Re: Script_Extension values for some combining marks
From: Mark Davis, David Corbett
Date: 2018-12-03

Proposal

The following Script_Extension property values are proposed for addition in Unicode 11.0.

```
# Script_Extensions=Cyrl
030F ;        Cyrl # COMBINING DOUBLE GRAVE ACCENT
0484 ;        Cyrl # COMBINING CYRILLIC PALATALIZATION
0487 ;        Cyrl # COMBINING CYRILLIC POKRYTIE
1DF8 ;        Cyrl # COMBINING DOT ABOVE LEFT
2E2F ;        Cyrl # VERTICAL TILDE
A66F ;        Cyrl # COMBINING CYRILLIC VZMET

# Script_Extensions=Cyrl Latn
02B9 ;        Cyrl Latn # MODIFIER LETTER PRIME

# Script_Extensions=Latn
02BB ;        Latn # MODIFIER LETTER TURNED COMMA
02C0 ;        Latn # MODIFIER LETTER GLOTTAL STOP
02C8 ;        Latn # MODIFIER LETTER VERTICAL LINE
030C..030D ;  Latn # COMBINING CARON..COMBINING VERTICAL LINE ABOVE
0311 ;        Latn # COMBINING INVERTED BREVE
031B ;        Latn # COMBINING HORN
0326..0328 ;  Latn # COMBINING COMMA BELOW..COMBINING OGONEK
035F ;        Latn # COMBINING DOUBLE MACRON BELOW
1DC5..1DC7 ;  Latn # COMBINING GRAVE-MACRON..COMBINING ACUTE-MACRON

# Script_Extensions=Lisu Beng Thai Cyrl Latn Deva
02BC ;        Lisu Beng Thai Cyrl Latn Deva # MODIFIER LETTER APOSTROPHE

# Script_Extensions=Thai
02D7 ;        Thai # MODIFIER LETTER MINUS SIGN

# Script_Extensions=Tale Copt Cyrl Latn Perm Grek
0300 ;        Tale Copt Cyrl Latn Perm Grek # COMBINING GRAVE ACCENT

# Script_Extensions=Cyrl Latn Osge Grek
0301 ;        Cyrl Latn Osge Grek # COMBINING ACUTE ACCENT

# Script_Extensions=Tale Latn Geor Tfng
0302 ;        Tale Latn Geor Tfng # COMBINING CIRCUMFLEX ACCENT

# Script_Extensions=Syrc Latn
030A ;        Syrc Latn # COMBINING RING ABOVE
0320 ;        Syrc Latn # COMBINING MINUS SIGN BELOW
032D ;        Syrc Latn # COMBINING CIRCUMFLEX ACCENT BELOW
0330 ;        Syrc Latn # COMBINING TILDE BELOW
```

```
# Script_Extensions=Syrc Thai Latn
0303 ;         Syrc Thai Latn # COMBINING TILDE

# Script_Extensions=Syrc Copt Cyrl Latn Osge Tfng Grek Aghb
0304 ;         Syrc Copt Cyrl Latn Osge Tfng Grek Aghb # COMBINING MACRON

# Script_Extensions=Elba Goth
0305 ;         Elba Goth # COMBINING OVERLINE

# Script_Extensions=Cyrl Latn Perm Grek
0306 ;         Cyrl Latn Perm Grek # COMBINING BREVE

# Script_Extensions=Syrc Hebr Tale Copt Latn Perm Tfng
0307 ;         Syrc Hebr Tale Copt Latn Perm Tfng # COMBINING DOT ABOVE

# Script_Extensions=Syrc Armn Hebr Tale Cyrl Latn Perm Goth Grek
0308 ;         Syrc Armn Hebr Tale Cyrl Latn Perm Goth Grek # COMBINING DIAERESIS

# Script_Extensions=Latn Tfng
0309 ;         Latn Tfng # COMBINING HOOK ABOVE

# Script_Extensions=Cyrl Latn Osge
030B ;         Cyrl Latn Osge # COMBINING DOUBLE ACUTE ACCENT
0358 ;         Cyrl Latn Osge # COMBINING DOT ABOVE RIGHT

# Script_Extensions=Grek
0314 ;         Grek # COMBINING REVERSED COMMA ABOVE
0342..0345 ;   Grek # COMBINING GREEK PERISPOMENI..COMBINING GREEK YPOGEGRAMMENI

# Script_Extensions=Perm Grek
0313 ;         Perm Grek # COMBINING COMMA ABOVE

# Script_Extensions=Syrc Cher Latn
0323 ;         Syrc Cher Latn # COMBINING DOT BELOW

# Script_Extensions=Syrc Cher
0324 ;         Syrc Cher # COMBINING DIAERESIS BELOW

# Script_Extensions=Syrc
0325 ;         Syrc # COMBINING RING BELOW
032E ;         Syrc # COMBINING BREVE BELOW

# Script_Extensions=Cher Thai Latn Aghb
0331 ;         Cher Thai Latn Aghb # COMBINING MACRON BELOW

# Script_Extensions=Aghb
035E ;         Aghb # COMBINING DOUBLE MACRON

# Script_Extensions=Cyrl Perm
0483 ;         Cyrl Perm # COMBINING CYRILLIC TITLO

# Script_Extensions=Perm
20DB ;         Perm # COMBINING THREE DOTS ABOVE
```

