## PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS

 FOR ADDITIONS TO THE REPERTOIRE OF ISOIIEC $10646{ }^{1}$ Please fill all the sections $A, B$ and $C$ below.Please read Principles and Procedures Document (P \& P) from http://www.dkuug.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://www.dkuug.dk/JTC1/SC2/WG2/docs/summaryform.html. See also http://www.dkuug.dk/JTC1/SC2/WG2/docs/roadmaps.html for latest Roadmaps.

## A. Administrative

1. Title:

## Proposal for additional cyrillic characters

2. Requester's name:
3. Requester type (Member body/Liaison/Individual contribution):
4. Submission date:
5. Requester's reference (if applicable):
6. Choose one of the following: This is a complete proposal:
(or) More information will be provided later:
B. Technical - General
7. Choose one of the following:
a. This proposal is for a new script (set of characters):


No
Proposed name of script:
b. The proposal is for addition of character(s) to an existing block:
Name of the existing block:
2. Number of characters in proposal:
3. Proposed category (select one from below - see section 2.2 of P\&P document):
A-Contemporary $\quad$ B. 1-Specialized (small collection)
C-Major extinct
F-Archaic Hieroglyphic or Ideographic

Yes

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F-Archaic Hieroglyphic or Ideographic
G-Obscure or qu
$\mathrm{P} \& \mathrm{P}$ document):
Is a rationale provided for the choice?
If Yes, reference:
Some of the proposed characters are combining characters
5. Is a repertoire including character names provided?

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?

6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard?

Professor R. M. Cleminson, University of Portsmouth
If available now, identify source(s) for the font (include address, e-mail, ftp-site, etc.) and indicate the tools used: . . Dilyana 1.2, made with FontLab, available from: http://userweb.port.ac.uk/~cleminsr/fonts/dilyan.ttf
7. References:
a. Are references (to other character sets, dictionaries, descriptive texts etc.) provided? $\qquad$
Yes
b. Are published examples of use (such as samples from newspapers, magazines, or other sources) of proposed characters attached?

Yes
8. Special encoding issues:

Does the proposal address other aspects of character data processing (if applicable) such as input, presentation, sorting, searching, indexing, transliteration etc. (if yes please enclose information)? $\qquad$ No
9. Additional Information:

Submitters are invited to provide any additional information about Properties of the proposed Character(s) or Script that will assist in correct understanding of and correct linguistic processing of the proposed character(s) or script. Examples of such properties are: Casing information, Numeric information, Currency information, Display behaviour 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 http://www.unicode.org/Public/UNIDATA/UCD.html and associated Unicode Technical Reports for information needed for consideration by the Unicode Technical Committee for inclusion in the Unicode Standard.

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## D. Proposal

Note: This document is a revision of L2/06-042. Changes were based on feedback received from the UTC. The changes between this document and L2/06-042 include the following: - removal of one character (COMBINING CYRILLIC TEN THOUSANDS SIGN, since it can be handled by U+20DD)

- name change for the upper- and lowercase forms of characters (from CYRILLIC LETTER REVERSED DZELO to CYRILLIC LETTER REVERSED DZE)


## - additional explanation and examples (such as for UNDIFFERENTIATED JER and BLENDED JUS) - change of name for xx20 to CYRILLIC CAPITAL LETTER OU, now identified as an all-caps version of U+0478.

## 1. User community and context of use

These characters have been used historically as part of the cyrillic alphabet; some of them are still in use in the liturgical books of the Orthodox churches. All are used by contemporary scholars who study the mediæval documents in which they appear. Most can be categorised as common, but a few, such as it, are less so, since few manuscripts using the orthographical system of which it was part survive.

## 2. Character properties

The mediaeval tradition did not use hyphens, nor in many cases word-spacing, but it did permit linebreaks within a word. The general practice (if we ignore the complications involving superscripts) was to permit line-breaks after a vowel, jer or paerok; however, in the Bosnian tradition a line could end with any character. Modern Church Slavonic printed books follow essentially the same conventions as Russian, which, broadly speaking, allow hyphenation at syllable-boundaries. There is no way of reducing this to any sort of consistency.

