Proposal to include transitional Cyrillic characters invented by I.H. Rădulescu in his proposal of the 19th Century Romanian Transitional Script and other unique characters

Marc Frincu^{*}, Marius E. Penteliuc[†], Simina Frincu[‡], Manuela Zanescu[§]

15th April 2024

1 Introduction

Between 1827/30 – 1860/70 versions of the Romanian Transitional Script (RTS) were introduced to gradually replace the existing Romanian Cyrillic Script (RCS) with the current Romanian Latin Script (RLS). Apart from the mixed Albanian script used at the turn of the 20th century combining mostly Latin letters and some Greek ones to render Albanian-specific sounds, the Romanian transitional script is considered one of the most original graphic systems in the modern history of European cultures [3]. Among the proposals, we find that of Ion Heliade Rădulescu who published in 1827 the book Gramatica Românească (en. The Romanian Grammar) [6] written both in RCS and RLS including his variations in the orthography. Subsequently, in his magazines (i.e., Curierul românesc (en. Romanian Courier) est. 1829) and Curier de ambe sexe (en. Courier of both genders) est. 1937) he uses invented characters designed to familiarize readers with the transition from RCS to RLS. Figure 1 contains the list of symbols introduced by Rădulescu according to Cazimir [4] (which identifies some in his study cf. Fig. 2) and used based on our analysis of historical texts by various publishers in the historical Romanian provinces and elsewhere in Europe. These contain unique versions of the following Cyrillic characters most of which are lowercase. For uppercase (which we could not identify in texts) scaled versions can be used:

• ↑ (Unicode A65E uppercase) and ↑ (Unicode A65F lowercase). The custom glyph in texts corresponding to both characters is ↑;

^{*}Corresponding address (West University of Timisoara Romania): marc.frincu@e-uvt.ro

[†]West University of Timisoara Romania: Email: marius.penteliuc@e-uvt.ro

[‡]West University of Timisoara Romania: Email: ioana.frincu@e-uvt.ro

[§]Central University Library Timisoara Romania: manuela.zanescu@bcut.ro



Figure 1: Custom glyphs used by Rădulescu according to Cazimir [4].

- \mathfrak{G} (Unicode 0462 lowercase). The custom glyph in texts corresponding to this character is \mathfrak{S} ;
- д (Unicode 0434 lowercase). The custom glyph in texts corresponding to this character is d;
- Π (Unicode 041F uppercase) and Π (Unicode 043F lowercase). The custom glyph in texts corresponding to this character is Π ;
- $\mbox{\ensuremath{\mathfrak{V}}}$ (Unicode A64B lowercase). The custom glyph in texts corresponding to this character is $\mbox{\ensuremath{\mathfrak{V}}}$;
- p (Unicode 0440 lowercase). The customs glyphs in texts corresponding to this character are P and P;
- Φ (Unicode 0444 lowercase). The custom glyphs in texts corresponding to this character are Φ and Φ ;
- ★ (Unicode 0436 lowercase). The custom glyphs in texts corresponding to this character are ** and **;
- π (Unicode 043B lowercase). The custom glyphs in texts corresponding to this character are Λ and Λ ;
- <u>u</u> (Unicode A68F lowercase). The custom glyph in texts corresponding to this character is <u>u</u> and <u>t</u>;
- B (Unicode 0432 lowercase). The custom glyphs in texts corresponding to this character are δ and ν.

In addition, symbols that are not present in the Unicode set were also used. We refer specifically to the symbol for iotified Uk (\mathfrak{C}) comprising of two Cyrillic characters linked together, Iota (\mathfrak{t}) and Uk (\mathfrak{C}). The symbol can contain a kavyka over \mathfrak{C} : \mathfrak{C} . Including this symbol is suited as similar iotified letters already have a Unicode. This symbol appears in 19th century texts (see examples below).



Figure 2: Our list of custom glyphs (extended from [4]) and used by Rădulescu and others to facilitate the transition from Cyrillic characters to their Latin counterparts. Underlined glyphs are not present in Unicode.

