L2/06-359

| ISO/IEC JTC 1/SC 2/WG 2 | | | | | |
|---|---|------------|--|--|--|
| PROPOSAL SUMMARY FORM TO ACCOMPANY SUBMISSIONS | | | | | |
| FOR ADDITIONS TO THE REPER | | | | | |
| Please fill all the sections | A, B and C below. | | | | |
| Please read Principles and Procedures Document (P & P) from h | 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/do | cs/roadmaps.html for latest Roadmaps | •••••• | | | |
| A. Administrative | | | | | |
| 1. Title: Proposal for add | itional avrillia abaractors | | | | |
| 2 Doguester's name: | cional cynnic characters | | | | |
| 2. Requester's name: Profest 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: | | 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): | | No | | | |
| Proposed name of script: | | | | | |
| b. The proposal is for addition of character(s) to an existin | ng block: | Yes | | | |
| Name of the existing block: | Cyrillic supplementary | | | | |
| 2. Number of characters in proposal: | | 41 | | | |
| 3. Proposed category (select one from below - see section 2.2 | of P&P document): | | | | |
| A-Contemporary B.1-Specialized (small collection) | X B.2-Specialized (large collectio | n) | | | |
| C-Major extinct D-Attested extinct | E-Minor extinct | | | | |
| F-Archaic Hieroglyphic or Ideographic | E-Minor extinct G-Obscure or questionable usage sym | bols | | | |
| | | | | | |
| Is a rationale provided for the choice? | | Yes | | | |
| | oposed characters are combining charac | | | | |
| 5. Is a repertoire including character names provided? Yes | | | | | |
| a. If YES, are the names in accordance with the "character | | | | | |
| in Annex L of P&P document? | | Yes Yes | | | |
| b. Are the character shapes attached in a legible form sui | | | | | |
| 6. Who will provide the appropriate computerized font (ordered preference: True Type, or PostScript format) for publishing the standard? <i>Professor R. M. Cleminson, University of Portsmouth</i> | | | | | |
| If available now, identify source(s) for the font (include ad | dross a mail ftp site atc) and indicate | the tools | | | |
| used: Dilyana 1.2, made with FontLab, available from | | | | | |
| 7. References: | | | | | |
| a. Are references (to other character sets, dictionaries, de | escriptive texts etc.) provided? | Yes | | | |
| b. Are published examples of use (such as samples from | newspapers, magazines, or other source | | | | |
| | Yes | | | | |
| 8. Special encoding issues: | | | | | |
| Does the proposal address other aspects of character da | ta processing (if applicable) such as inpu | ut, | | | |
| presentation, sorting, searching, indexing, transliteration | etc. (if yes please enclose information)? | 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 <u>http://www.unicode.org</u> for such information on other scripts. Also | | | | | |
| see http://www.unicode.org/Public/UNIDATA/UCD.html and as | | | | | |
| needed for consideration by the Unicode Technical Committee | | | | | |
| | | | | | |

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)

C. Technical - Justification

| 1. Has this proposal for addition of character(s) been submitted before? Yes | | | | |
|---|-------------|--|--|--|
| If YES explain This proposal supercedes L2/06-042 (26 January 2006) and includes information from L2/06-181. | | | | |
| 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? Proposal prepared under the auspices of the International Con | | | | |
| Slavists' Commission for Computer-Supported Processing of I | Mediæval | | | |
| Slavonic Manuscripts and Early-Printed Books | | | | |
| 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? | Yes | | | |
| Reference: See §D below. | | | | |
| 4. The context of use for the proposed characters (type of use; common or rare) | Various | | | |
| Reference: See §D below. | Vanouo | | | |
| 5. Are the proposed characters in current use by the user community? | Yes | | | |
| If YES, where? Reference: In scholarly and liturgical publications. | | | | |
| 6. After giving due considerations to the principles in the P&P document must the proposed characters | be entirely | | | |
| in the BMP? | Yes | | | |
| If YES, is a rationale provided? | Yes | | | |
| If YES, reference: The cyrillic alphabet belongs within the BMP. | | | | |
| 7. Should the proposed characters be kept together in a contiguous range (rather than being scattered) |)? 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? | No | | | |
| If YES, is a rationale for its inclusion provided? | | | | |
| If YES, reference: | | | | |
| 10. Can any of the proposed character(s) be considered to be similar (in appearance or function) | Vee | | | |
| to an existing character? | Yes | | | |
| If YES, is a rationale for its inclusion provided? | No | | | |
| If YES, reference: | Vee | | | |
| 11. Does the proposal include use of combining characters and/or use of composite sequences? | Yes Yes | | | |
| If YES, is a rationale for such use provided? If YES, reference: See §D below, under individual characters | 703 | | | |
| Is a list of composite sequences and their corresponding glyph images (graphic symbols) provide | d? No | | | |
| If YES, reference: | | | | |
| 12. Does the proposal contain characters with any special properties such as | | | | |
| control function or similar semantics? | No | | | |
| If YES, describe in detail (include attachment if necessary) | | | | |
| | | | | |
| | | | | |
| 13. Does the proposal contain any Ideographic compatibility character(s)? | No | | | |
| If YES, is the equivalent corresponding unified ideographic character(s) identified? | | | | |
| If YES, reference: | | | | |
| | | | | |

