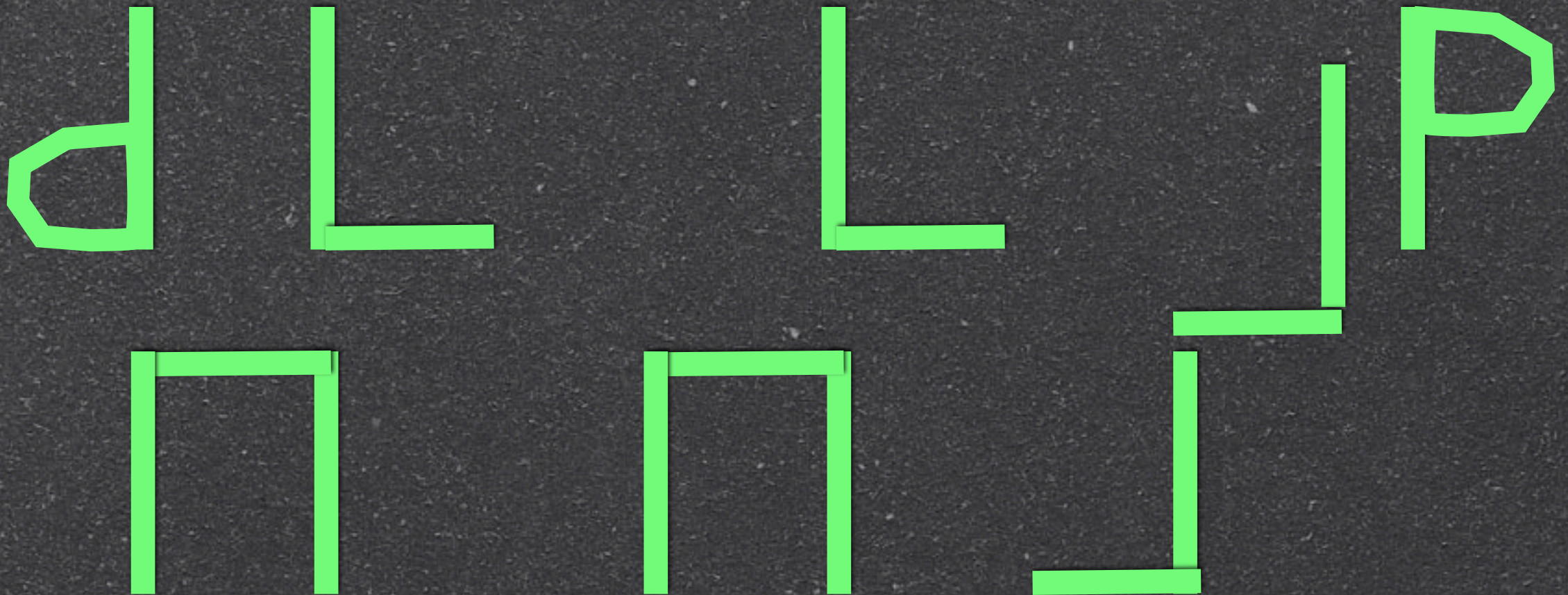
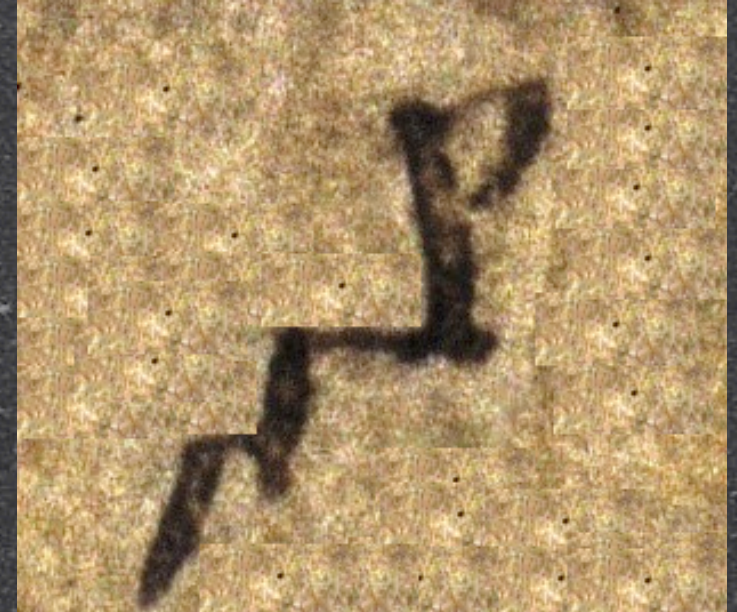