2 Suitability for Inclusion

These symbols are characters according to the definition in the Glossary having been used as letters in 19th-century Romanian texts and do not appear in the Archive of Notices of Non-Approval. As of this writing, they are not included in the Unicode Pipeline Table or BETA. These symbols are widely used in the 19th-century texts published by Rădulescu and others. Semantically identifying these symbols improves the output of OCR software which is unable to properly render accurate characters for them at this point. As the symbols are neither the original Cyrillic characters nor their Latin character counterparts their introduction in Unicode provides accurate digitized and searchable historical texts for scholars and the general public. Furthermore, in some cases (e.g., projects working on making RTS texts accessible to the current readers [5]), a phonetic interpretation (i.e., replacing a single Cyrillic character with one or more Latin characters based on the resulting sound) of the characters into their corresponding Latin counterparts is required. Replacing during OCR the "invented" characters with existing similar Cyrillic characters is not a viable solution as it may impact the accuracy and readability of the final RTS text providing a version that does not reflect the originality of the used script.

We provide along with our proposal an Open Type Font (OTF) font with no restrictions on their use.

3 Evidence of Use in Running Text

There is a lot of material containing RTS characters invented by Rădulescu (e.g., his two main papers but also through his publishing house) or used by various publishing houses. Most are yet to be digitized. Figures 1 through 15 show excerpts demonstrating the use of the invented characters. They were extracted from texts from the Central University Libraries in Timisoara and Cluj (Romania) through their online catalogs:

se verca ky nesaniš. Ficuti kare Romîn dorea sa afre ve av fost stramonii sal, ve av sanîr-

Figure 3: Version of the Cyrillic small letter Φ showing the transition to Latin small letter f in *Curier de ambe sexe* vol. 1 1836 Bucuresti published by Rădulescu. We propose this character for it: Φ .

аіпіарва, ші ла 19 Декетвріс, гіоз лятрі Тялопяляї, с'а пълцат трапг де гепърал де врігадъ, ші

Figure 4: Version of the Cyrillic small letter Λ showing the transition to Latin small letter \hat{i} from *The History of Napoleon Bonaparte* 1840 published by the St. Sava College in Bucuresti. We propose this character for it: \uparrow .

(kape a nysy in Aykpape agesty metody) min in

Figure 5: Version of the Cyrillic small letter ↑ showing the transition to Latin small letter î from *Manual de filosofie: lucratu după progamma Universității dela Paris din 1840* 1846 published by Tipografia Collegiului Națională in Bucuresti. We propose this character for it: ↑.

ед о пгівеще ка о фанть îmпліпіть, щі акут se оккупъ a esaminà natýra щі пгівінца оппозіцієї че пгозетуд ministeriad ва întъдnì în каттега доггідог. Оті каге ar nyteà фі пеddiчеде че înadta катте-

Figure 6: Version of the Cyrillic small letters Φ and κ showing the transition to Latin small letters f and j from *Curierul românesc* 7 March 1846 Bucuresti published by Rădulescu. We propose these characters for them: Φ , \mathfrak{F} .

antorya sus moant de minyne poaya enraeziacp, intress mps dana din intumnare artistya avesta are re o înnainare ny Don Fiainny Biaani, wi afas ku ny nymai ny pa amiyi intimi, vi unku

Figure 7: Version of the Cyrillic small letters Φ , κ and ρ showing the transition to Latin small letters f, j and r from *Curierul românesc* 4 July 1846 Bucuresti published by Rădulescu. We propose these characters for them: Φ , γ and γ .

Însemnare.

La копъктаціа a doa în ire ші a trem în ere,

Figure 8: Version of the Cyrillic small letters \mathbb{X} and \mathbb{P} showing the transition to Latin small letters \mathbb{P} and \mathbb{P} from Curierul românesc 13 November 1847 Bucuresti published by Rădulescu. We propose these characters for them: \mathbb{P} , \mathbb{P} .

ade Pezonydyi

Figure 9: Version of the Cyrillic small letter **p** from Suvenire chi impresii : epistole chi fabule de Grigorie Alesandrescul 1847 Bucuresti published by Tipografia luĭ C. A. Rosetti si Vinterhalder. We propose this character: **P**.