## 3. List of proposed characters with justification

We request 41 characters, as listed.
T^ CYRILLIC LETTER YN This is a standard character in Rumanian cyrilic, both manuscript and printed. See fig. 7.

Ifla CYRILLIC LETTER IOTIFIED A This letter occurs regularly from the earliest times to modern Church Slavonic (see figs. 5,6 etc.). It is not to be unified with я (which is a variant of a and should probably not have been distinguished from it), which is used as a distinct character alongside it in early modern Bulgarian (fig. 9). See also fig. 1.

I6 th CYRILLIC LETTER IOTIFIED YAT This letter occurs in certain early cyrillic texts, in which it is used contrastively with t. See fig. 11.

勺४ CYRILLIC LETTER MONOGRAPH UK At present this is unified with cyrillic $\mathbf{Y} \mathbf{Y}$, which is completely unjustifiable, as these two letters are not the same either historically or functionally. It is not unusual to find manuscripts using both $\gamma$ and $s$ (see fig.15). Both historically and in modern Church Slavonic, $\varphi$ is also used as a numeral, but 8 is only used as a letter: the two are therefore not interchangeable. Old cyrillic $s$ originated as a ligated form of or, but cannot be unified with it as the two quickly diverged in usage. They are distinguished by orthographical conventions going back many centuries and formalised in modern Church Slavonic; according to these rules, the substitution of either $y$ or or for 8 is an error, and all three characters are required for proper Church Slavonic typesetting. Samples also in figs. 1, 2, and 5.
ll CYRILLIC LETTER IOTA Used in scholarly literature since the nineteenth century to transcribe glagolitic $\mathbb{\Psi}$. See example in fig. 20.

33 CYRILIIC LETTER DZELO This is the original form of this letter, the function of which was taken over at a later period by $\mathbf{S}$, which was originally cyrillic stigma. The two co-exist in manuscripts, particularly where the former is used as a letter and the latter as a numeral. Example is found in fig. 21.

2ぇ CYRILLIC LETTER REVERSED DZE This is a common character, particularly in early South Slavonic manuscripts and inscriptions, and particularly when used as a numeral. It may co-exist with S, e.g. in manuscripts such as NBKM 880, RGB Sevast'janov 17 (the former has $\xi_{\xi}$ as well!); such texts cannot be adequately encoded without the possibility of distinguishing between these characters. See sample in fig. 22.

WI' CYRILLIC LETTER YERY (FORM WITH BACK JER) The distinction between m and $\boldsymbol{w}$ is of great importance to palæography, and essential for a comprehensive palæographic description of cyrillic sources. Although the two letters are characteristic of different periods and traditions, the one does not simply replace the other: there are important manuscripts, such as the Dobrejšo Gospels, in which both are found. Example is provided in fig. 6.
$\AA t$ CYRILLIC LETTER DJERV This is the old cyrillic letter for the voiced palatal affricate, used particularly in the Bosnian manuscript tradition and in early Bosnian printings (fig.4), where it also serves to indicate palatal / and $n$, by analogy with Italian gl, gn. The glyph is the ancestor of 040B/045B Ћћ, but the two characters do not correspond either phonetically or etymologically. 0402/0452 万ђ was in turn derived from $Ћ \hbar$ in 1819. え cannot be unified with $\ddagger$ because the latter corresponds to it only partially, and besides, the two are sorted differently: $\star$ comes between $\boldsymbol{и}$ and $\kappa$, while $\dagger$ comes between $д$ and $е$.