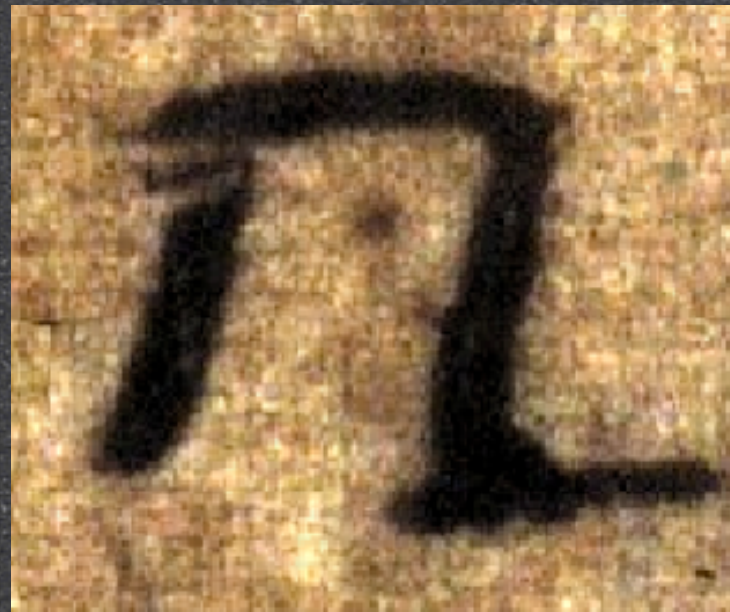
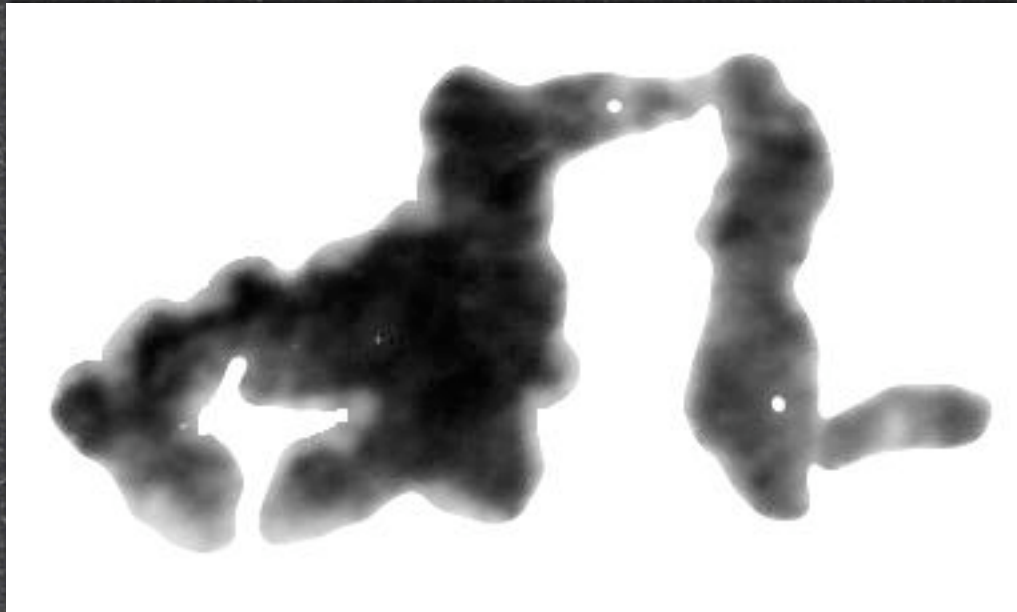
COMMON TRAITS



