

To: UTC

From: CLDR and Apple Inc.

Date: Jan. 24, 2013

Subject: Add tone marks in Unihan kMandarin field for 114 Han characters

This document proposes adding tone marks to the Unihan kMandarin entry for 114 Han characters whose entry currently lacks tone marks; for 2 of these characters (marked in yellow below) it also proposes changing the underlying reading. Supporting data is provided from several sources:

- Data used for the Mimer/SQL collations, supplied by Åke Persson.
- Vetting by Apple, primarily using the online Xinhua dictionary (<http://xh.5156edu.com>).
- Data from the Unihan kHanyuPinyin and kXHC1983 fields.

Supporting fields that contain a value matching the proposed reading are marked in light green.

Note: For `u88E1`, the kHanyuPinyin value (in orange below) is inconsistent and may be an error.

Code		current kMandarin	proposed kMandarin	Mimer	Apple check values	kHanyuPinyin	kXHC1983
u4E4E	乎	hu	hū	hū	hū	hū	hū
u4ED9	仙	xian	xiān	xiān	xiān	xiān, xiǎn	xiān
u4F0D	伍	wu	wǔ	wǔ	wǔ	wǔ	wǔ
u4F36	伶	ling	líng	líng	líng	líng	líng
u4FEC	俚	si	sī	sī	sī		
u5019	候	hou	hòu	hòu	hòu	hòu	hòu
u5085	傅	fu	fù	fù	fù	fù, fū	fù
u52A1	务	wu	wù	wù	wù		wù
u52D9	務	wu	wù	wù	wù	wù, wǔ, wú, máo, mào	wù
u5319	匙	shi	chí	chí	chí, shi	chí, shi	chí; shi
u5320	匠	jiang	jiàng	jiàng	jiàng		
u53CB	友	you	yǒu	yǒu	yǒu	yǒu	yǒu
u53ED	叭	ba	bā	bā	bā	pā, bā, ba	bā
u5436	呐	ne	nà	nà	nà		
u5450	呐	ne	nà	nà	nà	nè, nà, na, nuò	nà; na; nè; ne
u5490	咐	fu	fù	fù	fù	fú, fù	fù
u5495	咕	gu	gū	gū	gū	gū, gu	gū
u54A7	咧	lie	liě	liě	liě, lie	liè, liē, lié, liě, lie	liē; liě; lie
u54D6	哞	nian	nián	nián	nián		
u54E9	哩	li	lī	lī	lī, li	lì, li, lǐ, mái	lī; lǐ; li; yīng
u552C	唬	hu	hǔ	hǔ	hǔ	xiāo, guó, xià, hǔ, háo	hǔ; xià
u556F	啞	guo	guō	guō	guō		
u55BD	喽	lou	lóu	lóu	lóu, lou		lóu; lou

Code		current kMandarin	proposed kMandarin	Mimer	Apple check values	kHanyuPinyin	kXHC1983
u55FD	嗽	sou	sòu	sòu	sòu	shuò, shù, sòu	sòu
u560D	嘍	lou	lóu	lóu	lóu	lǒu, lóu, lou	lóu; lou
u56B9	噍	la	lá	lá	lá	la	
u5730	地	de	dì	dì	dì, de	dì, de	de; dì
u574A	坊	fang	fāng	fāng	fāng, fáng	fāng, fáng	fāng; fáng
u592B	夫	fu	fū	fū	fū	fū, fú	fū; fú
u59D0	姐	jie	jiě	jiě	jiě	jiě, jù, xù, zū	jiě
u5A18	娘	niang	niáng	niáng	niáng	niáng	niáng
u5A33	姍	li	lì	lì	lì		
u5B9C	宜	yi	yí	yí	yí	yí	yí
u5C49	屣	ti	tì	tì	tì	tì	tì
u5C5C	屣	ti	tì	tì	tì		tì
u5DF4	巴	ba	bā	bā	bā	bā	bā
u5E1A	帚	zhou	zhǒu	zhǒu	zhǒu	zhǒu	zhǒu
u5E85	庠	mo	mó	mó	mó		
u5F97	得	de	dé	dé	dé	dé, děi, dé, de	dé; de; děi
u606F	息	xi	xī	xī	xī	xī	xī
u621A	戚	qi	qī	qī	qī	qī, cù	qī
u626E	扮	ban	bàn	bàn	bàn	fěn, fēn, bàn, huǒ	bàn
u62C7	拇	mu	mǔ	mǔ	mǔ	mǔ	mǔ
u62FE	拾	shi	shí	shí	shí	shí, shè, jiè	shí
u655E	敞	chang	chǎng	chǎng	chǎng	chǎng, chèng, zhèng	chǎng
u6643	晃	huang	huǎng	huǎng	huǎng, huàng	huǎng, huàng	huǎng; huàng
u6668	晨	chen	chén	chén	chén	chén	chén
u6735	朵	duo	duǒ	duǒ	duǒ	duǒ	duǒ
u674E	李	li	lǐ	lǐ	lǐ	lǐ	lǐ
u6789	枉	wang	wǎng	wǎng	wǎng	wǎng, kuáng	wǎng
u6922	梱	gui	guì	guì	guì		
u695A	楚	chu	chǔ	chǔ	chǔ	chǔ	chǔ
u6B22	欢	huan	huān	huān	huān		huān
u6B61	歡	huan	huān	huān	huān	huān	huān
u6CF9	汨	dan	dàn	dàn	dàn		