W CYRILLIC LETTER BROAD OMEGA This character is found alongside $\omega$ in most sixteenth- and seventeenth-century alphabets (fig. 2). In some alphabets (e.g. the 1631, 1653 and 1692 Primers) it appears without any supralinear element, and in the 1648 grammar is used to correspond to Greek $\omega$ in proper names derived from Greek, in which function it may take the same diacritics as the other vowel
 body of the letter that is distinctive, not the supralinear element, and $\omega^{\prime}$ is not to be regarded as $\omega+$ diacritic.

Xx CyRillic letter blended Jus This character is found in certain Middle Bulgarian manuscripts where it replaces (and eliminates) both $\kappa$ and n . To encode it as if it were equivalent to either of them would be misleading, and a distinct character is therefore required. See figs. 16 and 17.

- $\mathbf{\Delta}$ CYRILlic letter closed little jus This character is found in Old Church Slavonic and Middle Bulgarian manuscripts, and may be used contrastively with A : in the Codex Supraslensis (fig.6), for example, $\AA$ represents $j \varepsilon$ and $\Delta$ represents $e$. There is thus a distinction in sound and meaning between the two.

IAIA CYRILLIC LETTER IOTIFIED CLOSED Little Jus In many manuscripts following an orthographical system where $\Delta$ represents a non-jotated vowel, is represents the corresponding prejotated vowel.

OHo CYRILLIC LETTER REVERSED YU This character appears in some early Middle Bulgarian manuscripts and inscriptions, and has palæographic and phonological significance. It is uncertain whether it has a common origin with Юı. See Andrej Bojadžiev, «Житието на св. Кондрат - първоначалната история на неговия славянски текст и развитието на старобългарската правописна система с голям ер», Кирило-Методиевски студии, кн. 10 (1995), 46-81, and specifically p.55. See fig. 23.
bb .CYRILLIC LETTER UNDIFFERENTIATED JER Used regularly in transcribing documents where it is impossible to tell the difference between $\mathrm{\imath}$ and s (a common situation in late mediæval Russian archival materials). See figure 18. Сf. С.И. Котков, «О совместном издании древнерусских скорописных памятников лингвистами и историками», Лингвистическое источниковедение, Москва, 1963, 16-17.

Z3 CYRILLIC LETTER EARLY ZE This is the form found in the earliest sources, replaced in more recent ones by 33. Sixteenth-century and (in Moscow) seventeenth-century alphabets invariably include both forms (fig.1), and there are printed books in which both occur.

OY CYRILLIC CAPITAL LETTER OU This is the all-caps form of Or, U+0478 (see fig. 10).
${ }^{s}$ CYRILLIC PAEROK Frequent from the earliest period, originally to replace an omitted jer, later also to break up consonant clusters. It is a spacing character (see fig. 12).
s CYRILLIC COMBINING PAEROK In early-printed books, and likewise in modern Church Slavonic service books, spacing paerok is not normally used. Instead a combining variant of the character is used, placed above the preceding consonant, usually slightly to the right of centre. There are two common variants of the glyph (see fig. 3, where one is called па́є̧къъ and the other égикъ, but in practice no consistent
distinction either of usage or nomenclature is maintained). The similarity between the latter and U+033E, COMBINING VERTICAL TILDE (an abbreviation mark standing for omitted "er" or "re" in certain forms of Latin script), is co-incidental and purely visual, and the one should not be substituted for the other. The COMBINING PAEROK should be distinguished because of these variant glyph shapes: while one is similar to U+033E (bottom image in figure 3), another variant is quite different (figure 19, top image in figure 3).
${ }^{-}$CYRILLIC KAVYKA Used on either side of a word or passage of text to indicate a substitution or alternative reading, usually indicated in the margin likewise between kavyki. See fig.13. Functionally this is equivalent to the use of U+2E02/2E03, LEFT SUBSTITUTION BRACKET and RIGHT SUBSTITUTION BRACKET, but the marks are visually different and there is no difference between the kavyka at the beginning and kavyka at the end.
${ }^{-}$CYRILLIC COMBINING KAVYKA Occasionally it is necessary to indicate an alternative reading to only part of a word, as in fig. 14, where the feminine ending in the margin is substituted for the masculine ending in the text. In this case the kavyka is placed directly over the relevant letters. Note that it is typographically as well as functionally distinct from U+0306 COMBINING BREVE, which is visible in мии\&Ай, the penultimate word of this example. COMBINING BREVE is narrower than the CYRILLIC COMBINING KAVYKA.
$\because$ COMBINING CYRILLIC TEN MILLIONS SIGN Written around a numeral to indicate that number $\times 10^{7}$.
こ COMBINING CYRILLIC HUNDRED MILLIONS SIGN Written around a numeral to indicate that number $\times 10^{8}$.
" COMBINING CYRILLIC ISO This character is always presented in sources which are normative by the standards of the day as a separate diacritic with its own name. Note that there is no Greek equivalent. (Indeed, Donald Mastronarde, who works on the Greek Unicode font for the American Philological Association, feels combining versions of Greek breathing marks and accents would have been much more useful than the spacing version, which is encoded.) As can be seen from fig. 8 , it is typographically distinct from a combination of breathing and acute, both of which are present in the same list, but rendered differently. See also fig. 19.
" COMBINING CYRILLIC APOSTROF This character has likewise always been regarded as a distinct entity. As can be seen from fig. 8, it too is typographically distinct from a combination of breathing and grave. See also fig. 19.