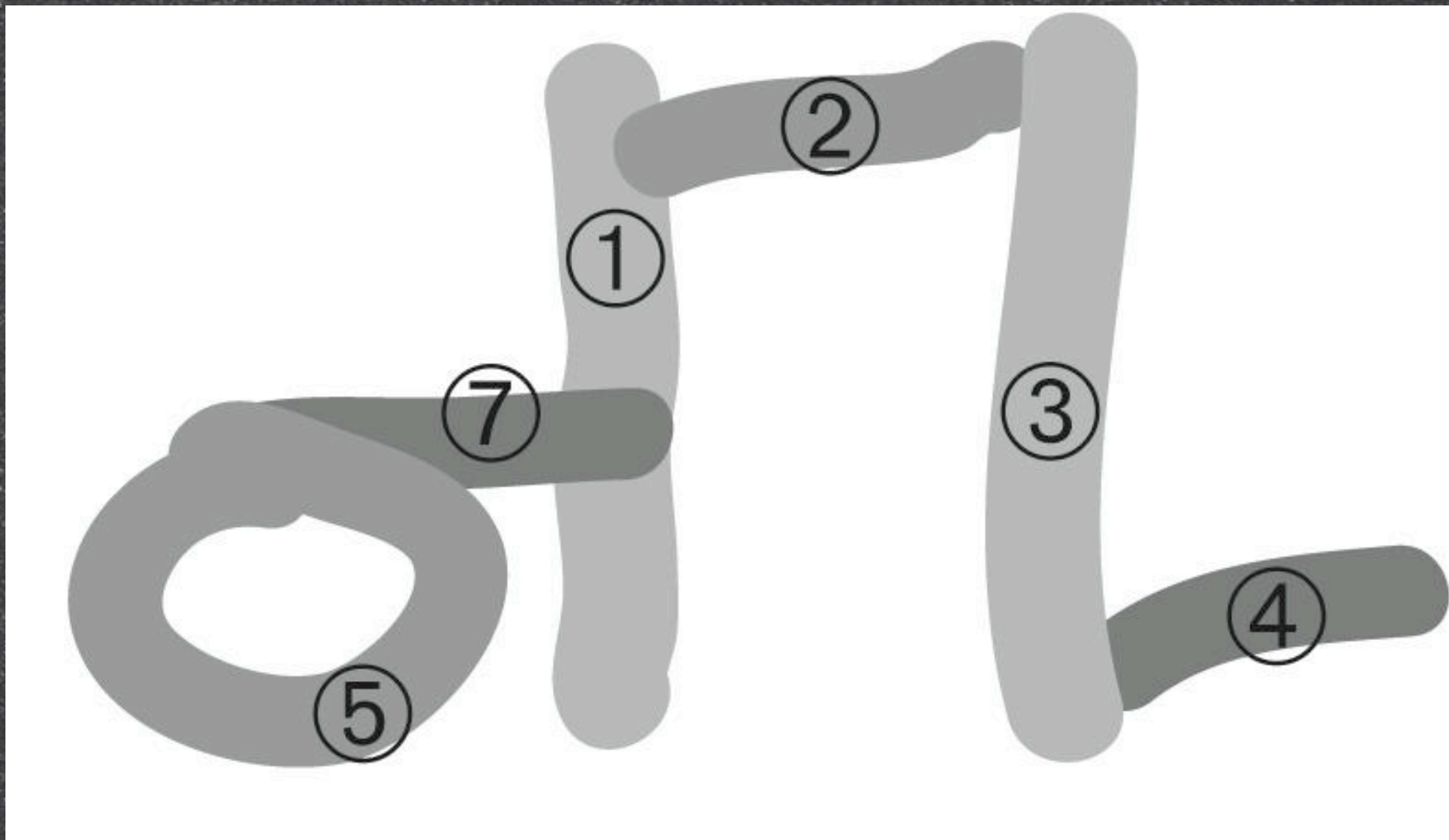
d

p

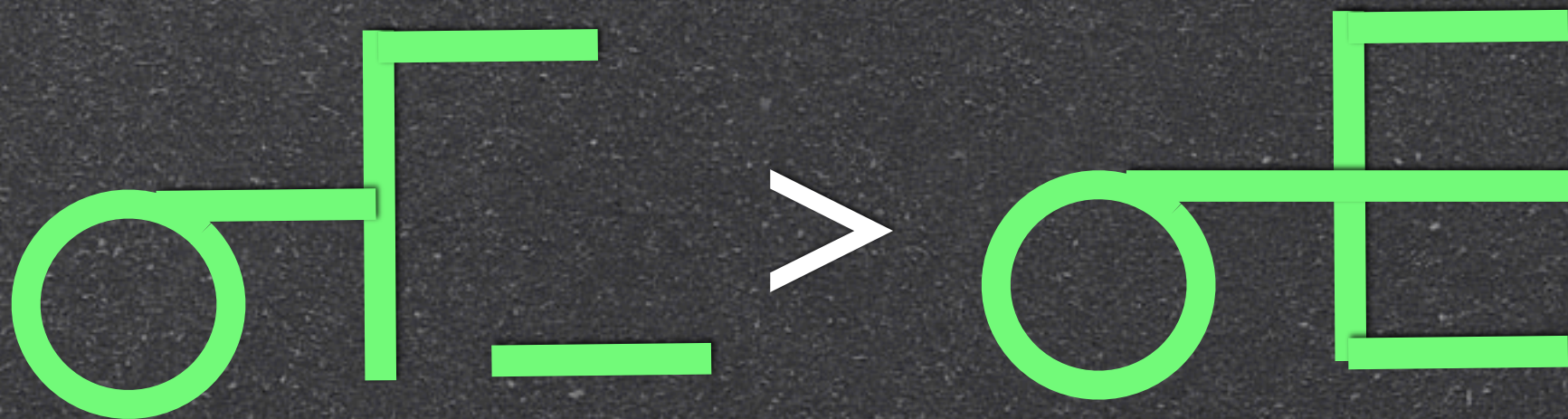
