The glyphs on the first page are incorrect, we do not have the correct font got printing that.

## **Greek Section**

0. These are the correct shapes of obsolete Greek characters (note that small and capital forms differentiate cardinal resp. ordinal numerals):

0.1. Digamma [DÀgamma] (narrow sense) = Fau, Vau, Wau [VaÒ]:

## Vv V8 'V9

0.2. Stigma [{Àgma]:

{[

0.3. Koppa, Qoppa [|Ëppa]:

```
\left| \right\rangle
```

```
0.4. Sampi [}ampÂ] = San [},n]:
```

}]

Fau and Stigma are both Digammas (wide sense); the «doubled» element is clearly visible in capital forms.

Sampi means «San like Pi» or «Pi sounding San».

# Cyrillic Section

Too a great many of modifications are to be done in what concerns the Cyrillic part of the document discussed, so I have grouped them in several levels (steps) that may be taken into consideration in an independent way.

0. Here the current proposal is repeated (with correction of obvious errata marked red) in somewhat summarizing form:

аА ӑӐ ӓӒ әӘ ӛӚ ӕӔ бБ вВ гГ ғҒ 㥠ҕҔ дД ђЂ ҙҘ ѓЃ еЕ (, ёЁ) ӗӖ єЄ ҽҼ ҿҾ жЖ ӂӁ ӝӜ җҖ зЗ ӟӞ ѕЅ ӡӠ иИ ӥӤ ӣӢ іЇ їЇ йЙ јЈ кК ҟҞ кК қҚ ҡҠ ӄӃ лЛ љЉ мМ нН њЊ ңҢ ҥҤ ӈӇ оО ӧӦ ѳѲ ӫӪ ҩҨ пП ҧҦ рР сС ҫҪ тТ ҭҬ ћЋ ќЌ уУ ўЎ ӱӰ ӳӲ ӯӮ үҮ ұҰ фФ хХ ҳҲ һҺ цЦ ҵҴ чЧ ӵӴ ҹҸ ҷҶ ӌӋ џЏ шШ щЩ ъЪ ыЫ ӹӸ ьЬ эЭ юЮ яЯ І 1.0. First of all I believe necessary to restitute  $\pm \overline{B}$ ,  $\Theta \Theta$  and vV, for nowadays these try to be extensively used, mostly for editing and advertizing purposes.

ѣ <cyr\_yat> <U0463>

CYRILLIC SMALL LETTER YAT

 $B < cyr_yat > <U0462 >$ 

CYRILLIC CAPITAL LETTER YAT

 $\Theta < cyr_fita > <U0473 >$ 

CYRILLIC SMALL LETTER FITA

 $\Theta < cyr_{fita} > U0472 >$ 

CYRILLIC CAPITAL LETTER FITA

V <cyr\_izhitsa> <U0475>

CYRILLIC SMALL LETTER IZHITSA

V <cyr\_izhitsa> <U0474>

#### CYRILLIC CAPITAL LETTER IZHITSA

1.1. The second necessary item is the addition (at least for the purpose of further consideration) of some new Cyrillic characters (Bulgarian-Macedonian GRAVEd vowels and Kildi Saami voiceless (con)sonants plus 33 after semi-palatalized dentals) already accepted by the UniCode:

 $\dot{e}$  <cyr\_ie\_with\_grave> <U0450>

#### CYRILLIC SMALL LETTER IE WITH GRAVE

È <cyr\_ie\_with\_grave> <U0400>

#### CYRILLIC CAPITAL LETTER IE WITH GRAVE

 $\dot{\mathcal{H}}$  <cyr\_ii\_with\_grave> <U045D>

#### CYRILLIC SMALL LETTER II WITH GRAVE

 $\dot{M}$  <cyr\_ii\_with\_grave> <U040D>

#### CYRILLIC CAPITAL LETTER II WITH GRAVE

 $\breve{H}$  <cyr\_short\_i\_with\_descender> <U04CA>

#### CYRILLIC SMALL LETTER SHORT I WITH DESCENDER

 $\breve{\mathbf{M}}$  <cyr\_short\_i\_with\_descender> <U04C9>

#### CYRILLIC CAPITAL LETTER SHORT I WITH DESCENDER

 $\Lambda < cyr_l_with_descender > < U04C6 >$ 

#### CYRILLIC SMALL LETTER EL WITH DESCENDER

 $\Lambda$  <cyr\_l\_with\_descender> <U04C5>

#### CYRILLIC CAPITAL LETTER EL WITH DESCENDER

 $M < cyr_m_with_descender > < U04CE >$ 

#### CYRILLIC SMALL LETTER IE WITH DESCENDER

 $M < \!\! \text{cyr_m_with}_\text{descender} \! > \! < \!\! \text{U04CD} \!\! >$ 

#### CYRILLIC CAPITAL LETTER IE WITH DESCENDER

 $p \text{ [or } p\text{] (better than } p) < cyr_r_with_tick > < U048F >$ 

#### CYRILLIC SMALL LETTER ER WITH TICK

[this «TICK» makes a result of designer's mere æsthetical in(cap)ability to provide a good-looking symbol face for the combination p plus DESCENDER]

P (better than P) <cyr\_r\_with\_tick> <U048E>

#### CYRILLIC CAPITAL LETTER ER WITH TICK

[the «TICK» is machanically transposed to the capital form instead of adding a DESCENDER that causes no difficulty in the case]

 $\ddot{\mathbf{9}}$  <cyr\_e\_with\_diaeresis> <U04ED>

#### CYRILLIC SMALL LETTER E WITH DIAERESIS

 $\tilde{\Theta}$  <cyr\_e\_with\_diaeresis> <U04EC>

CYRILLIC CAPITAL LETTER E WITH DIAERESIS

1.2. For the same reason (i. e. for future considerability) here I fill several striking gaps in rendering modern Cyrillic-writing languages by the UniCode repertoire, namely:

[Kurdish uvular voiceless stop:]

 $q < cyr_q > < U04; FD? >$ 

CYRILLIC SMALL LETTER Q

```
Q < cyr_q > <U04;FC?>
```

CYRILLIC CAPITAL LETTER Q

[Kurdish bilabial resonant:]

 $W < cyr_w > < U04; FF? >$ 

CYRILLIC SMALL LETTER W

 $W < cyr_w > < U04; FE?>$ 

CYRILLIC CAPITAL LETTER W

[Karachay bilabial resonant:]

 $\dot{y} < cyr_u_with_accent > < U04; F7?>$ 

CYRILLIC SMALL LETTER U WITH ACCENT

 $\dot{V}$  <cyr\_u\_with\_accent> <U04;F6?>

#### CYRILLIC CAPITAL LETTER U WITH ACCENT

[the shape of the ACCENT mark varies considerably between the above-shewn OVERCOMMA and a plain ACUTE via a vertical ICTUS mark like some modern (monotonic) Green TONOS «intermediate» between OXIA and VARIA, with an uncertainty of the vertical position whether or not immersing between the upper serifs with the diacritic's tale]

[Kildi Saami denotion of the semi-palatalization of dentals:]

b<cyr\_halfsoft\_sign><U04¿FB?>

CYRILLIC SMALL LETTER HALFSOFT SIGN

**b** <cyr\_halfsoft\_sign > <U04;FA?>

CYRILLIC CAPITAL LETTER HALFSOFT SIGN

[this is <u>NOT</u> <cyr\_yat> (ѣѢ)!!! this is a struck-through <cyr\_soft\_sign> with the somewhat lengthened vertical stroke, see e. g.: Саамско-русский словарь. 8000 слов. Под ред.

Р. Д. Куруч. Москва, «Русский язык», 1985]

[Minimal (most important) addendum to Russian «historical letters»:]  $\ddot{B} < cyr_yat>; < DIAERESIS> < U04;8B?>$ 

 $\label{eq:cyr_yat} CYRILLIC SMALL LETTER YAT WITH DIAERESIS \\ \ddot{\mathbf{b}} <\!\! cyr_yat\!\!>\!\! ; <\!\! DIAERESIS\!\!>\!\! <\!\! U04;8A?\!\!>$ 

CYRILLIC CAPITAL LETTER YAT WITH DIAERESIS

[not rarely used to indicate 🗄 pronounced as ëË]

∵ <cyr\_izhitsa>; <DIAERESIS> <U04¿8D?>

CYRILLIC SMALL LETTER IZHITSA WITH DIAERESIS

 $V < cyr_izhitsa>; < DIAERESIS> < U04; 8C?>$ 

CYRILLIC CAPITAL LETTER IZHITSA WITH DIAERESIS

[meaning mostly the syllabicity of vV, something similar to  $\ddot{y}\ddot{Y}$  in German or French]  $\widehat{IO} < cyr_ie>; < SUBSTITUTE>$ 

CYRILLIC SMALL LETTER / LIGATURE IO>

IO <cyr\_ie>; <SUBSTITUTE>

CYRILLIC CAPITAL LETTER / LIGATURE IO>

[the predecessor of ëË before its invention by N. M. Karamzin in his «Poor Liza» (1792)]

There still remain a great many of other un-enUniCoded glyphs, including Cyrillic ones (vowels with macron, «historical letters» for numerous Fenno-Ugric, Turkic and some other languages, accented vowels involving the just mentioned «historical» ones, and many others). Sooner or later — shall we ever see them treated legally?