. Абја 'n пріштварь ку zidede mede
Плъпъндъ ка роа абја ат адупѕ
Атупчеа кънд кънтъ пріп флорі фідотеле,
Ш'о крудъ дурере adınk m'a пътрупѕ.

Figure 10: Version of the Cyrillic small letters \mathfrak{G} , \mathfrak{B} , \mathfrak{K} , Φ and Π showing the transition to Latin small letters \mathfrak{b} , \mathfrak{v} , \mathfrak{l} , \mathfrak{f} and \mathfrak{r} from *Colectie din poesiile domnului* D. *Bolintineanul* 1847 Bucuresti published by Rosetti and Vinterhalder. We propose these characters for them: \mathfrak{b} , \mathfrak{b} , \mathfrak{f} , \mathfrak{h} , \mathfrak{g} and \mathfrak{p} .

Amarъ e moartea kъnd omyd, e Jyne, Wi zioa фрутоавъ, wi traiyd e din,

Figure 11: Version of the Cyrillic small letter Φ showing the transition to Latin small letter f from *Colectie din poesiile domnuluĭ D. Bolintineanul* 1847 Bucuresti published by Tipografia luĭ C.A. Rosetti si Vinterhalder. We propose this character for it: \uparrow .

Sъ moapъ бъtrînvi че фруптеа înkinъ, Че пиъпце trekytyi de ani обоsit, Sъ moapъ uni робуи че 'n lanuyri sysninъ Sъ moapъ tot omyi ky sydiet sdrobit!

Figure 12: Version of the Cyrillic small letter $\mathfrak o$ showing the transition to Latin small letter b from *Colectie din poesiile domnului D. Bolintineanul* 1847 Bucuresti published by Tipografia lui C.A. Rosetti si Vinterhalder. We propose this character for it: $\mathfrak o$.

TRANSIL VANIA.

Кляз, 31. Martie. Къпітала noastrъ se afлъ în miшкаге foarte віе; frika ші nedes.

Figure 13: Version of the Cyrillic small letters \mathbf{x} and $\mathbf{\Phi}$ showing the transition to Latin small letters j and f from *Curierul românesc* 1848 Bucuresti published by Rădulescu. We propose these characters for them: \mathbf{y} and $\mathbf{\Phi}$.

"Prekomš amš întelesš, în Episkopatsi Komanilorš se afla niute popli, kari se nomeskă Romani, wi ka tôte ka ka nomele se sokoteskă a fi krewtini, însa sapă o kredința avandă diverse ritori wi datine fakă fapte kontrare avestai nome. Kavi despretaindă biserika Romana na priimeskă misteriele biserivii dela venerabilel nostro frate, Episkopal Komaniloră

Figure 14: Version of the Cyrillic small letters \mathbf{B} \mathbf{IJ} , $\mathbf{\Phi}$, $\mathbf{\Pi}$ and $\mathbf{\Pi}$ showing the transition to Latin small letters \mathbf{v} , \mathbf{t} , \mathbf{f} and \mathbf{r} from *Colectie din poesiile domnului D. Bolintineanul* 1850 Vienna published by I.P. Sollinger's widow. We propose these characters for them: \mathbf{v} , \mathbf{t} , \mathbf{f} , \mathbf{J} , $\mathbf{\Pi}$.

tare mi indinedenna statelor, a lsatš o temešnisie

Figure 15: Version of the Cyrillic small letter $\underline{\mathbf{I}}$ showing the transition to Romanian small letter $\underline{\mathbf{t}}$ from Resbellulu şi civilisaţiunea: (tractatu istoricu) 1859 Bucuresti published by Imprimeria Natională a lui Iosif Romanov. The version contains a cedilla (another version of it closer to the final character is t cf. Fig. 14. We propose this character: $\underline{\mathbf{u}}$.