As per normal practice, Script values can be added later on to the Script_Extensions values of any of characters, of course, whenever evidence is obtained as to customary usage with that script.

Background

The Script_Extensions data supplements the Script value by providing information as to the known usage of characters. Among other uses, Script_Extensions are important:
- for font developers, to determine which combinations of characters to support for a script
- for security, such as in the processing used for spoof detection in UTS #39.

The values for the above characters were obtained in the following way:

> The exemplar data in CLDR (which includes a large amount of information donated by SIL), was processed. If a character in a main or aux exemplar set was a combining character, the script of the main exemplar set was added to the Script_Extensions value of that combining character.

> For inclusiveness, all of the characters in the exemplar sets were also decomposed with NFD, and a script value was added to any combining character in the NFD decomposition.

> In the Details section below, these are indicated by the locale code, with an appended [d] for cases where the decomposition was used, and appended [a] if the aux exemplars were used.

In addition, David Corbett researched documents to find additional cases in TUS tables 7-2 (Greek), 8-2 (Old Permic), 9-12 (Syriac), and 16-10 (Tai Le); pages 314 (Coptic), 317–318 (Cyrillic), 356 (Gothic), 358 (Caucasian Albanian), 369 (Hebrew), 620 (Thai), 736 (Tifinagh), and 758 (Osage); L2/11-050 (Elbasan); and L2/14-064R (Cherokee), L2/17-315 (Armenian), and the non-approval notice 2001-1 (Georgian). These are marked **Book** or **extra** in the data below.

Details

The proposed additions are for:

[\u02B9\u02BB\u02BC\u02C0\u02C8\u02D7\u0300-\u030D\u030F\u0311\u0313\u0314\u031B \u0320\u0323-\u0328\u032D\u032E\u0330\u0331\u0342-\u0345\u0358\u035E\u035F\u0483\ \u0484\u0487\u1DC5-\u1DC7\u1DF8\u20DB\u2E2F\uA66F]

CP	Scr.	Name	Reason: Book or Locale, where [d] = in decomposition, [a] = in aux exemplars
U+02B9	Cyrl	MODIFIER LETTER PRIME	Book, Book[d]
U+02B9	Latn	MODIFIER LETTER PRIME	nmz
U+02BB	Latn	MODIFIER LETTER TURNED COMMA	gby, gel, haw, to, uz[d]
U+02BC	Beng	MODIFIER LETTER APOSTROPHE	extra, extra[d]
U+02BC	Cyrl	MODIFIER LETTER APOSTROPHE	Book, Book[d], uk
U+02BC	Deva	MODIFIER LETTER APOSTROPHE	extra, extra[d]