## 4. Sorting order

Prescribing a sorting order for many of the proposed characters is problematic, for two reasons. The first is that actual practice was not consistent, as can be immediately seen from a comparison of the alphabets in fig. 1 and fig.2, particularly the last nine characters. The second is that the Unicode cyrillic blocks are a superset of all cyrillic characters, not all of which were used in any given historical writing system (just as no modern national alphabet uses the full repertory of cyrillic characters), so that it is difficult to establish ordering in respect of two characters which never occur in the same text. However, the following suggestions may be provisionally adopted. The remaining characters are not sortable. Characters not part of Synodal Church Slavonic are not sortable except in an arbitrary way. (SynCS characters include: iotified a, uk [monograph and digraph], broad omega, paerok, kavyka and all the combining characters.)
\$ should follow U+0475 $\mathbf{v}^{2}$
Iff should follow U+044E $\mathbf{v o}^{3}$
If should follow U+0463 $\mathrm{t}^{4}$
y should follow U+0479 or or be sorted the same as it ${ }^{5}$
l should follow U+0457 ${ }^{4}$
${ }_{3}$ should precede $\mathrm{U}+0455 \mathrm{~s}$ or be sorted the same as it ${ }^{5}$
2 should follow $\mathrm{U}+0455 \mathrm{~s}$ or be sorted the same as it ${ }^{5}$

[^1]WI should precede U+044B ru or be sorted the same as it ${ }^{6}$
ћ should precede U+043A к ${ }^{2}$
$\omega$ should probably be sorted with U+0461 $\omega^{5}$
X should follow U+046B $\boldsymbol{x}^{4}$
A should follow U+0467 $\mathrm{a}^{4}$
IA should follow $\Delta^{4}$
OI should follow U+044E ${ }^{4}$
b should be sorted as $U+044 A_{k_{k}}{ }^{6}$
Z should be sorted as U+0437 $3^{5}$
OV should be sorted as U+0478 O\%.