îmureų<mark>m</mark>rъrĭ d'antak

Figure 16: Cyrillic small letter iotified Uk with and without kavyka Transilvania, \hat{in} Curierul $Rom\hat{a}nu$, Anul XX, Nr 25 1848 Bucuresti. We propose for this character: \aleph with or without kavika.

ny te mai amesteni în Andrevide myepewti

Figure 17: Cyrillic small letters \forall , \mathbf{p} and π showing the transition to Latin small letters \mathbf{u} and \mathbf{r} and \mathbf{l} from O toaletă neisprăvită sau obrăzniciea slujilor : Farsă într'un act, Tipografia lui Vinterhalder, 1852, Iași. We propose these characters for them: \mathbf{v} , \mathbf{p} , \mathbf{J} .

ny te mai amesteni în Anderride myepewti

Figure 18: Cyrillic small letters \forall , \mathbf{p} and π showing the transition to Latin small letters \mathbf{u} and \mathbf{r} and \mathbf{l} from O toaletă neisprăvită sau obrăzniciea slujilor : Farsă într'un act, Tipografia lui Vinterhalder, 1852, Iași. We propose these characters for them: \forall , \mathbf{p} , \mathbf{J} l.

Table 1: Suggested properties for \aleph .

Property	Suggested value
Code point	1E960
Name	RTS CYRILLIC SMALL LETTER IOTIFIED UK
General category	Ll
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	
	1

Table 2: Suggested properties for 1.

Property	Suggested value
Code point	1E961
Name	RTS CYRILLIC SMALL LETTER YN
General category	Ll
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

4 Character properties

We propose to add a **Cyrillic Extended-E** block covering these RTS characters. Since the range U+1E09x following the Cyrillic Extended-C block is subject to an existing proposal we propose the block U+1E96x and U+1E97x following the Adlam block.

 $^{^{1} \}verb|https://www.unicode.org/L2/L2022/22262-cyrillic-caucasian-langs.pdf|$

Table 3: Suggested properties for \mathfrak{S} .

Property	Suggested value
Code point	1E962
Name	RTS CYRILLIC SMALL LETTER BE
General category	Lu
Canonical combining class	0
Bidirectional class	m L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 4: Suggested properties for d.

Property	Suggested value
Code point	1E963
Name	RTS CYRILLIC SMALL LETTER DE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 5: Suggested properties for $\Pi.$

Property	Suggested value
Code point	1E964
Name	RTS CYRILLIC SMALL LETTER PE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 6: Suggested properties for φ .

	1
Property	Suggested value
Code point	1E965
Name	RTS CYRILLIC SMALL LETTER MONOGRAPH UK
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	
	!

Table 7: Suggested properties for P.

	-
Property	Suggested value
Code point	1E966
Name	RTS V1 CYRILLIC SMALL LETTER ER
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 8: Suggested properties for P.

Property	Suggested value
Code point	1E967
Name	RTS V2 CYRILLIC SMALL LETTER ER
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	
Simple uppercase mapping Simple lowercase mapping	

Table 9: Suggested properties for ф.

	Ct-1l
Property	Suggested value
Code point	1E968
Name	RTS V1 CYRILLIC SMALL LETTER EF
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 10: Suggested properties for \oint .

Property	Suggested value
Code point	1E969
Name	RTS V2 CYRILLIC SMALL LETTER EF
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 11: Suggested properties for ${\mathfrak F}.$

Property	Suggested value
Code point	1E96A
Name	RTS V1 CYRILLIC SMALL LETTER ZHE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 12: Suggested properties for \mathfrak{z} .

Property	Suggested value
Code point	1E96B
Name	RTS V2 CYRILLIC SMALL LETTER ZHE
General category	Lu
Canonical combining class	0
Bidirectional class	m L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 13: Suggested properties for J.

Property	Suggested value
Code point	1E96C
Name	RTS V1 CYRILLIC SMALL LETTER EL
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 14: Suggested properties for J.

Table 14. Buggested properties for a.				
Property	Suggested value			
Code point	1E96D			
Name	RTS V2 CYRILLIC SMALL LETTER EL			
General category	Lu			
Canonical combining class	0			
Bidirectional class	L			
Decomposition Type/Decomposition Mapping				
Numeric type				
Numeric value				
Bidi mirrored				
Unicode 1 Name				
ISO comment				
Simple uppercase mapping				
Simple lowercase mapping				
Simple titlecase mapping				

Table 15: Suggested properties for u.

00	1 1
Property	Suggested value
Code point	1E96E
Name	RTS CYRILLIC SMALL LETTER TSWE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	
	•

Table 16: Suggested properties for t.

