Unicode request for VoQS support

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This is a request for modification of one VoQS (Voice Quality Symbol) character and the addition of one new code point. The full 2017 JIPA article on the 2016 revision of the VoQS is publicly available online from Cambridge University Press. (See references.)

Thanks to Deborah Anderson of the Universal Scripts Project for her assistance.

We believe that only the one code point will be required for the VoQS expansion, assuming that Cyrillic U+0418 〈N〉 will function in Latin-script text for the 'electrolaranx phonation' illustrated in Figure 3, and that U+A7FF 〈N〉 in the Latin D-block will function as a phonetic symbol for 'spasmodic dysphonia', not shown below but appearing at the bottom-left corner of the 'phonation types' block of the VoQS chart available online.

Modifier small capital letter H with stroke (H) [modification]

U+A7F8 in the Latin Extended-D block has been assigned to this character, which is used for 'faucalized voice'. It is defined by Unicode as 'modifier capital letter H with stroke'. This would make it the modifier version of superscript U+0126 〈Ħ〉. However, in VoQS is actually a *petite capital* Ħ, just as all IPA and extIPA capital variants are petite capitals. This can be seen both in the original 1995 JIPA article introducing the VoQS and in the 2017 JIPA update article, and is confirmed by Martin Ball, author of both articles.

Vj	palatalized voice	V^{γ}	velarized voice
$\Lambda_{ m R}$	uvularized voice	V_{ℓ}	pharyngealized voice
٧٢	laryngo-pharyngealized voice	V ^H	faucalized voice

Figure 1. Ball et al. (1995), p. 74. This is the original JIPA publication of the VoQS. The top serifs of the main and modifier letters in $\langle V^{\mu} \rangle$ align, as do those of $\langle V^{\chi} \rangle$ and $\langle V^{\mu} \rangle$, demonstrating that the modifier letters all have the same x-height. The tops of the modifier letters in $\langle V^{j} \rangle$ and $\langle V^{\zeta} \rangle$, on the other hand, rise above the top of the $\langle V \rangle$, as would be expected (but not found) for $\langle {}^{\mu} \rangle$ if it were a full capital.

Vj	palatalized voice	Λ λ	velarized voice
$\Lambda_{\rm R}$	uvularized voice	Λ_{c}	pharyngealized v
Λ̈́	laryngo-pharyngealized voice	V ^H	faucalized voice

Figure 2. Ball et al. (2017), p. 169. The x-height alignment of the modifier letter is maintained in the 2016 revision of the VoQS.

From informal discussion by Miller with the Unicode *ad hoc* committee on 2019 Dec 06, it would seem that, because there is no base letter 'small capital H with stroke' in Unicode, the correction can be made in the character description and does not require a new code point.

Note that the Unicode description should perhaps point to 'modifier small capital letter H' $\langle ^{H} \rangle$, the modifier variant of U+029C $\langle H \rangle$. This does not currently have a Unicode assignment, but Miller will be requesting it in a separate proposal for IPA superscripts, as it is well-attested in the transcription of pharyngealized click consonants in Khoisan languages.

Question 1 for ad hoc committee: If we don't need code points for Latin yeris ($^{\circ}$ and $^{\circ}$), because Cyrillic characters can be mixed in Latin text, do we need a 'modifier small capital letter H' $^{\circ}$, because the graphic equivalent in Cyrillic, U+2DE9 'combining Cyrillic letter en' ($^{\circ}$), is defined differently?

Question 2: There are two Unicode points for modifier letter reversed glottal stop, U+02C1 $\langle {}^{\varsigma} \rangle$ and U+02E4 $\langle {}^{\varsigma} \rangle$. These are identical in some fonts, though there is an apparent (though spurious) difference between them in the 1995 and 2016 VoQS charts above. Should there be an analogous pair for modifier glottal stop, or is the distinction of reversed glottal stops redundant / duplicate characters?

Modifier small capital AA ligature (*) [addition]

This character is introduced in the 2016 expansion of the VoQS, published in JIPA in 2017. It is a small-cap modifier variant of U+A733 æ and U+A732 AA.

V!! diplophonia

V^{AA} aryepiglottic phonation

И electrolarynx phonation

Figure 3. Ball et al. (2017), p. 169. The new modifier letter for aryepiglottic phonation, $\langle V^{A} \rangle$. It is an x-height small capital.

References

Ball, Martin J., John H. Esling & B. Craig Dickson. 1995. The VoQS system for the transcription of voice quality. *Journal of the International Phonetic Association* 25, 61–70.

Ball, Martin J., John H. Esling & B. Craig Dickson. Revisions to the VoQS system for the transcription of voice quality. *Journal of the International Phonetic Association*, doi:10.1017/S0025100317000159. Published online by Cambridge University Press, 13 April 2017.