U+02BC	Latn	MODIFIER LETTER APOSTROPHE	apd_Latn, avu, bav, bex, bfd, bkc, bkm, bmq, br[d], bss, bum, cch, dbq[d], dug[d], etu, extra, extra[d], ffm, fmp, fub_Latn, fuf, fuh, fuq, gba, gde, gn, gnd, grw, ha, krs, kuj[d], kus, led, lem, lgg, lkt, lln[d], lmp, lns, lor[d], mbo, mgo, mhi, mif, mnf, moh, myk, nga[d], niy, nnh, ozm, quc[d], qu[d], rel[d], tik, tlx[d], trv[a], uz, yam, yat, ybb
U+02BC	Thai	MODIFIER LETTER APOSTROPHE	Book, Book[d]
U+02BC	Lisu	MODIFIER LETTER APOSTROPHE	extra, extra[d]
U+02C0	Latn	MODIFIER LETTER GLOTTAL STOP	abi, dgi, sef
U+02C8	Latn	MODIFIER LETTER VERTICAL LINE	anc, bwr, tan
U+02D7	Thai	MODIFIER LETTER MINUS SIGN	Book
U+0300	Copt	COMBINING GRAVE ACCENT	Book, Book[d]
U+0300	Cyrl	COMBINING GRAVE ACCENT	bg[ad], mk[ad]
U+0300	Grek	COMBINING GRAVE ACCENT	Book, Book[d], el_POLYTON[d], el[ad]
U+0300	Latn	COMBINING GRAVE ACCENT	af[d], agq[d], ahl[d], anc[d], ann[d], ast[ad], atg[d], bas[d], bcn[d], bkv[d], blt_Latn[ad], bmq[d], bom[d], bqc[d], bqp[d], br[d], btt[d], bud[d], bys[d], bze[d], ca[d], cky[d], co[d], cs[ad], cy[d], da[ad], ddn[d], de[ad], dsb[ad], dts[d], dud[d], ee[d], enn[d], en[ad], es[ad], et[ad], eu[ad], ewo[d], fil[ad], fi[ad], fr[d], fur[d], fy[d], gby[d], gd[d], gel[d], gkn[d], gl[ad], gng[d], gsw[ad], ha[ad], hsb[ad], hu[ad], ich[d], igb[d], ige[d], iri[d], it[d], izi[d], jab[d], jbu[d], jen[d], jgo[d], jib[d], jv[d], kea[ad], ken[d], kez[d], kkj[d], ksh[ad], ku[ad], kwo[d], lb[ad], lmp[d], lt[ad], lu[d], mas[d], mda[d], mfn[d], mgo[d], mg[d], moh[d], mt[d], myk[d], mzk[d], mzm[d], nb[d], nds_NL[ad], nds[ad], nex[d], nin[d], nl[ad], nmz[d], nnh[d], nn[d], ntm[d], oc[d], ogc[d], pl[ad], pt[d], qu[ad], res[d], rm[d], ro[ad], seh[d], se[ad], sg[d], sk[ad], sl[ad], smn[ad], srn[d], stk[d], sur[d], sv_FI[d], sv[d], tbz[d], to[ad], tr[ad], vi[d], wae[ad], wa[d], wo[d], yav[d], yaz[d], yer[d], yo_BJ[d], yo[d], zu[ad]