Property	Suggested value
Code point	1E96F
Name	RTS V2 CYRILLIC SMALL LETTER TSWE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 17: Suggested properties for δ .

rable 11. Suggested properties for S.				
Suggested value				
1E970				
RTS V1 CYRILLIC SMALL LETTER VE				
Lu				
0				
L				

Table 18: Suggested properties for v.

Property	Suggested value
Code point	1E971
Name	RTS V2 CYRILLIC SMALL LETTER VE
General category	Lu
Canonical combining class	0
Bidirectional class	L
Decomposition Type/Decomposition Mapping	
Numeric type	
Numeric value	
Bidi mirrored	
Unicode 1 Name	
ISO comment	
Simple uppercase mapping	
Simple lowercase mapping	
Simple titlecase mapping	

Table 19: Mappings of keyboard characters to the proposed font (provisional).

QWERTY key char.	RTS char.
j	3 *
k	Ĵ
l	Л
;	.1
e	P
r	Ф
t	ц
У	t
u	V
i	R
p	П
С	b
v	Ŷ
b	Б
f	ф
g	f
d	Д

5 The UnicodeRTScharacters Font

We provide an OTF font for the RTS characters. To enable the use of the font mappings between existing Unicode characters on the keyboard and the RTS characters are provided. See Table 19 for details. We mapped each RTS character to its Latin counterpart and where two versions of the same character exist we mapped the previous/next character on the QWERTY keyboard to it.

6 Anticipated Objections

Resemblance to existing Unicode characters.

• Upwards arrow ↑ (Unicode 2191) similar to our proposed custom character

 \uparrow (transitional form from Cyrillic \uparrow to Latin î) however they have different meanings and we do not believe that simply replacing a character with a similar existing one but with a different purpose is valid. If this were the case then 0 (zero) and O would be interchangeable.

- Latin small letter v (Unicode 0056) is similar to our proposed custom character \(\varphi\) however our character represents the Latin character u. Its Cyrillic counterpart \(\varphi\) is similar however our character depicts an intermediate stage with the particular features of the Cyrillic character reduced to look more like a Latin u. Furthermore, the mentioned Cyrillic character is formed as a vertical ligature between Cyrillic O and Cyrillic U whereas ours is not, being a stylized Latin u or simplified Cyrillic \(\cap \) (depending on how you see it).
- Greek small letter PHI φ (Unicode 03C6) is similar to our proposed character \mathfrak{P} however they represent different sounds and our character is a transitional phase between the Cyrillic \mathfrak{p} and its Latin counterpart r.
- The existing Cyrillic character **\u03c4** is at first glance similar to our proposed character t however the graphical dissimilarities are obvious with our proposal exhibiting a small cedilla which represents a transitional phase to the character t (Unicode 021B).
- The existing Cyrillic character \mathbf{v} is similar to our proposed character $\hat{\mathbf{v}}$ but there are graphical dissimilarities that make them unique symbols. it also represents a transition from the Cyrillic \mathbf{B} via another custom character $\hat{\mathbf{b}}$ Phonetically our proposed character always translates to the Latin \mathbf{v} .
- The existing Latin dotless j with stroke and hook phonetic symbol (Unicode 0284) is similar to our proposed character j but the former represents a voiced palatal implosive whereas our character corresponds to the Latin j.

Limited use. Some of these symbols were invented to facilitate the transition from RCS to RTS by Rădulescu and were used mainly in his publications although there is evidence that at least some (e.g., his versions for Φ and κ) were used in other publishing houses in the Romanian regions and abroad. While some symbols seem limited to particular publishing houses they nonetheless represent distinct representations between Cyrillic and Latin characters and were used to familiarize readers with the RTS script. Further research by linguists and historians could lead to new documents containing these or other scripts thus enriching the knowledge of the 19th century RTS period.

Not distinct letters. The proposed characters are for facsimile reprinting/digitizing of 19th-century texts written by Rădulescu as part of his approach to transition from RCS to RLS. As such they are similar in scope to those present in the Cyrillic Extended-C Unicode block.

7 Drawing the Symbols

The proposed characters are not part of any script. Their drawing must resemble the one used in texts from the RTS period as they represent specific transitions of Cyrillic characters to Latin characters.

