To: The Unicode Technical Committee

From: Deborah Anderson on behalf of Prof. Ralph Cleminson (Professor of Slavonic Studies, University of Portsmouth) and Prof. David Birnbaum (Department of Slavic Languages and Literatures, University of Pittsburgh)

Date: 8 May 2006

RE: Request to Change Glyphs for U+0485 and U+0486

We request that the glyphs be changed for two characters: U+0485 COMBINING CYRILLIC DASIA PNEUMATA and U+0486 COMBINING CYRILLIC PSILI PNEUMATA.

Background

Cyrillic took over the breathing marks from Greek, and they resemble the Greek ones (U+0314 and U+0313). However, the marks don't represent breathing (or any other sound) in Cyrillic, but Slavs wrote them nevertheless.

Discussion of the Correct Shape

The smooth breathing [PSILI] mark may be rotated from its default (Greek) position 90 degrees counter-clockwise in some cases. This rotation is not dependent on whether it is combined with an acute; smooth breathing may be either in its Greek orientation or rotated both when it appears alone and when it is combined with acute (or, for that matter, grave). The most neutral representation (that is, the one David Birnbaum would recommend for use for illustrative purposes on the Unicode web site, for example) is like the Greek smooth breathing, both in isolation and when combined with other diacritics, but both orientations are found in authentic sources. See samples below (pages 2-3).

According to Alexej Kryukov, the rough breathing [DASIA] mark may be rotated clockwise. (See the font Kliment Std sample below)

On the Current Glyphs

David Birnbaum states, "I have never seen anything that looks like the current 0485 and 0486 glyphs in any Cyrillic document," and Ralph Cleminson adds, "[the 0485 and 0486 glyphs] bear no resemblance to anything ever seen in any cyrillic text."

Glyph Samples from Current Historic Slavic Fonts

Samples of the glyphs from the font Dilyana by Ralph Cleminson showing what should be the default glyphs:

COMBINING CYRILLIC DASIA: 'COMBINING CYRILLIC PSILI: '

Variant forms from the font Kliment Std by Sebastian Kempgen:

COMBINING CYRILLIC DASIA:

COMBINING CYRILLIC PSILI:

Examples

Numerous examples of PSILI are present in documents, but DASIA is much harder to find. According to Alexej Kryukov, it is extremely rare in manuscripts, but should in any event, look like a reversed PSILI. Only examples of U+0486 PSILI are provided below.

1. Default glyph shape for PSILI

Ογκώ ΜΗ ΕΛέλΗΟΜΕ, ογκώ ΜΗ Ε΄ ΕΗ Θκακηομέ: ιάκω ρέμτ προστηράω κα ΕΗ Μοθμα Αρετώμα, ή ελέβω Ѿ Θτίω προληβάω, нο ημκοτόκε μήλελή μλ.

Fig. 14 Euchologion, Moscow, 1906, f.121

2. Variant shape for PSILI

CI TARAGHEG HACTO

AUIA CEA KHHITH

RETURNE AHCTE E

CO TACUTE HELL AH A DE

CO TOCTTE CTEI ATTA AH EI

CO TOCTTE COE HOAT AH E

CO TOCTTE COE HOAT AH E

Малый домашний Устав. Москва.: Преображ. богад. дом, 1910. Fol. 1.

3. Both shapes (in "Ex. 1")

Ex. 1

Ex. 2

HEMIBAMINKIE ZBAAIÝ (BIH BEITIAHAEMTE • HEHEEM HAMBAMINKIE ZBAAIÝ (BIH BEITIAHAEM HACHAS MON BEIAÍ GET THE THE THE TO HEBHER) THE COMING THE THE THE THE THE COMING OF ALTER KIMING OKIAN MÁAGIZIS PÉTË TIPÁLEI HEZEÍTATH) IÝTHHHMH MIBAIS • ALEMEN TACITSWÍKTS HÂTSCA KAMH TICITÁBACHGIH BHAMTH ZHMPITO AHCA IÝKAÂ HICITH AOMHENTH THE MENÍST TIPALSHAMH THE MITHAS ANTO CHAHEMWÍK HAPA

fig.ii: Otpis na list Ipatija Potija, Ostrih, 1598

Ex. 1 shows smooth breathing (legkaja), APOSTROF, and grave (varia). Note that the smooth breathing has a glyph variant in which it is rotated 90 degrees counterclockwise.

Ex. 2 shows an acute (oxia), smooth breathing (legkaja), and the ISO.