These candidates will be referred to in blue. So we get in this step (revived letters in purpure, legal additions in emerald):

aA ăĂ äÄ əƏ äÖ æÆ бБ вВ wW гГ ғҒ 㥠ҕҔ дД ђЂ ҙҘ ѓЃeE(, èÈ, ëË, folO) ěĚ єЄ ҽҼ ҿҾ жЖ ӂӁ ӝӜ җҖ зЗ ӟӞ ѕЅ ӡЗиИ(, ѝЍ) ӥӤ ӣӢ іЇ їЇ йЙ ҋҊ јЈ кК ҟҞ кК қҚ ҡҠ ҕӃ qQлЛ љЉ дД мМ мӍ нН њЊ ңҢ ҥҤ ӈӇ оО öÖ өӨ öÖ ҩQпП ҧҦ pP pP cC ҫҪ тТ ҭҬ ћЋ ќЌ уУ ўЎ уЎ ӳЎ ӯӮ үҮ ұҰфФ хХ ҳҲ һҺ ҵЦ ҵҴ чЧ ӵӴ ҹҸ ҷҶ ӌӋ ҵЏ шШ щЩъЪ ыЫ ӹӸ ьЬ ҍҌ ѢѢ(, ѢѢ) эЭ ӭӬ юЮ яЯ ѳѲ ѵѴ(, ѷѶ) І

2.0. The needed reordering itself may also be divided into some levels according to its «inevitability».

Phonetic arguments exposed below will do their best resulting in that plenty of forms of

a) the same words written differently

aa) for technical purposes (lack of typesetting means to render «non-standard», i. e. not Russian characters),

ab) due to non-stop orthographic reforming (so characteristic to Soviet / Russian cultural doc-trine),

b) cognate word-forms from different languages,

c) borrowed, transliterated &c. lexemes

will meet (or at least get closer) after the sorting done.

2.1.0.0. The Abkhaz Cyrillic alphabet is ordered as follows («{}» denote Bzyb dialect sounds, льЛь is used in borrowings only):

аА бБ вВ гГ гьГь гуГу ҕҔ ҕьҔь ҕуҔу дД дәДә еЕ жЖ жьЖь жәЖә зЗ {зьЗь зьәЗьә} ӡЗ {ӡьЗь} ӡәЗә иИ кК кьКь куКу қҚ қьҚь қуҚу ҟҞ ҟьҞь ҟуҞу лЛ <льЛь> мМ нН оО пП ҧҦ рР сС {сьСь сьәСьә} тТ тәТә ҭҬ ҭәҬә уУ фФ

#### хХ {<u>хХ</u>} хьХь хуХу {<u>хуХ</u>у} ҳҲ ҳәҲә ҵЦ {цьЦь} цәЦә ҵҴ {ҵьҴь} ҵәҴә чЧ ҷҶ ҽҼ ҿҾ шШ шьШь шәШә ыЫ ҩҨ џЏ џьЏь [ьЬ әӘ]

[e. g. refer to: *K. С. Шьакрыл, В. Х. Концьариа*, Аҧсуа бызшәа ажәар. Актәи том. А — О. Актәи атыжьра. «Алашара», Ақуа, 1986, р. 12; some other works on the Abkhaz language but **not** dictionaries (the only valuable sources because of **sorting** data provision) may present an ordering differing from the just cited one, and thus being the source of the letter order implying the outcoming one, cf. e. g. in: *B. А. Амų*-*Пуҳ*, *P. К. Гублиа*-*Пуҳ*, Аҧсуа бызшәа. Афонетика, аморфологиа. Актәи атыжьра. «Алашара», Ақуа, 1986, р. 57; or in: *P. С. Гиляревский, В. С. Гривнин*, Определитель языков мира по письменностям. Издание третье, исправленное и дополненное. «Наука», Москва, 1964 and 1965:

аА бБ вВ гГ гьГь гуГу ҕҔ ҕьҔь ҕуҔу дД дәДә џЏ џьЏь еЕ ҽҼ ҿҾ жЖ жьЖь жәЖә зЗ {зьЗь зьәЗьә} зЗ {зьЗь} зәЗә иИ кК кьКь куКу қҚ қьҚь қуҚу ҟҞ ҟьҞь ҟуҞу лЛ <льЛь> мМ нН оО @@ пП ҧҦ рР сС {сьСь сьәСьә} тТ тәТә ҭҬ ҭәҬә уУ фФ хХ {<u>хХ</u>} хьХь хуХу {<u>хуХ</u>у} ҳҲ ҳәҲә цЦ {цьЦь} цәЦә тҳҴ {тцьҴь} тҳәҴә чЧ чҶ шШ шьШь шәШә ыЫ [әӘ ьЬ]; тәТә and ҭҬ are marked red for they are **missing** in the first mentioned source.]

[2.1.0.0.1. The characters bb and  $\partial\partial$  have **no** self-standing sound or graphical value and are used as analytically constructed diacritics, whence it is clear that their final position in the alphabet (as well as their relative order) is only the means of providing the correct ordering of numerous composed letters. The same rôle is performed by yY after gutturals, which proves that it is impossible to replay the whole alphabet as containing no compound letters and with bb and  $\partial\partial$  as normal full-weight characters.]

2.1.0.3. As to QQ, it is actually surely **not** on its place. We see that in native usage it is situated, together with UU(-group), at the **end** of the alphabet (in proper sense of the latter word, not taking into account the pure diacritical characters bb and  $\partial \partial$ ), which seems to be the correct decision for this letter. Its sound value (labialized and somewhat palatalized '*ayn*) rather approves such a decision (anyway its parent sounds may be claimed consonantically used y (= [w]) and  $\chi\partial$ , not o).

2.1. Serbo-Croätian and Macedonian letter pairs  $h\bar{b}$  and  $h\bar{h}$  resp.  $f\dot{\Gamma}$  and  $k\dot{K}$  must stay neighbour. These couples denote the same sounds and are etymologically equivalent. They are sorted identically in traditional lexicography (namely, after AA and TT respectively); they stay for one another in rendering forms of one language «in terms» of the other. They occupy the same positions in the encoding JUS 1.B1.003-serb (ISO 146) resp. in JUS 1.B1.003-mac (ISO 147) &c.

2.2. (From one side,) Ukrainian  $\Gamma \Gamma$  will better stay close to usual  $\Gamma \Gamma$  as being *de facto* its optionally used sub-kind.

2.3. (From the other,)  $\mathbf{FF}$  and  $\mathbf{F}\mathbf{h}$  stay better near one another because of their functional identity and interchangeability (in inter-Turkic relations of any kind — rendering, comparison &c.).

2.4. The forms  $\kappa K$  and  $\kappa B$ , the same as  $\kappa H$  and  $\kappa H$ , constitute not more than the poles in the continuous chains of varieties as to the shape of the descender / tail. Some of these species are even hardly attributable as belonging to  $\kappa K$  or  $\kappa B$  resp.  $\kappa H$  or  $\kappa H$  families. That is why these characters must be kept close. Kildi Saami seems to be the only idiom distinguishing between  $\kappa H$  (voiceless [n]) and  $\kappa H$  (velar nasal).

2.5. Azerbaijani  $\kappa K$  meaning [g] has nothing in common with (Turkic)  $\kappa K$ ,  $\kappa B$ ,  $\kappa K$  and  $\kappa K$  that stand for [q] or alike, so it must not intercalate them. Placing it to the end of the sub-group resolves the situation.

2.5.1. By analogy  $\Psi \Psi$  will travel to the end of its division. But more important is the release of  $\Psi \Psi$  (Abkhaz abruptive  $[t\check{s}^{?}]$  — voiced  $[d\check{z}]$  in the rest) that may now drop between  $\ddot{\Psi} \ddot{\Psi}$  (Udmurt non-palatalized **voiceless**  $[t\check{s}]$ ) and the **voiced**  $[d\check{z}]$ -micro-group ( $\Psi \Psi \Psi \Psi$ ).