U+0300	Tale	COMBINING GRAVE ACCENT	Book, Book[d]
U+0300	Perm	COMBINING GRAVE ACCENT	Book, Book[d]
U+0301	Cyrl	COMBINING ACUTE ACCENT	be[ad], mk[d], ru[ad], uk[ad]
U+0301	Grek	COMBINING ACUTE ACCENT	Book, Book[d], el_POLYTON[d], el[d]
U+0301	Latn	COMBINING ACUTE ACCENT	abt[d], ada[d], af[d], ahl[d], anc[d], ast[d], bas[d], bcn[d], bfd[d], bio[d], bkv[d], blt_Latn[d], bom[d], bqc[d], bqp[d], br[ad], bss[d], bs[d], btt[d], bud[d], byn_Latn[d], bys[d], bzf[d], ca[d], ckl[d], cky[d], co[ad], cs[d], cy[d], da[ad], ddn[d], de[ad], dsb[d], dua[d], dud[d], dyo[d], ee[d], eka[d], en[ad], es[d], et[ad], eu[ad], ewo[d], fil[ad], fi[ad], fod[d], fo[d], fr[d], fur[ad], fy[d], gaj[d], ga[d], gby[d], gd[d], gel[d], gkn[d], gl[d], gng[d], gsw[ad], gux[d], ha[ad], hig[d], hr[d], hsb[d], hu[d], iby[d], ich[d], idi[d], idu[d], igb[d], ige[d], ikw[d], iri[d], is[d], it[d], izi[d], jab[d], jbu[d], jgo[d], jib[d], jv[d], kdh_Latn[d], kea[ad], ken[d], kez[d], kkj[d], klt[d], kl[d], knf[d], ksf[d], ksh[ad], kub[d], ku[ad], kwo[d], lag[d], lb[d], lem[d], lkt[d], ln[d], lt[ad], lu[d], man[d], mas[d], mcq[d], mda[d], mfn[d], mg[d], mmu[d], moh[d], mql[d], mzk[d], mzm[d], nb[d], nca[d], nds_NL[ad], nds[ad], nex[d], nin[d], nko[d], nl[d], nmg[d], nmz[d], nnh[d], nn[d], ntm[d], oc[d], ogc[d], pl[d], png[d], ppo[d], pt[d], qu[ad], res[d], rm[d], ro[ad], seh[d], se[d], sgz[d], sjr[d], sk[d], sl[ad], smj[d], smn[d], sok[d], soy[d], sr_Latn[d],