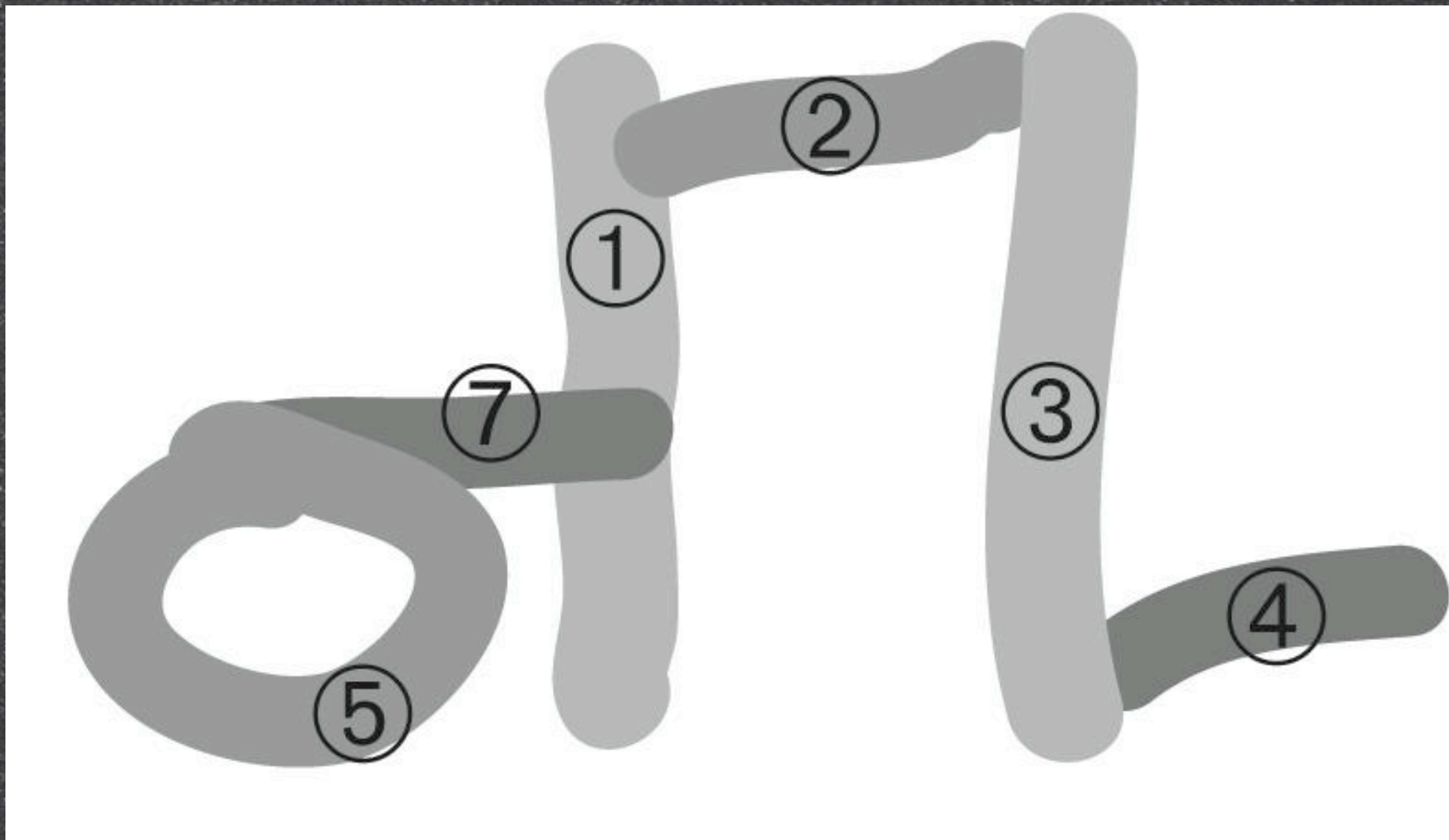
COMMON TRAITS