[^2]TABLE XX - Row xx: Additional Cyrillic

|  |  | ก | Or |
| :---: | :---: | :---: | :---: |
|  |  | * |  |
|  |  | $\omega$ | \% |
|  |  | $\omega$ | - |
|  |  | 8 | ¢ |
|  |  | $x$ | \%: |
|  |  | $\Delta$ | こ |
|  |  | $\Delta$ | ${ }^{\prime}$ |
|  |  | 14 | $\stackrel{3}{ }$ |
|  |  | A |  |
|  |  | OH |  |
|  |  | ${ }^{4}$ |  |
|  |  | b |  |
|  |  | b |  |
|  |  | 3 |  |
|  |  | 3 |  |

## TABLE XX - Row xx: Additional Cyrillic

```
Hex Name
00 CYRILLIC CAPITAL LETTER YN; Lu;0;L;;,;,;;;;,XX01;
01 CYRILLIC SMALL LETTER YN; LI;0;L;;;;,N;;;XX00;;XX00
02 CYRILLIC CAPITAL LETTER IOTIFIED A; Lu;0;L;;;;,N;;;;XX03;
03 CYRILLIC SMALL LETTER IOTIFIED A; LI;0;L;;;;N;;;XX02;;XX02
04 CYRILLIC CAPITAL LETTER IOTIFIED YAT; Lu;0;L;;;;N;;;;XX05;
05 CYRILLIC SMALL LETTER IOTIFIED YAT; LI;0;L;;;;N;;;XX04;;XX04
06 CYRILLIC CAPITAL LETTER MONOGRAPH UK; Lu;0;L;;;;N;;;;XX07;
07 CYRILLIC SMALL LETTER MONOGRAPH UK; LI;0;L;;;;N;;;XX06;;XX06
08 CYRILLIC CAPITAL LETTER IOTA; Lu;0;L;,;,;N;,;,XX09;
09 CYRILLIC SMALL LETTER IOTA; LI;0;L;;,;N;;;XX08;;XX08
0A CYRILLIC CAPITAL LETTER DZELO; Lu;0;L;;,;,N;;;,XXOB;
0B CYRILLIC SMALL LETTER DZELO; LI;0;L;;;;N;;;XX0A;;XXOA
OC CYRILLIC CAPITAL LETTER REVERSED DZELO; Lu;0;L;,;;,N;;;,XXOD;
OD CYRILLIC SMALL LETTER REVERSED DZELO; LI;0;L;;;;,N;;,XXOC;;XXOC
0E CYRILLIC CAPITAL LETTER YERY (FORM WITH BACK JER) ; Lu;0;L;;;;,N;;;,XX0F;
OF CYRILLIC SMALL LETTER YERY (FORM WITH BACK JER) ; LI;0;L;;,;N;;;XX0E;;XX0E
10 CYRILLIC CAPITAL LETTER DJERV; Lu;0;L;;;;,N;;;;XX11;
1 1 \text { CYRILLIC SMALL LETTER DJERV; LI;0;L;,;;N;;;XX10;;XX10}
12 CYRILLIC CAPITAL LETTER BROAD OMEGA; Lu;0;L;;,;N;;;;XX13;
13 CYRILLIC SMALL LETTER BROAD OMEGA; LI;0;L;;;;,N;;;XX12;;XX12
14 CYRILLIC CAPITAL LETTER BLENDED JUS; Lu;0;L;;;;,N;;;;XX15;
15 CYRILLIC SMALL LETTER BLENDED JUS; LI;0;L;;;;N;;;XX14;;XX14
16 CYRILLIC CAPITAL LETTER CLOSED LITTLE JUS; Lu;0;L;;;;N;;;;XX17;
17 CYRILLIC SMALL LETTER CLOSED LITTLE JUS; LI;0;L;;,;N;;;,XX16;;XX16
18 CYRILLIC CAPITAL LETTER IOTIFIED CLOSED LITTLE JUS; Lu;0;L;;;,;N;;;,XX19;
19 CYRILLIC SMALL LETTER IOTIFIED CLOSED LITTLE JUS; LI;0;L;;;;N;;;XX18;;XX18
1A CYRILLIC CAPITAL LETTER REVERSED YU; Lu;0;L;;;;N;;;;XX1B;
1B CYRILLIC SMALL LETTER REVERSED YU; LI;0;L;;;;N;;;XX1A;;XX1A
1C CYRILLIC CAPITAL LETTER UNDIFFERENTIATED JER; Lu;0;L;;;;N;;;,XX1D;
1D CYRILLIC SMALL LETTER UNDIFFERENTIATED JER; LI;0;L;;;;N;;;XX1C;;XX1C
1E CYRILLIC CAPITAL LETTER EARLY ZE; Lu;0;L;;;;N;;;;XX1F;
1F CYRILLIC SMALL LETTER EARLY ZE; LI;0;L;;;;,N;;;XX1E;;XX1E
20 CYRILLIC CAPITAL LETTER OU;Lu;0;L;;,;,N;,;;0479;0478
21 CYRILLIC PAEROK;Sk;0;,,,;,,;,;;
2 COMBINING CYRILLIC PAEROK;Mn;232;NSM;;,;,N;;,;;
CYRILLIC KAVYKA;Sk;0;ON;,;;N;,;;;
24 COMBINING CYRILLIC KAVYKA;Mn;230;NSM;;,;,N;;;;;
25 COMBINING CYRILLIC TEN MILLIONS SIGN;Me;0;NSM;,;;N;,;;;
26 COMBINING CYRILLIC HUNDRED MILLIONS SIGN;Me;0;NSM;;,;,N;;;;;
27 COMBINING CYRILLIC ISO;Mn;230;NSM;;,;,N;;,;;
28 COMBINING CYRILLIC APOSTROF;Mn;230;NSM;;;;N;;;;;
```