			srn[d], stk[d], sur[d], sv_FI[d], sv[d], tbz[d], tci[d], tk[d], tof[d], to[d], tr[ad], tvd[d], tvu[d], twh[d], vai_Latn[d], vi[d], wae[d], wa[d], wo[d], yas[d], yat[d], yav[d], yer[d], yle[d], yo_BJ[d], yo[d], yuj[d], zu[ad]
U+0301	Osge	COMBINING ACUTE ACCENT	Book, Book[d]
U+0302	Geor	COMBINING CIRCUMFLEX ACCENT	Book, Book[d]
U+0302	Latn	COMBINING CIRCUMFLEX ACCENT	af[d], agq[d], ann[d], ast[ad], atg[d], bas[d], bfd[d], bkq[d], bkv[d], blt_Latn[d], br[d], bss[d], btt[d], buk[d], ca[ad], co[ad], cs[ad], cy[d], da[ad], de[ad], dsb[ad], ee[ad], en[ad], eo[d], es[ad], et[ad], eu[ad], ewo[d], fil[ad], fi[ad], fr[d], fur[d], fy[d], gaj[d], gby[d], gd[ad], gl[d], gsw[ad], ha[ad], hot[d], hsb[ad], hu[ad], igb[d], it[ad], jab[d], jbu[d], jgo[d], jra[d], jv[d], kea[ad], kkj[d], kl[d], kpe[d], kpf[d], ksh[ad], ku[d], lbu[d], lb[ad], lmp[d], ln[d], mas[d], mda[d], mg[d], mmo[d], mzm[d], naf[d], naq[d], nb[d], nds_NL[ad], nds[d], nin[d], nl[ad], nmg[d], nnh[d], nn[d], nso[d], ny[d], pl[ad], ptp[d], pt[d], qu[ad], rm[ad], ro[d], seh[d], sg[d], skc[d], sk[d], sl[ad], smn[d], sms[d], spl[d], srn[d], sv[ad], tci[d], tim[d], tn[d], to[ad], tr[ad], twh[d], vec[d], vi[d], wae[ad], wa[d], wnu[d], xsi[d], yav[d], yer[d], yle[d], zu[ad]
U+0302	Tale	COMBINING CIRCUMFLEX ACCENT	Book, Book[d]
U+0302	Tfng	COMBINING CIRCUMFLEX ACCENT	Book, Book[d]
U+0303	Latn	COMBINING TILDE	ada[d], af[ad], ala[d], arh[d], arn[d], ast[d], bba[d], bcn[d], bjt[d], bjz[d], blt_Latn[ad], bnm[d], boj[d], bom[d], bqc[d], bqp[d], br[d], byn_Latn[d], ca[ad], co[ad], cs[ad], cy[ad], dad[d], da[ad], de[ad], dgi[d], dje[d], dsb[ad], dyo[d], ebu[d], ee[d], en[ad], es[d], et[d], eu[d], fab[d], fan[d], ff[d], fil[d], fi[ad], fpe[d], fr[ad], fur[ad], gd[ad], geb[d], gkn[d], gl[d], gng[d], gn[d], gsw[ad], gux[d], ha[ad], hsb[ad], hu[ad], ife[d], it[ad], jen[d], jra[d], kam[d], kbp[d], kbx[d], kea[d], khq[d], ki[d], kjy[d], kl[d], kmh[d], knf[d], kpr[d], ksh[ad], kun[d], kup[d], ku[ad], las[d], lb[ad], ldb[d], lt[ad], man[d], mci[d], mer[d], mg[d], mua[d], mzm[d], nac[d], nb[ad], nds[ad], nex[d], nl[ad], nn[ad], pt[d], quc[ad], qu[d], rm[ad], ro[ad], sav[d], seh[d], ses[d], se[ad], sk[ad], sl[ad], smj[ad], smn[ad], sms[d], soy[d], srr[d], stk[d], sv[ad], tbz[d], tgu[d], to[ad], tr[ad], tvd[d], twh[d], twq[d], vai_Latn[d], vi[d], wae[d], wa[ad], wo[d], wwa[d], yer[d], zu[ad]
U+0303	Syrc	COMBINING TILDE	Book, Book[d]
U+0303	Thai	COMBINING TILDE	Book, Book[d]
U+0304	Copt	COMBINING MACRON	Book, Book[d]
U+0304	Cyrl	COMBINING MACRON	tg[d]
U+0304	Grek	COMBINING MACRON	Book, Book[d]
U+0304	Latn	COMBINING MACRON	agq[d], ann[d], ast[ad], atg[d], bas[d], bfd[d], bkv[d], bom[d], br[ad], bss[d], btt[d], ca[ad], ckl[d], cs[ad], cy[ad], ddn[d], de[ad], dsb[ad], dua[d], dww[d], ee[ad], en[ad], es[ad], et[ad], eu[ad], fi[ad], fr[ad], gd[ad], geb[d], gkn[d], gsw[ad], gux[d], haw[d], hsb[ad], hu[ad], iby[d], ich[d], idu[d], igb[d], ige[d], ikw[d], iri[d], jab[d], jbu[d], jgo[d], kea[ad], kjy[d], kqf[d], ksh[ad], ksj[d], kub[d], ku[ad], lb[ad], lnu[d], lt[d], lv[d], mas[d], mda[d], mi[d], mql[d], nds[ad], nin[d], nmg[d], oro[d], prg[d], pt[ad], qu[ad], rm[ad], sk[ad], sl[ad], snc[d], sv[ad], tci[d], to[d], tqo[d], tr[ad], twh[d], wae[ad], wa[ad], wja[d], yav[d], yba[d], zu[ad]
U+0304	Syrc	COMBINING MACRON	Book, Book[d]