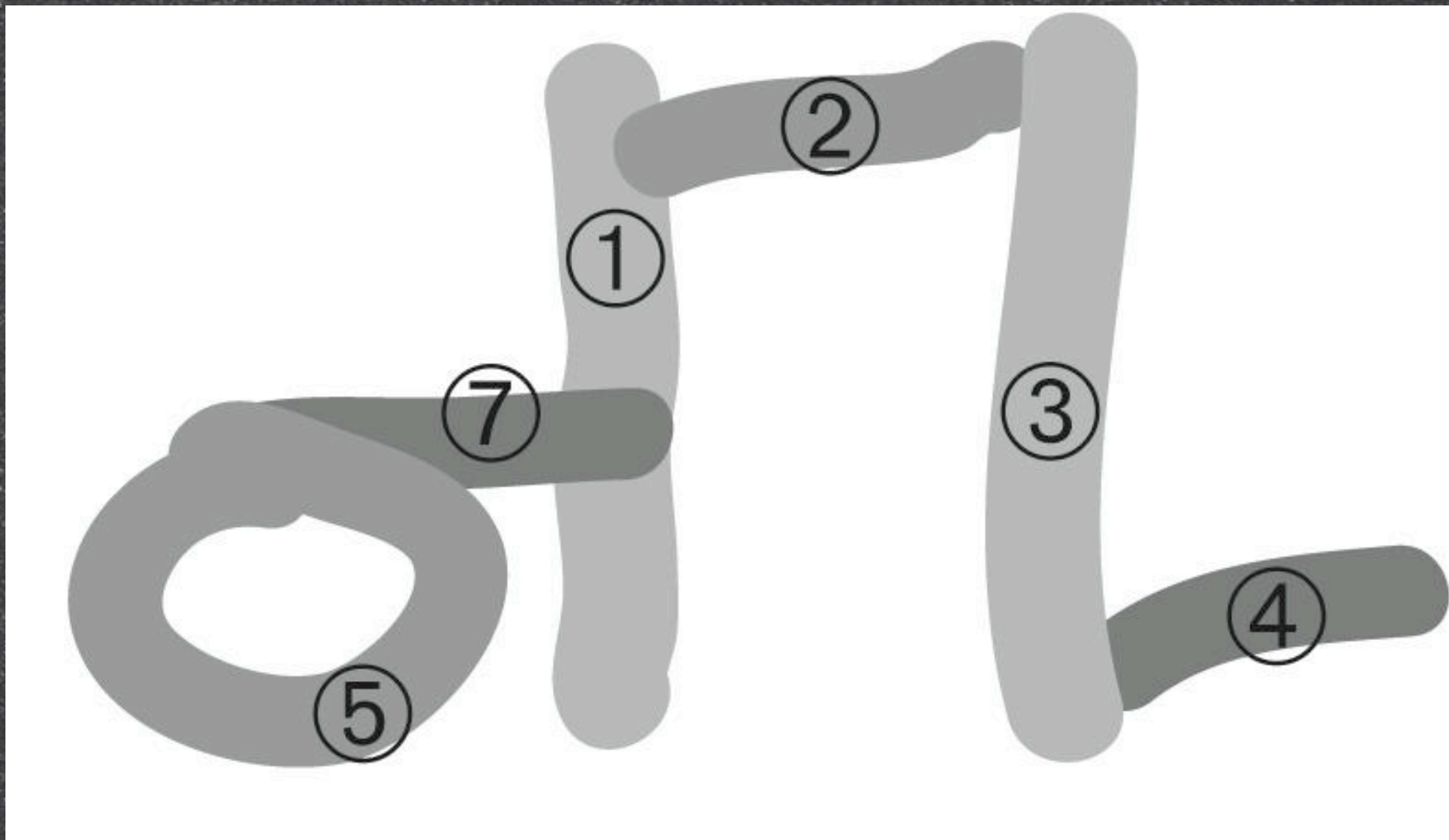
RECONSTRUCTION



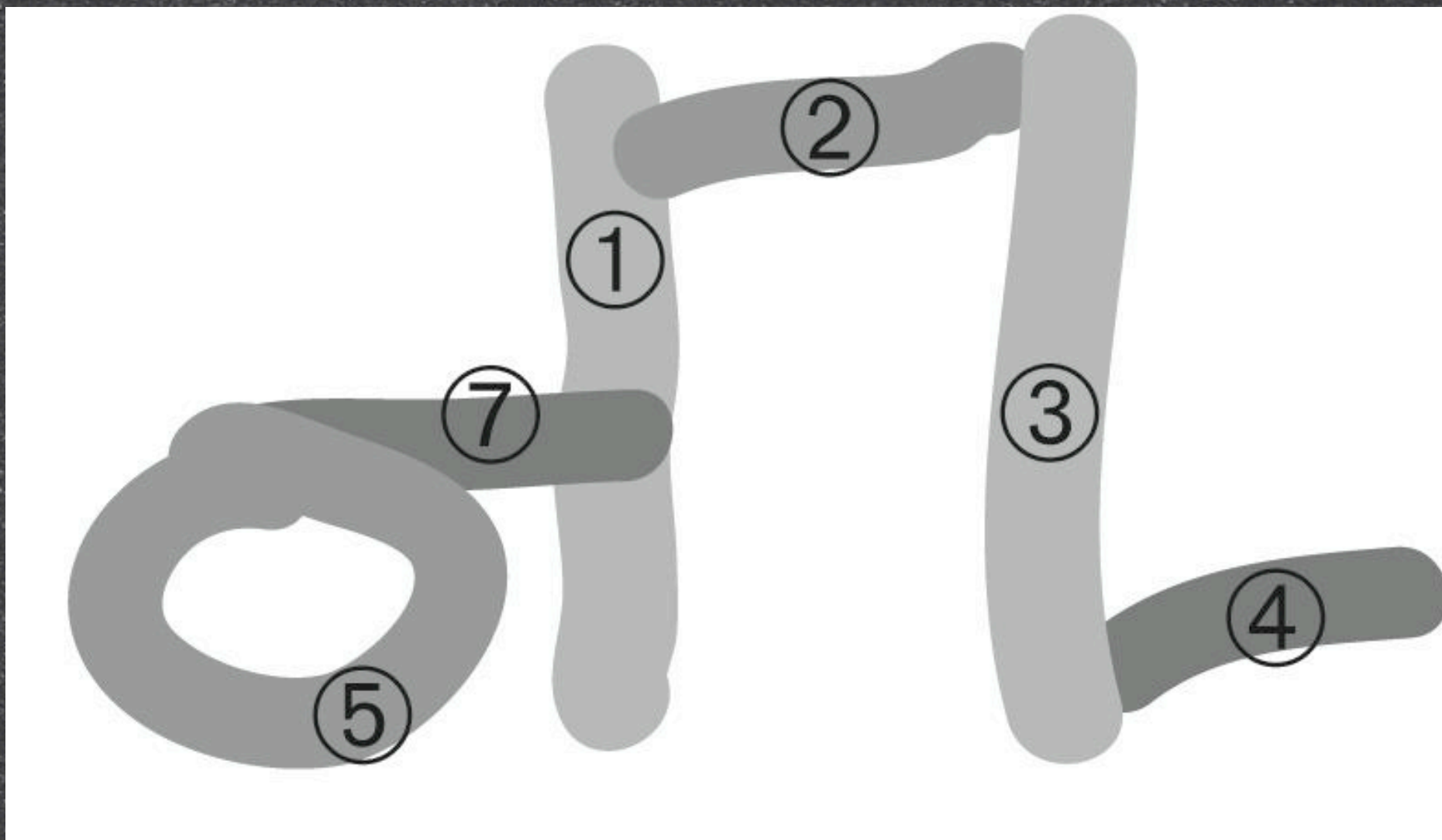
RECONSTRUCTION



RECONSTRUCTION



RECONSTRUCTION



$$\text{L} + \text{O} + \text{L} = \text{4}$$

MORE EVIDENCE

ČERNORIZEC XRABR, O PISMA.

And he made them 30 letters and 8,
some, indeed, according to the system of
the Greek letters, others, however,
according to the Slavic speech... (Veder)

... R S T U F Gǫ, and Ps Ks Th

п р с т ҃у ф х ѿ и пѣ хлѣ тѣ

ρ σ τ υ φ χ ψ ω