fig. 11574 Primer. The top circle shows CYRILLIC LETTER EARLY ZE beside CYRILLIC LETTER ZE. The middle circle shows CYRILLIC LETTER MONOGRAPH UK alongside the digraph CYRILLIC LETTER UK. The bottom left circle shows CYRILLIC LETTER IOTIFIED A.


##  Gaaǵтнкагт.


fig. 21631 primer.
The top circle shows the CYRILLIC LETTER UK digraph alongside CYRILLIC LETTER MONOGRAPH UK. The bottom two circles enclose the CYRILLIC LETTER BROAD OMEGA and the CYRILLIC LETTER OMEGA.

fig. 31631 Primer.
The circled glyphs are CYRILLIC PAEROK. (The bottom one closely resembles COMBINING VERTICAL TILDE.)

```
0 「^をそさへ0
    - ત' XOIINO
世 Hoverka M CHaIXE
        fixnore vonuvawckors.
```



```
    разгопаря, абсто и педесет
        З8ОНА, ААНТН С СМААА
                ПогАяпитих.
```




```
    HeTOMAVENO H3 He \(\mathrm{K}_{6}\) HTAAHAM-
        СКОГА, З C. ОНNGKH.
        © MMETYHEX。
        sa \({ }^{\text {X K K K }}\)
```




```
        W Hwc ont linequige :
```

fig． 4 Ogledalo duhovno，Venice， 1628.
Examples of CYRILLIC LETTER DJERV
（ Ancamen dio








 MENE：：
fig． 5 Acts of the Apostles，modern edition．
Example of CYRILLIC LETTER IOTIFIED A at the beginning of line 2 ．The end of line 2 has the CYRILLIC LETTER UK digraph，whereas the third line from the bottom has CYRILLIC LETTER MONOGRAPH UK．In line 7，CYRILLIC LETTER IOTIFIED A occurs in the same word as CYRILLIC LETTER LITTLE YUS，obliging an orthographic distinction．


 HKOスHISOPACTOATBMEXA, VYGEOLX O NH


fig. 6 Codex Supraslensis.
The first line contains CYRILLIC LETTER IOTIFIED A. Line 4 has CYRILLIC LETTER LITTLE YUS and line 5 has two examples of CYRILLIC LETTER CLOSED LITTLE JUS. Line 6 has two examples of CYRILLIC LETTER YERY (FORM WITH BACK JER).

fig. 7 Carte românească de învățătură, Iaşi, 1646 The circled glyphs are CYRILLIC LETTER YN.

fig. 8 Grammar, Moscow, 1648.
The circled bottom right mark of punctuation is the COMBINING CYRILLIC APOSTROF, the other circle encloses the COMBINING CYRILLIC ISO. Compare the breathing and acute diacritics in the same passage (in rectangles).

