

To: The Unicode Technical Committee / For consideration by WG2  
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, REVISED 4 August 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. They do serve an orthographic function, indicating (broadly speaking, as there are variations over the ages) a vowel in initial or post-vocalic position.

*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. (Ralph Cleminson states that the "rotation" should more accurately be regarded as the result of making the starting point of the mark when it is written lower.)

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. 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: ˆ

COMBINING CYRILLIC PSILI: ˆ

### 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.

#### 1. Default glyph shape for PSILI

Оуѣкы мнѣ владнѡмѡ, оуѣкы мнѣ ѿ  
 оуѣкнѡмѡ: ѿкъ рѡцѣ простирѡю къ  
 моймѡ дръгѡмѡ, ѿ слѣзы ѿ оуѣю  
 проливѡю, но никтоже мнѡмѡ мѡ.

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

#### 2. Variant shape for PSILI (in SQUARES)

ОГЛАВЛЕНІЕ НАСТО  
 АЩІА СЕА КНИГИ .  
 ИЗВѢЩЕНІЕ . ЛИСТЪ Б .  
 ѿ велико постѣ . ли ѿ ѿ .  
 ѿ пасцѣ ѿ ѿ . ли ѿ .  
 ѿ постѣ стѣ апл . ли ѿ ѿ .  
 ѿ прочи днѣ всегѡ лѣта ѿ ѿ  
 ѿ постѣ сре ѿ ѿ . ли ѿ .

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

## 3. Both shapes (in “Ex. 1”)

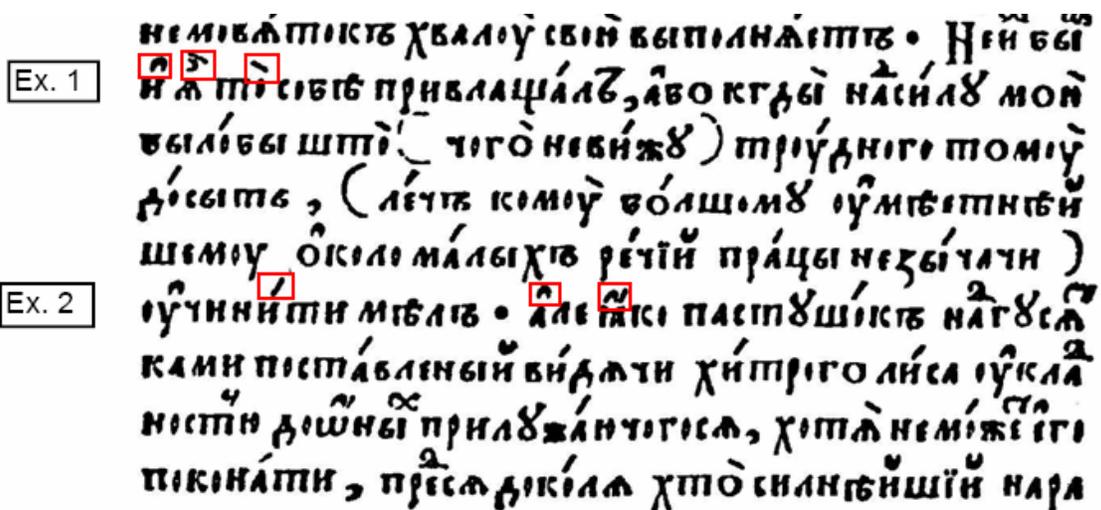


fig.ii: *Otpis na list Ipatija Potija*, Ostrih, 1598

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.

4. Example of Dasia (from a late 13th-century Serbian manuscript, Budapest, OSzK, Fragm. Eccl. slav. 3)