2.6. At last for the group,  $\kappa K$  due to its phonetic ambiguity (Abkhaz [k<sup>h</sup>] — [q] in the rest) will be better moved to the border of diacritically marked zone, dragging  $\beta B$  as its closest relative. Formally this is achieved with moving Abkhaz  $\kappa K$  to the end of uvular ([q]) sub-family.

2.7. It seems reasonable (and is partially realized — cf. æÆ and ee, ee) that ligatures follow simple (<u>+</u> diacriticized) forms, for they may be sorted as character sequences; so  $J_{A}J_{A}$ ,  $I_{B}H_{A}$  are to be moved to the end of their groups; with  $I_{F}H$  everything occurs *déjà fait*.

2.9. Tajik  $\overline{\mu}\overline{H}$  is merely an orthographic trick to denote final non-izafet [i], so it is to be closest to plain  $\mu H$ , [After this move Udmurt (Votyak)  $\ddot{\mu}\overline{H}$  and Komi il with **identical** meaning (the absence of palatalization before [i]) become adjacent.]

2.10. Analogously Tajik  $\bar{y}\bar{y}$  will suit better after yY being neither [w] nor [ü] as the rest of the yY-group.

Thus, we obtain (moved forward in magenta, backward in green):

#### [Minimal Collating]

aA ăĂ äÄ əƏ öÖ æÆ бБ вВ wW гГ ґҐ ғҒ ҕҔ дД ђЂ ѓЃ ҙҘ<br/>еЕ(, èÈ, ëË, îôlO) ěĔ єЄ жЖ ӂӁ ӝӜ җҖ зЗ ӟЗ sS ӡЗ<br/>иИ(, ѝЍ) ӣӢ ӥӤ іЇ їЇ йЙ ҋҊ јЈ кК қҚ ӄӃ ҡҠ ҟҞ ҝК qQ<br/>лЛ дД љЉ мМ мӍ нН ңҢ ӈӇ ҥҤ њЊ оО öÖ өӨ öÖ<br/>пП ҧҦ pP ҏҎ cC ҫҪ тТ ҭҬ ћЋ ќЌ уУ ӯӮ ўЎ уЎ уЎ ӳӲ үҮ ұҰ<br/>фФ хХ ҳҲ hҺ цЦ ҵҴ чЧ ӵӴ чҶ ӌӋ ҹҸ ҽҼ ҿҾ џЏ шШ щЩ<br/>ъЪ ыЫ ӹӸ ьЬ ҍҌ ѣѢ(, ѣѢ) эЭ ӭӬ юЮ яЯ өѲ vV(, vV) ҩQ l

It becomes clear that within a level we have obtained a fixed order of diacritics / modifiers: <GRAVE> <UPTURN> <MACRON> <BREVE> <ACCENT> (<«COMMA\_ABOVE»> or alike)

```
<DIAERESIS>

<DOUBLE_ACUTE>

<DESCENDER> or <TICK>

<«LEFTWARD_DESCENDER»> (<khakassian_che>)

<TAIL> or<HOOK>

<«LEFT_WING»> (<bashkir_k>)

<STROKE>

<VERTICAL_STROKE>

<LIGATURE>

<SUBSTITUTED>
```

3.0. Most of the above-said in 2.x is appliable in favour of the forthcoming section.

3.1. Serbo-Croätian resp. Macedonian letter pairs  $\frac{1}{5}$  and  $\frac{1}{5}$  and  $\frac{1}{5}$  and  $\frac{1}{5}$  and  $\frac{1}{5}$  must be unified within the first-level ordering to be differed within the second one. The whole rest of the two alphabets exhibits the complete identity.

To enable such a mixture it is necessary to enlarge the list of collating symbols for the secondary ordering key with something like <SUBSTITUTED> (after <MODIFIED2>). So the respective fragment shall appear like the following:

```
<U0452> <cyr_dje>;<BLANK>;<SMALL>;<U0452>
% CYRILLIC SMALL LETTER DJE
<U0402> <cyr_dje>;<BLANK>;<CAPITAL>;<U0402>
% CYRILLIC CAPITAL LETTER DJE
<U0452> <cyr_dje>;<SUBSTITUTED>;<SMALL>;<U0453>
% CYRILLIC SMALL LETTER GJE
<U0402> <cyr_dje>;<SUBSTITUTED>;<CAPITAL>;<U0403>
% CYRILLIC CAPITAL LETTER GJE
```

```
<U045B> <cyr_tje>;<BLANK>;<SMALL>;<U045B>
% CYRILLIC SMALL LETTER TJE
<U040B> <cyr_tje>;<BLANK>;<CAPITAL>;<U040B>
% CYRILLIC CAPITAL LETTER TJE
<U045B> <cyr_tje>;<SUBSTITUTED>;<SMALL>;<U045C>
% CYRILLIC SMALL LETTER KJE
<U040B> <cyr_tje>;<SUBSTITUTED>;<CAPITAL>;<U040C>
% CYRILLIC CAPITAL LETTER KJE
```