Благодарөниө на голвмы-ты жрьтвы, които почитаөма-та Госпожяа Марию Н. Гөрова принөсө, рьчникъ-тъ можя да изльвз докрай въ духа и начрьтаниө-то, коөто покойный-тъ му авторъ фюпе нарядилъ. СЂ твви си жрьтвы Госпожя Марияа $H$, Герова въздигнж нөсъкрушимъ памятникъ на покойныね си съпруг'Ђ и изплъни най-добросъвб̆стно задлъжөнинта, които той имашө камъ народа си, а тю сама васлужи най-гольмж хвалд и благодарность.
fig. 9 Najden Gerov, Ръчникъ на блъгарскый языкъ, vol.5, Plovdiv, 1904 Note the CYRILLIC SMALL LETTER IOTIFIED A occurring in the same text as CYRILLIC SMALL LETTER YA, appearing in the next word.

Hz Правосла́внымд Pоди́ттлємй, Roc-
 ста́вникшмъ, Госпо́дїАмди, ДХХо́в-

 ческое надুZ ма́лымии ӧ́троками носпи́чими:
fig. 10 (a)

$$
\text { ê Hasínate. } \quad 57
$$







fig． 10 （b）
Katichisis malyj，Buda，1801：（a）p． 3 and（b）p． 57
Fig．10（b）shows CYRILLIC CAPITAL LETTER OU，which is the all－caps of the character circled in fig． 10 （a）．

> NイIVUビム
> $\rightarrow$ TACDBA $\because$ BBTTPOCT $\because$

$$
\begin{aligned}
& \text { ТНСА•НЗАрАНАБ•В В }
\end{aligned}
$$

$$
\begin{aligned}
& \text { CA•HNECTMЂICAKMA }
\end{aligned}
$$

IGAHHNACJTHEZCA．
fig． 11 Izbornik of 1073.
The top example is of an ordinary CYRILLIC LETTER YAT，the lower example of CYRILLIC LETTER IOTIFIED YAT．

#  <br>  <br> ntcon inskrmbee. nivico 

Fig. 12 Athos, Zographou Monastery, MS IIIб 6, f.61v.
This example shows the CYRILLIC PAEROK.

ГААН поми́лвй, три́ждды.


гдн

Fig. 13 Horologion, Moscow, 1980, p26.
Examples of CYRILLIC KAVYKA.


Fig. 14 Euchologion, Moscow, 1906, f. 121.
Example of COMBINING CYRILLIC KAVYKA and (in the penultimate word) COMBINING BREVE.


Fig. 15 РГАДА, ф.237, оп.1, ч.2, №969, f.101v
Example showing the CYRILLIC LETTER MONOGRAPH UK and the second element contained in the UK digraph.

##   

Fig. 16 Examples of BLENDED JUS from f. 53 v of MS 880 in the National Library of Bulgaria

#  

Fig. 17: Example of BLENDED JUS from Add. MS 39628, British Library

18<br>А. И. БЕЗОБРАЗОВ АЛЕКСЕЮ МАТВЕЕВИЧУ

| л. 537 | Приятел мои гсдрь и добродеи Алед̆ə̆и Ма|твеевичь здравствуи о Хрсте на веки і пребы|ваи во всяки $x$ радостя $x$ и с теми кто тебб прия|телю моему всякого добра желает и здоровя | твоего остерегает ${ }^{1}$

Пожалуи прикажи ко мне писат о своемъ здорове а я слышат про твое | здоровье всегда желате $\boldsymbol{\Omega}^{1}$ |