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 Its, 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.

ΛΛ CYRILLIC LETTER YN This is a standard character in Rumanian cyrillic, both manuscript and printed. See fig.7.

M a 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 π (which is a variant of Λ 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.

h k CYRILLIC LETTER IOTIFIED YAT This letter occurs in certain early cyrillic texts, in which it is used contrastively with the See fig. 11.

 $\frac{1}{3}$ CYRILLIC LETTER MONOGRAPH UK At present this is unified with cyrillic ψ_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 ψ and \$ (see fig.15). Both historically and in modern Church Slavonic, ψ is also used as a numeral, but \$ is only used as a letter: the two are therefore not interchangeable. Old cyrillic \$ originated as a ligated form of φ_Y , 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 ψ or φ_Y for \$ is an error, and all three characters are required for proper Church Slavonic typesetting. Samples also in figs. 1, 2, and 5.

Lι CYRILLIC LETTER IOTA Used in scholarly literature since the nineteenth century to transcribe glagolitic **π**. See example in fig. 20.

Z³ CYRILLIC LETTER DZELO This is the original form of this letter, the function of which was taken over at a later period by 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.

2² 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 $\frac{1}{5}$ as well!); such texts cannot be adequately encoded without the possibility of distinguishing between these characters. See sample in fig. 22.

'LT_{**L**}**I** CYRILLIC LETTER YERY (FORM WITH BACK JER) The distinction between ${}_{\mathbf{L}\mathbf{L}}$ and ${}_{\mathbf{L}\mathbf{L}}$ 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.

 \hbar 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 *I* and *n*, by analogy with Italian *gl*, *gn*. The *glyph* is the ancestor of 040B/045B Th, but the two characters do not correspond either phonetically or etymologically. 0402/0452 Th was in turn derived from Th in 1819. A cannot be unified with $f_{\rm D}$ because the latter corresponds to it only partially, and besides, the two are sorted differently: \star comes between μ and κ , while $f_{\rm D}$ comes between g and e.

CYRILLIC LETTER BROAD OMEGA This character is found alongside w 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 ω in proper names derived from Greek, in which function it may take the same diacritics as the other vowel characters (cf. on f.93v in the paradigm of *Jonah*, locative \hat{w} TOARTS iconto be regarded as w + diacritic.

X^{**x**} CYRILLIC LETTER BLENDED JUS This character is found in certain Middle Bulgarian manuscripts where it replaces (and eliminates) both π and h. 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.

A^{**A**} CYRILLIC LETTER CLOSED LITTLE JUS This character is found in Old Church Slavonic and Middle Bulgarian manuscripts, and may be used contrastively with \underline{A} : in the Codex Supraslensis (fig.6), for example, \underline{A} represents $\underline{j}e$ and \underline{A} represents \underline{e} . There is thus a distinction in sound and meaning between the two.

 $\mathbf{H}_{\mathbf{H}}$ CYRILLIC LETTER IOTIFIED CLOSED LITTLE JUS In many manuscripts following an orthographical system where \mathbf{A} represents a non-jotated vowel, \mathbf{H} represents the corresponding prejotated vowel.

OIA 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 IO₁₀. 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 r_b and r_b (a common situation in late mediæval Russian archival materials). See figure 18. Cf. C.И. Котков, «О совместном издании древнерусских скорописных памятников лингвистами и историками», *Лингвистическое источниковедение*, Москва, 1963, 16-17.