U+0304	Tfng	COMBINING MACRON	Book, Book[d]
U+0304	Aghb	COMBINING MACRON	Book, Book[d]
U+0304	Osge	COMBINING MACRON	Book, Book[d]
U+0305	Goth	COMBINING OVERLINE	Book, Book[d]
U+0305	Elba	COMBINING OVERLINE	Book, Book[d]
U+0306	Cyrl	COMBINING BREVE	abq[d], az_Cyrl[d], ba[d], be[d], bg[d], ce[d], cu[d], cv[d], kk[d], ky[d], mn[d], os[d], ru[d], sah[d], sr[ad], tg[d], tt[d], uk[d], uz_Cyrl[d]
U+0306	Grek	COMBINING BREVE	Book, Book[d]
U+0306	Latn	COMBINING BREVE	ast[ad], az[d], blt_Latn[d], br[ad], ca[ad], ckl[d], cs[ad], cy[ad], de[ad], dsb[ad], ee[ad], en[ad], eo[d], es[ad], et[ad], eu[ad], fi[ad], fur[ad], gd[ad], gsw[ad], hsb[ad], hu[ad], jra[d], kea[ad], ksh[ad], ku[ad], lb[ad], mda[d], nds[ad], pt[ad], qu[ad], rm[ad], ro[d], sk[ad], sl[ad], taq[d], to[ad], tr[d], twh[d], vi[d], wae[ad], wja[d], zu[ad]
U+0306	Perm	COMBINING BREVE	Book, Book[d]
U+0307	Copt	COMBINING DOT ABOVE	Book, Book[d]
U+0307	Hebr	COMBINING DOT ABOVE	Book, Book[d]
U+0307	Latn	COMBINING DOT ABOVE	az[d], de[ad], dsb[ad], fi[ad], ga[ad], gd[ad], hsb[ad], ig[d], ikk[d], ksh[d], lb[ad], lt[d], mt[d], pl[d], tr[d], vec[ad], ve[d]
U+0307	Syrc	COMBINING DOT ABOVE	Book, Book[d]
U+0307	Tale	COMBINING DOT ABOVE	Book, Book[d]
U+0307	Tfng	COMBINING DOT ABOVE	Book, Book[d]
U+0307	Perm	COMBINING DOT ABOVE	Book, Book[d]
U+0308	Armn	COMBINING DIAERESIS	Book, Book[d]
U+0308	Cyrl	COMBINING DIAERESIS	abq[ad], ba[d], be[d], bg[ad], ce[d], cu[d], cv[d], kk[d], ky[d], mn[d], os[d], ru[d], sah[ad], sr[ad], tg[d], tt[d], uk[d], uz_Cyrl[d]
U+0308	Goth	COMBINING DIAERESIS	Book, Book[d]
U+0308	Grek	COMBINING DIAERESIS	Book, Book[d], el_POLYTON[d], el[d]
U+0308	Hebr	COMBINING DIAERESIS	Book, Book[d]
U+0308	Latn	COMBINING DIAERESIS	af[d], agg[d], aom[d], arn[d], ast[d], awx[d], az[d], bbr[d], bet[d], bex[d], bmu[d], bon[d], br[ad], bud[d], buk[d], bvb[d], bzh[d], ca[d], co[d], cs[ad], cy[d], daf[d], da[ad], de_CH[d], de[d], dsb[ad], dts[d], ee[ad], en[ad], es[d], etr[d], et[d], eu[ad], fab[d], ffi[d], fi[d], fpe[d], fr[d], fur[ad], fy[d], gd[ad], geb[d], gl[d], god[d], gsw[d], ham[d], hla[d], hmt[d], hsb[ad], hu[d], iou[d], is[d], it[ad], iwm[d], jgo[d], kbq[d], kea[ad], kgf[d], kjy[d], klq[d], knf[d], kol[d], ksh[d], kuj[d], kup[d], ku[ad], lb[d], lgg[d], loj[d], lor[d], los[d], mcr[d], mgl[d], mg[d], mhi[d], miw[d], mua[d], nb[ad], nce[d], nds_NL[ad], nds[d], nl[d], nmg[d], nmz[d], nnh[d], nn[ad], nus[d], oc[d], pex[d], pl[ad], pt[ad], quc[d], qu[ad], rm[ad], ro[ad], se[ad], sg[d], shk[d], sk[d], sl[ad], sma[d], smj[d], smn[d], sms[d], sq[d], srn[d], sv_FI[d], sv[d], tbd[d], tk[d], tof[d], to[ad], tpz[d], tr[d], vo[d], wae[d], wa[d], wer[d], wo[d], yll[d], yuw[d], zu[ad]
U+0308	Syrc	COMBINING DIAERESIS	Book, Book[d]