Челом гсдрь бью | за пъремъног юю твою къ бе ${ }^{2}$ милось $m$ что по съвоем $久$ милосеръдо|м久 милосьтивом $\nearrow$ вомотъренью ${ }^{3}$ учнилъ ${ }^{4}$ мне въ людехъ указъ и я за тъвою къ се|бе милоњђть вечьнои тебе ${ }^{5}$ работникъ ${ }^{6}$ |

И о техъ гсдрь людехъ посълалъ я людише|къ своихъ зъ гсдревою грамотою уди|ви милосъть гсдрь мои нада мъною | даи мне милосьть свою на веки по|мънить учини меня себе вечьны|мъ работъникомъ ${ }^{7}$ |

И я посла $л$ для те $x^{8}$ беглы $x$ людеи люди|шек свош $x$ а с ними послал я ${ }^{9}$ пожалуи приятел | мои Хдиви надо мною млсть свою пошли для | те $x$ мои $x$ беглы $x$ людеи пристава і пожа|лу $u^{10}$

А семъ писав вечнои твои работник Андрюшка БЂзо|бразов со прошениемъ челомъ бью не пре|зри приятел мои Хбогова моево прошения | к себх водше

Моск. ст., стб. 599, л. 537
1-1 Написано на левом поле, вставка; далее зачеркнуто челомъ гсдрь бью за премвогую твою к се|бћ млсть что жалуеш (далее буква не читается) ом крстьяннишек | нши $x$ і впред $\&$ тебя о том же млсти про|шу пожалуи буди к ним млсрдъ; далее почерком А. И. Безобразова. ${ }^{2}$ Так в ркп. ${ }^{3}$ Так в ркп., милоЄЋливомя вомотъренью

Fig. 18. Examples of UNDIFFERENTIATED JER from a 17 th-century document as published in S. I. Kotkov, I. I. Tarabasova, Памятники русского народного разговорного языка XVII столетия (из фондов А. И. Безобразова), Moscow, 1965.





 Example 2



# ностн дошны пр  

Figure 19. Otpis na list Ipatija Potija, Ostrih, 1598
Example 1 shows smooth breathing (legkaja), COMBINING CYRILLIC APOSTROF, and grave (varia).
Note that the smooth breathing (legkaja) has a variant shape, created by starting the clockwise arc lower down.
Example 2 shows an acute (oxia), smooth breathing (legkaja), and the COMBINING CYRILLIC ISO.
Example 3 (circled) shows the CYRILLIC COMBINING PAEROK, different in shape from the COMBINING VERTICAL TILDE.




Figure 20. Cyrillic transcription of part of a glagolitic manuscripts (Codex Marianus), from
T.A.Ivanova, Staroslavjanskij jazyk, Moscow, 1977, p. 168.

Examples of CYRILLIC LETTER IOTA.

 MHPG MANAOYECOLHATHHEMGHMOHZA

Figure 21. Vatican Library, Vat. Slav. 2, f.8: line 4, tenth character. Example of CYRILLIC LETTER DZELO.


Figure 22. Zagreb, HAZU, IV d.107. Example of CYRILLIC LETTER REVERSED DZE.


Figure 23. Zagreb, HAZU, IV d.107. Example of CYRILLIC LETTER REVERSED YU.


[^0]:    ${ }^{1}$ Form number: N3002-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)

[^1]:    ${ }^{2}$ Follows the practice of early alphabets.
    ${ }^{3}$ Follows the practice of early alphabets, but may not be acceptable to modern scholars.
    ${ }^{4}$ There is no early precedent, but there is a good case for this ordering.
    ${ }^{5}$ Early practice is inconsistent.

[^2]:    ${ }^{2}$ Follows the practice of early alphabets.
    ${ }^{3}$ Follows the practice of early alphabets, but may not be acceptable to modern scholars.
    ${ }^{4}$ There is no early precedent, but there is a good case for this ordering.
    ${ }^{5}$ Early practice is inconsistent.
    ${ }^{6}$ There is no early precedent.