 Z_{3} CYRILLIC LETTER EARLY ZE This is the form found in the earliest sources, replaced in more recent ones by 3_{3} . Sixteenth-century and (in Moscow) seventeenth-century alphabets invariably include both forms (fig.1), and there are printed books in which both occur.

OV CYRILLIC CAPITAL LETTER OU This is the all-caps form of Oy, U+0478 (see fig. 10).

⁵ 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).

⁵ 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 π_{depkTb} and the other \check{e}_{pHkTb} , 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 MHASAM, the penultimate word of this example. COMBINING BREVE is narrower than the CYRILLIC COMBINING KAVYKA.

COMBINING CYRILLIC TEN MILLIONS SIGN Written around a numeral to indicate that number × 10⁷.

 \Box COMBINING CYRILLIC HUNDRED MILLIONS SIGN Written around a numeral to indicate that number × 10⁸.

["] 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.

^a 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.)

- \hbar should follow U+0475 v²
- If should follow U+044E ω^3
- Its should follow U+0463 ts4

& should follow U+0479 or be sorted the same as it⁵

- ι should follow U+0457 ι⁴
- χ should precede U+0455 s or be sorted the same as it ⁵

 $[\]dot{z}$ should follow U+0455 s or be sorted the same as it⁵

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.

 ${}^{\prime}\!{\bf h}I$ should precede U+044B ${}^{\prime}\!{\bf h}I$ or be sorted the same as it 6 Å should precede U+043A κ^{2} ω should probably be sorted with U+0461 w⁵ **X** should follow U+046B π^4 A should follow U+0467 π^4 **I** \mathbf{A} should follow \mathbf{A}^4 OI should follow U+044E ω^4

b should be sorted as U+044A ${}_{\rm T\!A}{}^6$ ${\bf Z}$ should be sorted as U+0437 35 ${}_{\rm O\!V}$ should be sorted as U+0478 ${}_{\rm O\!Y}.$

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.

TABLE XX – Row xx: Additional Cyrillic

| | xx0 | xx1 | xx2 |
|---|-----|--------|--|
| 0 | Ψ | ħ | ОY |
| 1 | Λ | ħ | s |
| 2 | RI | ω | s |
| 3 | ы | ယ | J |
| 4 | њ | Ж | 0 |
| 5 | 眩 | Ж | $x \stackrel{x}{\underset{x}{\overset{x}{\overset{x}{\overset{x}{\overset{x}{\overset{x}{\overset{x}{\overset$ |
| 6 | y | Α | 0 |
| 7 | 8 | Α | % |
| 8 | l | Ю |) () |
| 9 | l | Ю | |
| А | Z | Ю | |
| В | z | બ | |
| С | S | Ъ | |
| D | S | b | |
| Е | ЪΙ | Z Z | |
| F | Դ | ζ | |

TABLE XX – Row xx: Additional Cyrillic

Hex Name 00 CYRILLIC CAPITAL LETTER YN; Lu;0;L;;;;N;;;;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;;;;XX0B; 0B CYRILLIC SMALL LETTER DZELO; LI;0;L;;;;;N;;;XX0A;;XX0A OC CYRILLIC CAPITAL LETTER REVERSED DZELO; Lu;0;L;;;;;N;;;;XX0D; 0D CYRILLIC SMALL LETTER REVERSED DZELO; LI;0;L;;;;N;;;XX0C;;XX0C 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; 11 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;;;;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;;;;;;;;;;;; 22 COMBINING CYRILLIC PAEROK;Mn;232;NSM;;;;;N;;;;; 23 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.1 1574 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.



fig.2 1631 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.

Проещдія. Препина 10: 31121 A 2 1004 ner вопроен METH Ma MALKAW 01

fig.3 1631 Primer.

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

Ο ΓΛΕξΙΛΟ **JXXOINO** G NOVETKA , H CHAPXE HUBOTE VOURVANCKOTA. Pasentaeno, H paspikeno & nernanecr разгопора , абсто и печесет 480на, алити с8мћан Поглапнтих. SVRANIN MIRS MELLOOM , HANITO-THE SALINEROW НСТОМАУ СНО НЗ НЕЛКА НТАЛНАМ-CKOF4,8 C4 DHNCKH. -1.21 SHMETYHEX. NAAXKH По Нарк в Аннамн Антрар в марцари плиз спетога Нарка. 0 w uncertate l'Imeganige . 121.1

fig. 4 *Ogledalo duhovno*, Venice, 1628. Examples of CYRILLIC LETTER DJERV

ά. Πέρβοε ού τω αλόβο κοτβορήχα ώ Βετάχα, 3 Φεόφίλε,

в. Даже до дне, въ бньже запов давъ Яптолима Дхома стыма, йхже избрд, вознесеся :

Г. Пред нимнже й постави себе жива по страдании своема, во мнозъха йстинныха знамениха, денми четыредесатми гавлялся йма, и глаголя, гаже и царстви Бжии:

4. Ся нимиже й гадый повел ймя й Гервалима не шлячатися, но ждати бетованія Оча, ёже слышасте ю мень:

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.