This gives:

[Minor Collating]

аА ӑӐ ӓӒ әӘ ӛӚ ӕӔ бБ вВ wW гГ ґҐ ғҒ ҕҔ дД ђЂ(, ѓЃ) ҙҘ еЕ(, ѐЀ, ёЁ, ҧ҄҄Ѻ) ӗӖ єЄ жЖ ӂӁ ӝӜ җҖ зЗ ӟӞ sS ӡЗ иИ(, ѝЍ) ӣӢ ӥӤ іЇ їЇ йЙ ҋҊ јЈ кК қҚ ҕӃ ҡҠ ҟҞ ҝҜ qQ лЛ дД љЉ мМ мМ нН ңҢ ӊӉ ҥҤ њЊ оО ӧӦ ѳѲ ӫӪ

### пП ҧҦ pP pP cC çÇ тТ ҭҬ ћЋ(, ќЌ) уУ ӯӮ ўЎ ўЎ ўЎ ӳӲ үҮ ұҰ фФ хХ ҳҲ һҺ ҵЦ ҵҴ чЧ ӵӴ ҷҶ ӌӋ ҹҸ ҽҼ ҿҾ ҵЏ шШ щЩ ъЪ ыЫ ӹӸ ьЬ ҍҌ ѣѢ(, ѣѢ) эЭ ӭӬ юЮ яЯ ѳѲ ѵѴ(, ѷѶ) ҩҨ І

4.0. In a system comprising a full set of vowels with macron these would be certainly collated with corresponding macronless ones, so in view of the pan-Cyrillic character of this standard Tajik  $\bar{\mu}\bar{\Lambda}$  and  $\bar{y}\bar{y}$  are to be unified with base  $\mu$ M and yY. For the former this change is insensitive for it occurs only in final position.

Newly unified (within the first level) characters are enclosed in indigo punctation.

[Little Collating]

aA ăĂ äÄ əƏ öӚ æÆ бБ вВ wW гГ rI ғҒ ҕҔ дД ђЂ(, ŕЃ) ҙҘ<br/>еЕ(, èÈ, ëË, folO) ӗӖ єЄ жЖ ӂӁ ӝӜ җҖ зЗ ӟӞ sS ӡЗ<br/>иИ(, ѝЍ, ӣӢ) ӥӤ il їЇ йЙ ҋҊ јЈ кК қҚ ӄӃ ҡҠ ҟҞ кК qQлЛ дД љЉ мМ мӍ нН ңҢ ӈӇ ҥҤ њЊ оО öÖ өӨ ӫӪ пП ҧҦ<br/>pP pP cC ҫҪ тТ ҭҬ ћЋ(, ќЌ) уУ(, ӯӮ) ўЎ уЎ ӱЎ ӳӲ үҮ ұҰ<br/>фФ хХ ҳҲ hҺ цЦ ҵҴ чЧ ӵӴ ҷҶ ӌӋ ҹҸ ҽҼ ҿҾ џЏ шШ щЩ<br/>ъЪ ыЫ ӹӸ ьЬ ҍҍ ѣѢ(, ѣѢ) эЭ ӭӬ юЮ яЯ өѲ vV(, vѶ) ҩҨ I

5.0. Next come some historically supported changes which may be treated as optional.

5.1. Ukrainian  $\Gamma\Gamma$  shares many features of Russian  $\ddot{e}\ddot{E}$  «by module», opposing to it «by sign»: the use of the former had been even prohibited, the one of the latter sometimes just compelled. The collating with plain  $\Gamma\Gamma$  looks reasoning.

5.2. The same applies to Moldavian / Gagauz ӂӁ (graphically not differed from жЖ but since not earlier than 1968 in Moldavian, 1971 in Gagauz) to be unified with plain жЖ.