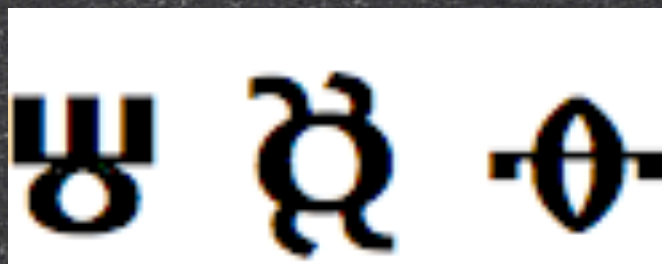
MORE EVIDENCE

ČERNORIZEC XRABR, O PISMA.

- Pe character “modeled after Greek”
- at the end of the list, in group of alternate sounds / variants / affricates
- 2 candidates only: psi [ps] and phi [ph]

пѢ хѡѢ тѢ

ψ ξ θ or ψ χ θ



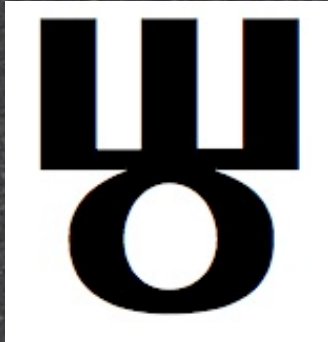
MORE EVIDENCE

ACROSTICS, LINE 26

Херовьскоу ми. | мѣсль ѿ оумѣ | дождѣ.:: |
О чѣстнаѧ. прѣ|стѧѧ тройце.:: |
Печаль мою на ра|дость прѣложи.:: | ψ
Щѣломоудрьно. | да начьноу пѣ|сати.:: |