Code		current kMandarin	proposed kMandarin	Mimer	Apple check values	kHanyuPinyin	kXHC1983
u6CFC	泼	po	pō	pō	pō		pō
u6D82	涂	tu	tú	tú	tú	tú, chú, yé	tú
u6F51	潑	po	pō	pō	pō	pō, bō	pō
u6F9B	澹	lu	lǔ	lǔ	lǔ		
u6FCF	漈	se	sè	sè	sè		
u709A	眈	guang	guāng	guāng	guāng		
u7226	爓	lan	lǎn	lǎn	lǎn, làn		
u7237	爷	ye	yé	yé	yé, ye (rarer)		yé
u723A	爺	ye	yé	yé	yé, ye (rarer)	yé	yé
u72AD	彳	quan	quǎn	quǎn	quǎn		
u72F8	狸	li	lí	lí	lí	lí	lí
u732C	狷	wei	wèi	wèi	wèi	wèi	wèi
u752B	甫	fu	fǔ	fǔ	fǔ	fǔ, fū, pǔ	fǔ
u766A	癩	ji	jī	jī	jī		
u775B	睛	jing	jīng	jīng	jīng	jīng, jǐng	jīng
u77E9	矩	ju	jǔ	jǔ	jǔ, ju	jǔ	jǔ
u7A3C	稼	jia	jià	jià	jià	jià	jià
u7ABF	窿	long	lóng	lóng	lóng	lóng	lóng
u7B06	笆	ba	bā	bā	bā	bā	bā
u7BF7	篷	peng	péng	péng	péng	péng	péng
u7CCA	糊	hu	hú	hú	hú, hū, hù	hú, hū, hù	hū; hú; hù
u7DB4	綴	zhui	zhuì	zhuì	zhuì	zhuì, chuò	
u7F00	綴	zhui	zhuì	zhuì	zhuì		zhuì
u7F62	罢	ba	bà	bà	bà, ba (rarer)		bà; ba
u7F77	罷	ba	bà	bà	bà, ba (rarer)	bà, pí, pì, bǐ, ba, bǎi	bà; ba; pí
u818A	膊	bo	bó	bó	bó, bo	pò, bó, liè	bó
u83C7	菇	gu	gū	gū	gū	gū	gū
u8423	茈	ding	dìng	dìng	dìng		
u8517	蔗	zhe	zhè	zhè	zhè	zhè	zhè
u86A3	蚣	gong	gōng	gōng	gōng	zhōng, gōng	gōng
u8747	蝇	ying	yíng	yíng	yíng		yíng
u875F	蝟	wei	wèi	wèi	wèi		wèi

Code		current kMandarin	proposed kMandarin	Mimer	Apple check values	kHanyuPinyin	kXHC1983
u87C6	蟆	ma	má	má	má	má, mò	má
u8805	蠅	ying	yíng	yíng	yíng	yíng	yíng
u8864	衣	yi	yī	yī	yī		
u88B1	袱	fu	fú	fú	fú	fú	fú
u88E1	裡	li	lǐ	lǐ	lǐ	chéng	lǐ; li
u897F	西	xi	xī	xī	xī	xī	xī
u8A01	言	yan	yán	yán	yán		
u8A13	訓	xun	xùn	xùn	xùn	xùn	
u8A34	訴	su	sù	sù	sù	sù	
u8B58	識	shi	shí	shí	shí	zhì, shí	shí; zhì
u8BAD	訓	xun	xùn	xùn	xùn		xùn
u8BC6	识	shi	shí	shí	shí		shí; zhì
u8BC9	诉	su	sù	sù	sù		sù
u8F2F	輯	ji	jí	jí	jí	jí	
u8F91	辑	ji	jí	jí	jí		jí
u916C	酬	chou	chóu	chóu	chóu	chóu	chóu
u91D2	金	jin	jīn	jīn	jīn		
u943A	鐺	dang	dāng	dāng	dāng	chēng, dāng, tāng	chēng; dāng
u94DB	铛	dang	dāng	dāng	dāng		chēng; dāng
u97DF	鞞	gao	gāo	gāo	gāo		
u99C7	駁	pu	wén	wén	wén		
u99DD	駝	tuo	tuó	tuó	tuó	tuó	
u9A7C	驼	tuo	tuó	tuó	tuó		tuó
u9D72	鵲	que	què	què	què	què	
u9D89	鶉	chun	chún	chún	chún	chún, tuán	
u9E4A	鵲	que	què	què	què		què
u9E51	鶉	chun	chún	chún	chún		chún

Side note (not part of the main proposal, but should be considered): Apple reviewers also suggested that qián is the more common reading for the following:

Code		current kMandarin	proposed kMandarin	kHanyuPinyin	kXHC1983
u4E7E	乾	gān	qián	gān, qián	gān; qián