There is no need to mirror any of the symbols for right-to-left scripts.

7.1 Severability

All the characters are required to accurately represent/reproduce texts written in RTS in a digitized form. However, we acknowledge that some characters are close to their original (e.g., standard Λ , δ) and they can be omitted if deemed appropriate. Based on the frequency of occurrence and differences from their original Cyrillic counterparts we suggest that the versions for $\mathcal K$ and Φ should be included, followed by the versions for $\mathcal P$, $\mathcal I$, $\mathcal B$ and $\mathcal I$. When deciding whether or not to exclude a character it should be noted however that these together represent symbols used in the transitional phase from RCS to RLS and as such form an integral part of the efforts to change the script in that period.

A further character, the Cyrillic small letter iotified UK \aleph should also be included as it is not present in the Unicode character set and appears in numerous texts of the mentioned time period. In light of other iotified characters having a Unicode there is no reason why this would be omitted.

8 Sponsors

The address of correspondence is:

Prof. Marc Frincu, Ph.D. West University of Timisoara Faculty of Mathematics and Computer Science Blvd. Vasile Parvan, No 4, Room 052 300223 Timisoara Romania Tel. 0040 745 376 795

Email: marc.frincu@e-uvt.ro

URL: https://staff.fmi.uvt.ro/~marc.frincu/index.html

We have been in contact with Dr. Elena Tamba (isabelle.tamba@gmail.com, isabelle.tamba@acadiasi.ro), head of the Dept. for Lexicology and Lexicography from the "A. Philippide" Institute for Romanian Philology and part of the Iasi branch of the Romanian Academy. She endorses this action as highly relevant to the history of the Romanian language.

This proposal also aligns with the aims of the Council for the Digitization of the Romanian Language (ConsILR - https://conferences.info.uaic.ro/

consilr/) and with European efforts to digitize the cultural heritage (see below).

9 Summary and Conclusion

The latest report we could find shows that merely 4.5% [2] of the minimum mandatory amount of digitized cultural heritage collections is available from Romania as part of the Europeana initiative. Part of this comprises old RTS texts which without proper rendering of characters cannot be reproduced accurately nor capture the essence of their innovative cultural and educational aspects. Within the framework of Europe's digital decade, more than ever, "digitization and online access to cultural heritage and its long-term preservation are essential to enable access for all to culture and knowledge, promote richness and diversity of European cultural heritage and contribute to the achievement of the digital single market through the increasing offer of new and innovative products and services" [1]. Introducing these custom RTS characters as an extension set of the existing Cyrillic characters would ensure that the Romanian heritage of the 19th century is properly digitized and preserved for scholars and the general public alike.

References

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- [6] I.H. Rădulescu. Romanian Grammar (Ro.). 1828.

ISO/IEC JTC 1/SC 2/WG 2

PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS FOR ADDITIONS TO THE REPERTOIRE OF ISO/IEC 10646.1

Please fill all the sections A, B and C below.

Please read Principles and Procedures Document (P & P) from http://std.dkuuq.dk/JTC1/SC2/WG2/docs/principles.html for guidelines and details before filling this form.

Please ensure you are using the latest Form from http://std.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html. See also _http://std.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html _ for latest Roadmaps.

Proposal to include transitional Cyrillic characters invented by I.H. Rădulescu in his proposal of