Both letters occur in the **minor** part of texts written / printed in Ukrainian resp. Moldavian and Gagauz. However, at least for Moldavian we have many authoritative dictionaries in the «new» spelling, and one seeming to be the best for Gagauz (Гагаузско-русско-молдавский словарь. 11500 слов. Составили Г. А. Гайдаржи, Е. К. Колца, Л. А. Покровская, Б. П. Тукан. Под редалцией проф. Н. А. Баскскова. «Советская Энциклопедия». Москва, 1973), so this unifying is less demanding for the latter two (once introduced,  $\breve{x}\breve{X}$  is sorted autonomously).

[Moderated Collating]

aA ăĂ äÄ əƏ ə̈Ə æÆ бБ вВ wW гГ(, ґҐ) ғҒ ҕҔ дД ђЂ(, ѓЃ) ҙҘ еЕ(, èÈ, ёЁ, ю́Ю) ӗӖ єЄ жЖ(, ӂӁ) ӝӜ җҖ зЗ ӟӞ sS ӡӠ иИ(, ѝЍ, ӣӢ) ӥӤ il їЇ йЙ ҋҊ јЈ кК қҚ ӄӃ ҡҠ ҟҞ ҝК qQ лЛ дД љЉ мМ мӍ нН ңҢ ӈӇ ҥҤ њЊ оО ӧӦ ѳѲ ӫӪ пП ҧҦ pP pP cC çÇ тТ ҭҬ ҺЋ(, ќЌ) уУ(, ӯӮ) ўЎ у҆Ў ӱӲ ӳӲ үҮ ұҰ

### фФ хХ ҳҲ һҺ ҵЦ ҵҴ чЧ ӵӴ ҷҶ ӌӋ ҹҸ ҽҼ ҿҾ ҵЏ шШ щЩ ъЪ ыЫ ӹӸ ьЬ ҍҍ ѣѢ(, ѣѣ) эЭ ӭӬ юЮ яЯ ѳѲ ѵѴ(, ѵ҃Ѷ) ҩҨ І

[this is the <u>default</u> scheme]

6.0. The changes below are by no means obligatory; they provide possible alternative sorting for the so called «historical letters»  $\Bar{b}$ ,  $\Theta\Theta$  and vV. The argumentation, beside the given above in 3.x for гГ and  $\Bar{k}\Bar{K}$ , may also concern propædeutical purposes (cf. L. Tolstoy's «Азбука» and «Новая азбука» wgere this sorting is introduced and explained). At least they form a subset of total collating scheme.

The next unifications must **not** be preceded with relocation to the adjacent position: \$B may directly be inserted within eE,  $\Theta\Theta$  within  $\varphi\Phi$ , vV within  $\mu$ I.

So:

[Medium Collating]

aA ăĂ äÄ əƏ äӚ æÆ бБ вВ wW rГ(, rҐ) ғҒ ҕҔ дД ђЂ(, ŕЃ) ҙҘ eE(, èÈ, ëË, ю̂ЃѺ, ѣѢ, ѣѢ) ӗӖ єЄ жЖ(, ӂӁ) ӝӜ җҖ зЗ ӟӞ sS ӡӠ иИ(, ѝЍ, ӣӢ, vV, vѶ) ӥӤ il ïl йЙ ҋҊ jJ кК қҚ ӄӃ ҡҠ ҟҞ ҝҜ qQ лЛ дД љЉ мМ мӍ нН ңҢ ӈӇ ҥҤ њЊ оО öӦ өѲ ӫӪ пП ҧҦ pP pP cC çÇ тТ ҭҬ ћЋ(, ќЌ) уУ(, ӯӮ) ўЎ у҆Ў ӱӰ ӳӲ үҮ ұҰ фФ (, ѳѲ) xX ҳҲ hҺ цЦ ҵҴ чЧ ӵӴ чҶ ӌӋ ҹҸ ҽҼ ҿҾ џЏ шШ щЩ ъЪ ыЫ ӹӸ ьЬ ҍҌ эЭ ӭӬ юЮ яЯ ҩҨ I

7.0. More profound «historicalization» will cause some other collations, namely for  $\epsilon \varepsilon$  and il. The first is a (chronologically earlier) graphical, the second an orthographical variant of  $\epsilon E$  and  $\mu H$  respectively.