“evidence for  in this place is undoubtedly more convincing than that for any other letter” (Veder)

HISTORY OF A LETTER

Ψ [ps] >  [ps]

PHASE ONE: ORIGINAL
GLAGOLICA (KYRILL)

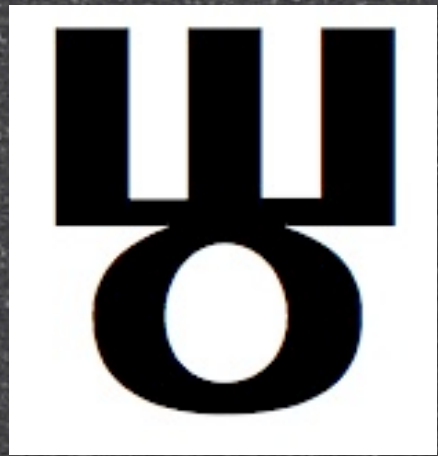
HISTORY OF A LETTER

a) Ψ Gr > Cyr Ψ

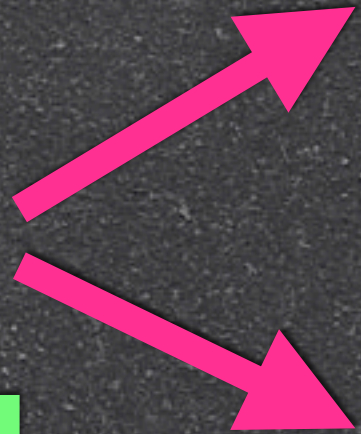
b)  [ps] > [št]

PHASE TWO: KIRILICA CREATED,
GLAG. LETTER RE-INTERPRETED

HISTORY OF A LETTER



[ps]

































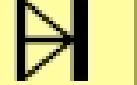














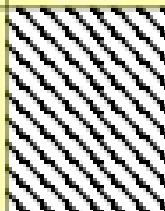


[pe]

[št]

EFFECT: ORIG. LETTER SPLIT UP
INTO TWO
















































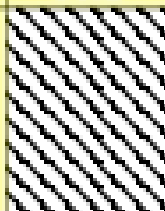
UNICODE GLAGOLITIC

8						
	2008	2018	2028	2038	2048	2058
9						
	2009	2019	2029	2039	2049	2059
A						
	200A	201A	202A	203A	204A	205A
B						
	200B	201B	202B	203B	204B	205B
C						
	200C	201C	202C	203C	204C	205C
D						
	200D	201D	202D	203D	204D	205D
E						
	200E	201E	202E	203E	204E	205E
F						
	200F	201F		203F	204F	

DISTORTED
SHAPE, ORIG.
SOUND VALUE
[PS, P]

































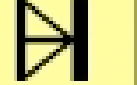














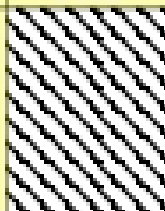
FAITHFUL SHAPE,
LATER SOUND-
VALUE [ŠT]

UNICODE GLAGOLITIC

8	 2008	 2018	 2028	 2038	 2048	 2058
9	 2009	 2019	 2029	 2039	 2049	 2059
A	 200A	 201A	 202A	 203A	 204A	 205A
B	 200B	 201B	 202B	 203B	 204B	 205B
C	 200C	 201C	 202C	 203C	 204C	 205C
D	 200D	 201D	 202D	 203D	 204D	 205D
E	 200E	 201E	 202E	 203E	 204E	 205E
F	 200F	 201F		 203F	 204F	

SAME LETTER
TWICE: ONCE
DISTORTED, ONCE
FAITHFULLY
RENDERED

UNICODE GLAGOLITIC

8						
	2008	2018	2028	2038	2048	2058
9						
	2009	2019	2029	2039	2049	2059
A						
	200A	201A	202A	203A	204A	205A
B						
	200B	201B	202B	203B	204B	205B
C						
	200C	201C	202C	203C	204C	205C
D						
	200D	201D	202D	203D	204D	205D
E						
	200E	201E	202E	203E	204E	205E
F						
	200F	201F		203F	204F	