BAIRT'SOT'ANEPO HAKEBBERY SNACK BY KACA EXT'S. ON'S XEPEYEPAAPOA HITEK AEXHKETA BBPPAANE HAHEBEECH HPPAAN HRIANEKCI HICOLHICOPACTO ATTANEXA OVICEOIX ONH pr manaphikokkokkha, k NANAPHYAHTACA HNOROKOFTOTTOAKOKICACEDIUHAIKH

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.

ЖК TOHK

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).

Благодарение на голѣмы-ты жрьтвы, които почитаема-та Госпожна Марим Н. Герова принесе, рѣчникъ-тъ можна да излѣзе докрай въ духа и начрьтание-то, което покойный-тъ му авторъ быле нарядилъ. Съ тѣзи си жрьтвы Госпожна Марим Н. Герова въздигнж несъкрушимъ памятникъ на покойным си съпругъ и изплъни най-добросъвѣстно задлъженимта, които той имаше камъ народа си, а тна сама заслужи най-голѣмж хвалж и благодарность.

fig. 9 Najden Gerov, *Р*[±]уникъ 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.

Къ Правосла́внымъ Роди́телемъ, Воспита́телемъ, Оун́и́телемъ, Приста́вникшмъ, Госпо́дїямъ, Дхо́внымъ Ша́стыремъ, й вскать про́чїимъ Настоя́телемъ, й ймя о́те́ческое надъ ма́лыми о́троками носм́щимъ:

fig. 10 (a)

w Hagingt.

38. В. ГАКТ ЖЕ ВУДЕШЬ ПРИЗЫВАТИ СТАГШ АХА ЛАСКУ, Й ПО́МОЩЬ? СЭ: НА ПОЧАТКУ МО-ЛИ́ТЕЫ ПРЕКРЕСТИ́ВШЕСА, Й РУКИ БХ ЄДНШ СЛОЖИ́ВШЕ: НАЙПЕ́РВЪЕ ЗА́ЧНУ МА́ТВУ: ЦР́Ю НЕ́НЫЙ ОЎГЬ́ШИТВЛЮ Й ПРШ́Ч: СТ́ЫЙ БЖЕ, Й ПРШ́Ч: ПР́ТА́А ТР́ЦЕ, Й ПРШ́Ч:

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).

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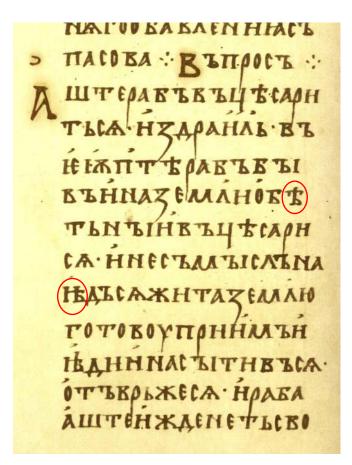


fig. 11 Izbornik of 1073.

The top example is of an ordinary CYRILLIC LETTER YAT, the lower example of CYRILLIC LETTER IOTIFIED YAT.

BT HT

Fig.12 Athos, Zographou Monastery, MS III6 6, f.61v. This example shows the CYRILLIC PAEROK.

Предстоя́тель: Рце́мя н ๊ѡ нн́хя. Гдн помн́л8н, трнякды. Илтвами стыха Отеца нашиха, съ греч. щ себѣ самѣхъ.⊙ глн

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

Оўкы мн блёдномё, оўкы мн і кн Окалномё: такш рёц простираю ка кн мойма дрёг шма, й слёзы ш отію проливаю, но никтоже милёл мд. Fig. 14 Euchologion, Moscow, 1906, f.121.

Example of COMBINING CYRILLIC KAVYKA and (in the penultimate word) COMBINING BREVE.