U+0308	Tale	COMBINING DIAERESIS	Book, Book[d]
U+0308	Perm	COMBINING DIAERESIS	Book, Book[d]
U+0309	Latn	COMBINING HOOK ABOVE	blt_Latn[d], twh[d], vi[d]
U+0309	Tfng	COMBINING HOOK ABOVE	Book, Book[d]
U+030A	Latn	COMBINING RING ABOVE	af[ad], ast[ad], br[ad], ca[ad], cs[d], cy[ad], da[d], de[ad], dsb[ad], ee[ad], en[ad], es[ad], et[ad], eu[ad], fi[d], fr[ad], fur[ad], ga[ad], gd[ad], gsw[ad], hsb[ad], hu[ad], id[ad], it[ad], jv[d], kea[ad], kl[d], ksh[d], ku[ad], lb[ad], nb[d], nds[d], nl[ad], nn[d], pl[ad], pt[ad], qu[ad], rm[ad], ro[ad], se[ad], sk[ad], sl[ad], sma_NO[d], sma[d], smj[d], smn[ad], sms[d], sr_Latn[ad], sv_FI[d], sv[d], to[ad], tr[ad], wae[ad], wa[d], zu[ad]
U+030A	Syrc	COMBINING RING ABOVE	Book, Book[d]
U+030B	Cyrl	COMBINING DOUBLE ACUTE ACCENT	cv[d]
U+030B	Latn	COMBINING DOUBLE ACUTE ACCENT	dsb[ad], fi[ad], hsb[ad], hu[d]
U+030B	Osge	COMBINING DOUBLE ACUTE ACCENT	Book, Book[d]
U+030C	Latn	COMBINING CARON	agq[d], bas[d], bfd[d], bkv[d], bsq_Latn[d], bss[d], bs[d], btt[d], co[ad], cs[d], dje[d], dsb[d], dzg[d], et[d], ewo[d], fi[d], fr[ad], fur[ad], gaj[d], gby[d], geb[d], hr[d], hsb[d], jab[d], jen[d], jgo[d], kab[d], ken[d], khq[d], kun[d], lkt[d], lmp[d], ln[d], lt[d], lv[d], mzm[d], nb[ad], nin[d], nmg[d], nnh[d], nn[ad], nso[d], prg[d], rao[d], ses[d], se[d], sk[d], sl[d], smn[d], sms[d], sr_Latn[d], taq[d], tk[d], tuq[d], twq[d], vec[ad], wae[d], wa[ad], yav[d]
U+030D	Latn	COMBINING VERTICAL LINE ABOVE	mzp[d], yba[d]
U+030F	Cyrl	COMBINING DOUBLE GRAVE ACCENT	cu[d]
U+0311	Latn	COMBINING INVERTED BREVE	kxw[d]
U+0313	Grek	COMBINING COMMA ABOVE	Book, Book[d], el_POLYTON[d], el[ad]
U+0313	Perm	COMBINING COMMA ABOVE	Book, Book[d]
U+0314	Grek	COMBINING REVERSED COMMA ABOVE	Book, Book[d], el_POLYTON[d], el[ad]
U+031B	Latn	COMBINING HORN	blt_Latn[d], jra[d], twh[d], vi[d]
U+0320	Latn	COMBINING MINUS SIGN BELOW	ema[d], gaw[d], hui[d], kxw[d], lih[d], mur[d], toq[d]
U+0320	Syrc	COMBINING MINUS SIGN BELOW	Book, Book[d]
U+0323	Cher	COMBINING DOT BELOW	Book, Book[d]
U+0323	Latn	COMBINING DOT BELOW	anc[d], ann[d], apd_Latn[d], ast[d], atg[d], avu[d], bin[d], blt_Latn[d], bom[d], bzw[d], dzg[d], enn[d], gkn[d], iby[d], igb[d], ige[d], ig[d], ikk[d], ikw[d], izi[d], jbu[d], kab[d], krs[d], mfn[d], okr[d], shi_Latn[d], tan[d], taq[d], tmh[d], tuq[d], twh[d], tzm[d], vi[d], yay[d], yaz[d], yo[d]
U+0323	Syrc	COMBINING DOT BELOW	Book, Book[d]
U+0324	Cher	COMBINING DIAERESIS BELOW	Book, Book[d]