FROM DIFFERENT
STAGES OF THE
HISTORY OF THE
GLAGOLITIC
ALPHABET

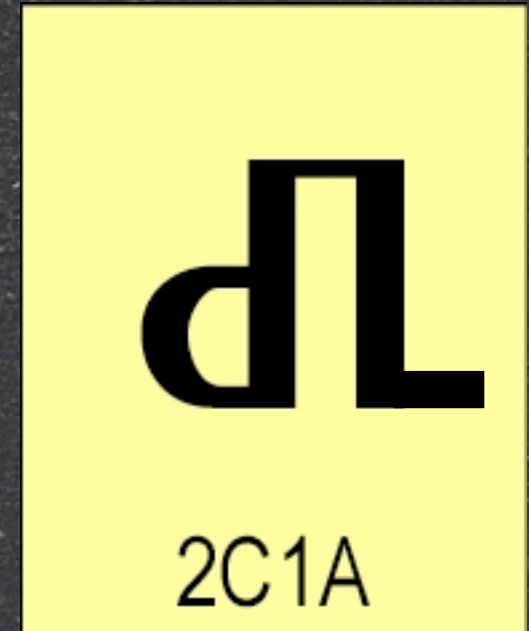
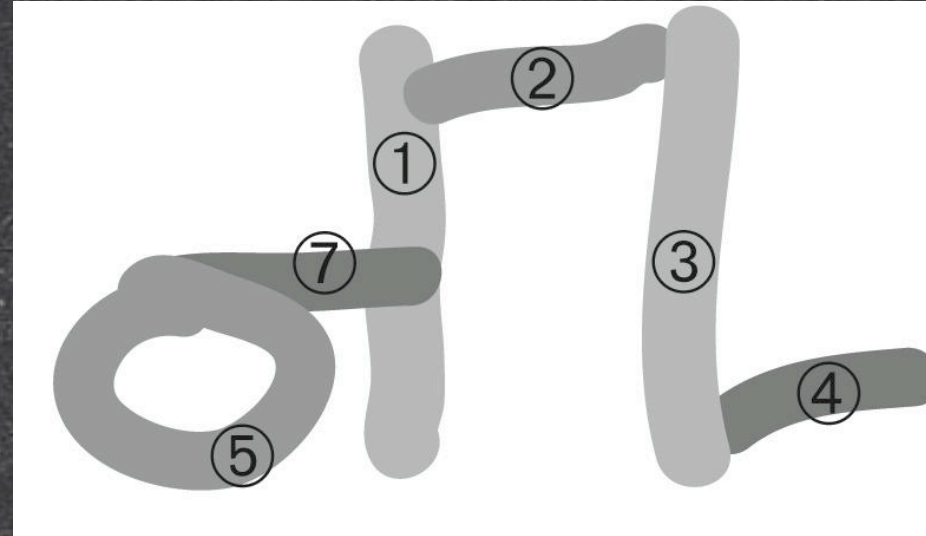
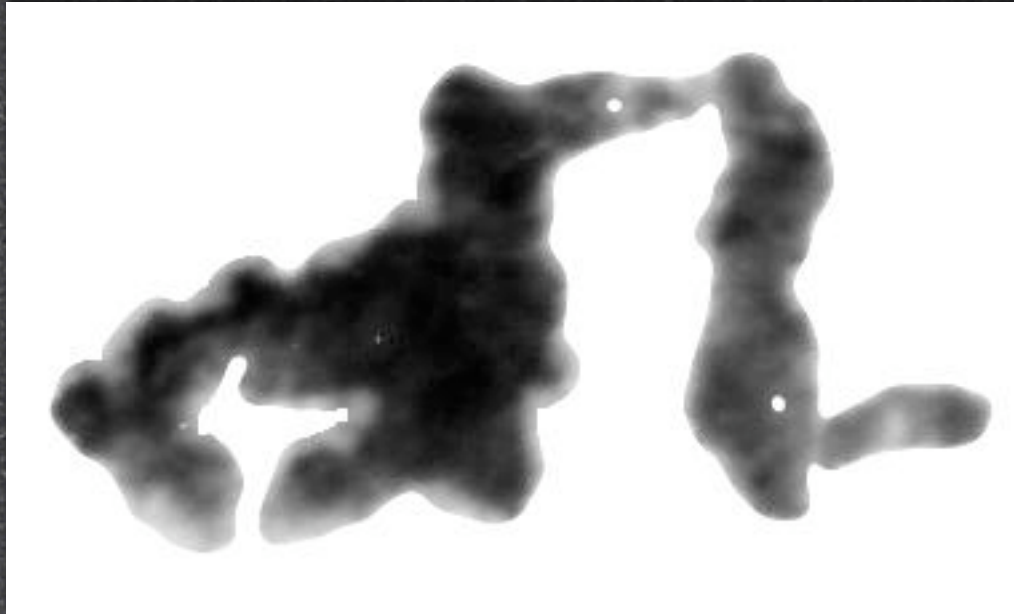
UNICODE

ENCODES CHARACTERS,
NOT SOUNDS!

UNICODE

CERTAIN PROBLEM

RESULTS



- PROGRESS STILL BEING MADE
- BASIS FOR INCLUSION INTO UC
- DIFFERS FROM OTHER LETTERS
- SLIGHT MODIF. NECESSARY
- GENERAL PROBLEM REMAINS



dl

2C1A

Thank You!