T 06 1101 B PR duno w 110 701110 d 00 OHMAN 0 em Ζ, INFILM ALL O. a. a. bully u John Rou ()0 6.00 R A и aHea ATTTHMIN 4 C CH CA OMANTO Kun 0 10 4 HIK (A DOMNILL 00 INTITIO 16 Lin ٥ 6 n J H 1 sid m aul HA d md ((11) (0,00000 KANHO x1 in THANKIS à H 0 A LLLO Q x 66 Mars Jhon molio YTTE tth 3 10 J 10 DOWIN Prd Sumis A 0 (A MAILO A 8 Bal T Ó 1 64 OX H ç Tand 8 ŏ ami 10 Tian ð an 820 +1 Derano mai numi Chi u aisd Anno

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.

H: ON Y ON SULLONR SYTTLE

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

ЩНПІОТИЬ СІНАМЕНТА А А ШНУБОТРАЦЕ ТЬЮПОВИПЬНЦЬПА А А ШНУБОТРАЦЕ ТЬЮПОВИПЬНЦЬПА А А ШНУБОТРАЦЕ ТЬЮПОВИЛЬНУБ ТОГАНЬ ОВЪЩАВЬ ВЕНН

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

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А. И. БЕЗОБРАЗОВ АЛЕКСЕЮ МАТВЕЕВИЧУ

| л. 537 | Приятел мои гсдрь и добродеи Алеžѣи Ма|твеевичь здраєствуи о Хрсте на веки і пребы|ваи во всяких радостях и с теми кто тебѣ прия|телю моему всякого добра желает и здоровя | твоего остерегает¹ Пожалуи прикажи ко мне писат о своемъ здорове а я слышат про

твое | здоровье всегда желател¹ |

Челом гсдрь бью | за пъремъногою твою къ бе² милосьти что по съвоемо милосеръдо мо милосьтивомо вомотъренью³ учнилъ⁴ мне въ людехъ указъ и я за тъвою къ се бе милосъть вечьнои тебе⁵ работникъ⁶ |

И о техъ гсдрь людехъ посълалъ я людише къ своихъ зъ гсдревою грамотою уди ви милосъть гсдрь мои нада мъною | даи мне милосъть свою на веки по мънить учини меня себе вечьны мъ работъникомъ⁷ |

И я послал для тех⁸ беглых людеи люди|шек своих а с ними послал я⁹ пожалуи приятел | мои 8 диви надо мною млсть свою пошли для | тех моих беглых людеи пристава і пожа|луи¹⁰

А семъ писав вечнои твои работник Андрюшка Бѣзо|бразов со бпрошениемъ челомъ бью не пре|зри приятел мои ббогова моево прошения | к себѣ водше

Моск. ст., стб. 599, л. 537

¹⁻¹ Написано на левом поле, вставка; далее зачеркнуто челомъ гсдрь бъю за премногую твою к се|бѣ млсть что жалуеш (далее буква не читается) ом крстьяннишек | нших 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., милосытивом\$ вомотъренью

Fig. 18. Examples of UNDIFFERENTIATED JER from a 17th-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.

стка данійла ду а тыба жаєть YEANV COIN BOITINHAITTE 8本1111に18 FH 661 Example 1 ABAAWAA6, ABO KT 10 ala 61 HA TO HES **m**6 X 18 oki Н Example 2 и пти / Π. IH B TIHAO ពោម YMH9 ресадикила хто силитенши нара Π

Example 3

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.

I въ третии день бракъ быстъ въ кана галилеисции. с бъ мати исва тоу. Зъванъ же быстъ исъ. (1) бученици его но 14 Бракъ. (1) NELOCTAВЪШЮ ВИНОУ. ГЛА МАТИ ИСВА КЪ NEMOY. ВИНУ

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.



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.

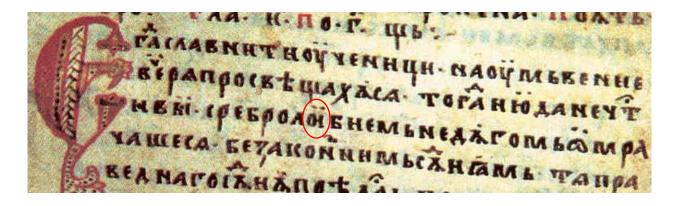


Figure 23. Zagreb, HAZU, IV d.107. Example of CYRILLIC LETTER REVERSED YU.