U+0324	Syrc	COMBINING DIAERESIS BELOW	Book, Book[d]
U+0325	Syrc	COMBINING RING BELOW	Book, Book[d]
U+0326	Latn	COMBINING COMMA BELOW	fi[ad], gd[ad], prg[d], ro[d]
U+0327	Latn	COMBINING CEDILLA	af[ad], ast[ad], az[d], bkq[ad], br[ad], ca[d], co[ad], cs[ad], cy[ad], da[ad], de[ad], dsb[ad], ee[ad], en[ad], es[ad], et[ad], eu[d], fi[ad], fr[d], fur[d], gd[ad], gl[ad], gmm[d], gsw[ad], gv[d], hsb[ad], hu[ad], it[ad], kea[ad], kkj[d], knf[d], ksh[ad], ku[d], lb[ad], lv[d], nb[ad], nds[ad], nl[ad], nn[ad], oc[ad], pl[ad], ppo[d], prg[d], pt[d], pwa[ad], qu[ad], rm[ad], ro[ad], seh[d], se[ad], sk[ad], sl[ad], smn[ad], sq[d], sv[ad], tk[d], to[ad], tr[d], vec[d], wae[ad], wa[d], zu[ad]
U+0328	Latn	COMBINING OGONEK	dsb[ad], fi[ad], hsb[ad], lt[d], nds[ad], pl[d]
U+032D	Latn	COMBINING CIRCUMFLEX ACCENT BELOW	ve[d]
U+032D	Syrc	COMBINING CIRCUMFLEX ACCENT BELOW	Book, Book[d]
U+032E	Syrc	COMBINING BREVE BELOW	Book, Book[d]
U+0330	Latn	COMBINING TILDE BELOW	mql[d], ntm[d], sok[d]
U+0330	Syrc	COMBINING TILDE BELOW	Book, Book[d]
U+0331	Cher	COMBINING MACRON BELOW	Book, Book[d]
U+0331	Latn	COMBINING MACRON BELOW	ank[d], arn[d], asg[d], bys[d], cch[d], etx[d], gel[d], iri[d], jab[d], kad[d], kcg[d], kdl[d], lnu[d], mfn[d], ncu[d], nin[d], nus[d], res[d], saf[d], tiv[d], trv[ad], yer[d]
U+0331	Thai	COMBINING MACRON BELOW	Book, Book[d]
U+0331	Aghb	COMBINING MACRON BELOW	Book, Book[d]
U+0342	Grek	COMBINING GREEK PERISPOMENI	Book
U+0343	Grek	COMBINING GREEK KORONIS	Book
U+0344	Grek	COMBINING GREEK DIALYTIKA TONOS	Book
U+0345	Grek	COMBINING GREEK YPOGEGRAMMENI	Book
U+0358	Cyrl	COMBINING DOT ABOVE RIGHT	extra, extra[d]
U+0358	Latn	COMBINING DOT ABOVE RIGHT	extra, extra[d]
U+0358	Osge	COMBINING DOT ABOVE RIGHT	Book, Book[d]
U+035E	Aghb	COMBINING DOUBLE MACRON	Book, Book[d]
U+035F	Latn	COMBINING DOUBLE MACRON BELOW	apd_Latn[d], kxw[d]
U+0483	Cyrl	COMBINING CYRILLIC TITLO	Book
U+0483	Perm	COMBINING CYRILLIC TITLO	Book
U+0484	Cyrl	COMBINING CYRILLIC PALATALIZATION	Book
U+0487	Cyrl	COMBINING CYRILLIC POKRYTIE	Book
U+1DC5	Latn	COMBINING GRAVE-MACRON	btt[d]

U+1DC6	Latn	COMBINING MACRON-GRAVE	bas[d], btt[d]
U+1DC7	Latn	COMBINING ACUTE-MACRON	bas[d]
U+1DF8	Cyrl	COMBINING DOT ABOVE LEFT	extra, extra[d]
U+20DB	Perm	COMBINING THREE DOTS ABOVE	Book, Book[d]
U+2E2F	Cyrl	VERTICAL TILDE	cu
U+A66F	Cyrl	COMBINING CYRILLIC VZMET	Book