[Comprehensive Collating] aA ăĂ äÄ əƏ äӚ æÆ бБ вВ wW гГ(, ґГ) ғҒ ҕҔ дД ђЂ(, ѓЃ) ҙҘ eE(, èÈ, єЄ, ёЁ, ю҄Ю, ѣѢ, ѣѢ) ӗӖ жЖ(, ӂӁ) ӝӜ җҖ зЗ ӟӞ sS ӡӠ иИ(, ѝЍ, ӣӢ, іӏ, vV, ѷѶ) ӥӤ їЇ йЙ ҋҊ јЈ кК қҚ ӄӃ ҡҠ ҟҞ кК qQ лЛ дД љЉ мМ мӍ нН ңҢ ӈӇ ҥҤ њЊ оО ӧӦ ѳѲ ӫӪ пП ҧҦ pP pP cC ҫҪ тТ ҭҬ ћЋ(, ќЌ) уУ(, ӯӮ) ўЎ у҆Ў ӱӰ ӳӲ үҮ ұҰ фФ(, ѳѲ) xX ҳҲ hҺ цЦ ҵҴ чЧ ӵӴ ҷҶ ӌӋ ҹҸ ҽҼ ҿҾ џЏ шШ щЩ ъЪ ыЫ ӹӸ ьЬ ҍҌ эЭ ӭӬ юЮ яЯ ҩҨ І

8.0. Trying to continue and unify all **functionally identical** symbols will probably result in the following:

[Great Collating]

aA ăĂ äÄ əƏ ə̈Ə æÆ бБ вВ wW гГ(, ґҐ) ғҒ(, ҕҔ) дД ђЂ(, ѓЃ) ҙҘ еЕ(, èÈ, єЄ, ёЁ, по́Ю, ѣѢ, ѣѢ) ӗӖ жЖ(, ӂӁ, ӝӜ, җҖ) зЗ sS(, ӟӞ, ӡЗ) иИ(, ѝЍ, ӣӢ, іӏ, vV, v̈V) йӤ їЇ йЙ(, јЈ) ҋҊ кК қҚ(, ҕӃ, ҡҠ, ҟҞ, qQ) кК лЛ дД љЉ мМ мӍ нН ңҢ ӈӇ(, ҥҤ) њЊ оО ӧӦ ѳѲ ӫӪ пП ҧҦ рР ҏҎ сС ҫҪ тТ ҭҬ ћЋ(, ќЌ) уУ(, ӯӮ) ўЎ у҆Ў ӱЎ(, ӳӲ, үҮ) ұҰ фФ(, ѳѲ) хХ ҳҲ(, hh) ҵҴ ҵҴ чЧ ӵӴ чҶ ӌҶ(, ҹҸ, ҵЦ) ҽҼ ҿҾ шШ щЩ ъЪ ыЫ ӹӸ ьЬ ҍҌ эЭ ӭӬ юЮ яЯ ҩҨ І

9.0. Finally we can try to unify all letters but un-unifiable ones on the platform of «basic Russian»:

[Total Collating] aA(, ăĂ, äÄ, əƏ, äӚ, æÆ) бБ вВ(, wW) гГ(, ґҐ ғҒ ҕҔ) дД(, ђЂ, ѓЃ, ҙҘ) еЕ(, ѐЀ, єЄ, ёЁ, ю҄ӏѺ, ѣѢ, ѣѢ, ӗӖ) жЖ(, ӂӁ, ӝӜ, җҖ) зЗ(, ӟӞ, ѕЅ, ӡЗ) иИ(, ѝЍ, ӣӢ, ӥӤ, іЇ, їЇ, vV, ѷѶ) йЙ(, јЈ, ҋҊ) кК(, қҚ, ҕӃ, ҡҠ, ҟК, кК, qQ) лЛ(, дД, љЉ) мМ(, мӍ) нН(, ңҢ, ӈӇ, нҤ, њЊ) оО(, öӦ ѳѲ ӫӪ) пП(, ҧҦ) рР(, ҏҎ) сС(, ҫҪ) тТ(, ҭҬ, ћЋ, ќЌ) уУ(, ӯӮ, ўЎ, ўЎ, ӱЎ, ӳӲ, үҮ, ұҰ) фФ(, ѳѲ) хХ(, ҳҲ, hҺ) цЦ(, ҵҴ) чЧ(, ӵӴ, чҶ, ӌҶ, ҹҶ, ҽҼ, ҿҾ, џЦ) шШ щЩ ъЪ ыЫ(, ӹӸ) ьЬ(, ҍҌ) эЭ(, ӭӬ) юЮ яЯ ҩҨ҈ І

This scheme resembles the one applied for Latin (and Greek) sorting in the current Project.