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Proposal to include transitional Cyrillic characters invented by I.H. Rådulescu in his proposal of 1. Title: the 19th Century Romanian Transitional Script and other unique characters				
2. Degreeter's name: Mary Edward EDNOU Describ				
3. Requester type (Member body/Liaison/Individual contribution): Individual contribution				
4. Submission date: 12th April 202	4			
5. Requester's reference (if applicable):				
6. Choose one of the following:				
This is a complete proposal:	yes			
(or) More information will be provided later:				
B. Technical – General				
1. Choose one of the following:				
a. This proposal is for a new script (set of characters):				
Proposed name of script: Romanian Transitional Script				
b. The proposal is for addition of character(s) to an existing block:	No			
Name of the existing block:				
2. Number of characters in proposal:	18			
3. Proposed category (select one from below - see section 2.2 of P&P document):				
A-Contemporary B.1-Specialized (small collection) B.2-Specialized (large of	ollection)			
C-Major extinct D-Attested extinct E-Minor extinct				
F-Archaic Hieroglyphic or Ideographic G-Obscure or questionable usage	• • • • • • • • • • • • • • • • • • • •			
4. Is a repertoire including character names provided?	yes			
a. If YES, are the names in accordance with the "character naming guidelines"				
in Annex L of P&P document?				
b. Are the character shapes attached in a legible form suitable for review?	Yes			
5. Fonts related:				
a. Who will provide the appropriate computerized font to the Project Editor of 10646 for pub	olishing the			
standard?				
Marius PENTELIUC				
b. Identify the party granting a license for use of the font by the editors (include address, e-	mail, ftp-site, etc.):			
6. References:				
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided?				
b. Are published examples of use (such as samples from newspapers, magazines, or other	r sources)			
of proposed characters attached? yes				
7. Special encoding issues:				
Does the proposal address other aspects of character data processing (if applicable) such				
presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)	ition)? no			
8. Additional Information:				
Submitters are invited to provide any additional information about Properties of the proposed Cha	aractar(s) or Script			
that will assist in correct understanding of and correct linguistic processing of the proposed chara				
Examples of such properties are: Casing information, Numeric information, Currency information				
information such as line breaks widths at Combining behaviour. Chapting behaviour Directions				

information such as line breaks, widths etc., Combining behaviour, Spacing behaviour, Directional behaviour, Default Collation behaviour, relevance in Mark Up contexts, Compatibility equivalence and other Unicode normalization related information. See the Unicode standard at http://www.unicode.org for such information on other scripts. Also see Unicode Character Database (http://www.unicode.org/reports/tr44/) and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

[.] Form number: N4502-F (Original 1994-10-14; Revised 1995-01, 1995-04, 1996-04, 1996-08, 1999-03, 2001-05, 2001-09, 2003-11, 2005-01, 2005-09, 2005-10, 2007-03, 2008-05, 2009-11, 2011-03, 2012-01)

C. Technical - Justification

Has this proposal for addition of character(s) been submitted before?	no
If YES explain	
2. Has contact been made to members of the user community (for example: National Body,	
user groups of the script or characters, other experts, etc.)?	yes
If YES, with whom? ``A. Philippide" Institute for Romanian Philology part of the lasi branch of the	e Romanian Academy
If YES, available relevant documents:	
3. Information on the user community for the proposed characters (for example:	
size, demographics, information technology use, or publishing use) is included?	
Reference: Researchers in history and history of languages and general public interested in his	torical texts
	rare
Reference: Specific time interval in 19th century in Romanian texts	
	no
If YES, where? Reference:	
6. After giving due considerations to the principles in the P&P document must the proposed charact	ers be entirely
in the BMP?	yes
If YES, is a rationale provided?	
If YES, reference: Specified in the the attached proposal.	
7. Should the proposed characters be kept together in a contiguous range (rather than being scatter	red)? yes
8. Can any of the proposed characters be considered a presentation form of an existing	
character or character sequence?	no
If YES, is a rationale for its inclusion provided?	
If YES, reference:	
9. Can any of the proposed characters be encoded using a composed character sequence of either	
existing characters or other proposed characters?	
If YES, is a rationale for its inclusion provided?	
If YES, reference: Only iotified Uk which is used but does not have a unicode as other	er iotified characters
10. Can any of the proposed character(s) be considered to be similar (in appearance or function)	
to, or could be confused with, an existing character?	yes
If YES, is a rationale for its inclusion provided?	
If YES, reference: Specified in the attached proposal.	
	no
If YES, is a rationale for such use provided?	
If VES reference: Specified in the the attached proposal	
Is a list of composite sequences and their corresponding glyph images (graphic symbols) prov	
If YES, reference:	
12. Does the proposal contain characters with any special properties such as	
	no
If YES, describe in detail (include attachment if necessary)	
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13. Does the proposal contain any Ideographic compatibility characters?	no
If YES, are the equivalent corresponding unified ideographic characters identified?	
If YES, reference:	