

# BibleVox Implementation of Webster's (1934) Vowel Diacritical Markup

## (By: MEAdams, Rev: 2017-05-05)

Note: This document requires DejaVu Serif fonts

"The Westminster Dictionary of the Bible", By: John D. Davis, Revised by: Henry S. Gehman, The Westminster Press, 1944; and "The New Westminster Dictionary of the Bible", Edited by: Henry S. Gehman, The Westminster Press, 1970 were chosen as the primary pronunciation references for the BibleVox project. These works are remarkable in their comprehensive word content and detailed and consistent application of pronunciation diacritical markup. They employ the diacritical symbols from the "Webster's New International Dictionary of the English Language", Second Edition, 1934. The BibleVox implementation improves Festival speech engine diction. A BibleVox "SndSpell" reference document might be helpful in the following discussion.

**Table 1: BibleVox Implementation of Webster (1934) Vowel Diacritical Symbols**

<u>Sym</u>	<u>Example</u>	<u>IPA</u>	<u>SndSpell</u>	<u>Sym</u>	<u>Example</u>	<u>IPA</u>	<u>SndSpell</u>
ā	fāte	eɪ	ay	ĩ	char'ĩ-ty	ə	uh
ǎ <sup>(1)</sup>	vǎ-ca'tion	ə, eɪ	uh, ay <sup>(3)</sup>	ō	nōte	oʊ	oh
â	câre	ɛr	ehr	õ <sup>(1)</sup>	õ-bey'	ə, oʊ	uh, oh <sup>(6)</sup>
ă	ădd	æ	a	ô	ôrb	ɔ, ɔr	ao, ohr <sup>(7)</sup>
ǻ	in'fǻnt	ə	uh	ö	ödd	ɑ	o
ärm	ärm	ɑr	ahr	õ <sup>(2)</sup>	sõft	ɔ	ao
à	àsk	ɑ	ah	ō	cōn-nect'	ə	uh
ǻ	so'fǻ	ə	uh	oi	oil	ɔɪ	oy
ē	mēte	i:	ee	oo	mōon	u	oo
ē	hēre	ɪr	ihr	oo	bōok	ʊ	uu
ě <sup>(1)</sup>	ě-vent'	ɪ, i:	i, ee <sup>(4)</sup>	ou	out	aʊ	ow
ĕ	mĕt	ɛ	e	ū	cūbe	ju, u	yoo, oo <sup>(8)</sup>
ĕ	si'lĕnt	ə	uh	ũ <sup>(1)</sup>	ũ-nite'	ju	yoo
ĕ	mak'ĕr	ɜ~	uhr	û	ûrn	ɜ~	uhr
ī	īce	aɪ	iy	ŭ	ŭp	ʌ	u
ĩ	ĩll	ɪ, i:	i, ee <sup>(5)</sup>	ű	cir'cűs	ə	uh

(1), (2) The symbol differs slightly from Webster's, which is not available in the DejaVu font.

(3) The contexts where "ǎ" is found do not render well as "uh" (i.e. schwa). Nor does it render well as "ay" if it precedes "ĩ". Names ending in "ǎ-ĩ" are rendered as single syllables and pronounced as "iy" (i.e. "ǎ" is silent). Example: hǎg'g-ǎ-ĩ is pronounced HAG-iy. Otherwise, "ǎ" is pronounced "ay". Example: ǎ-bĩm'ǎ-ĕl is pronounced uh-BIM-ay-el.

(4) When "ě" does not precede a vowel it is pronounced "i". Example: ǎ-bĕd'nĕ-gō is pronounced uh-BED-ni-goh. Otherwise, "ě" is pronounced "ee". Example: ǎb'dĕ-ĕl is pronounced AB-dee-el.

(5) When "ĩ" does not precede a vowel it is pronounced "i". Example: ǎ'bĕl-mǎ'ĩm is pronounced AY-buhl-MAY-im. Otherwise, "ĩ" is pronounced "ee". Example: ǎ'drĩ-ǎ is pronounced AY-dree-uh.

(6) When "ō" does not precede a vowel it is pronounced "uh". Example: ǎd'ō-nĩ-rǎm is pronounced AD-uh-NIY-ruhm. Otherwise, "ō" is pronounced "oh". Example: ǎ-bĩn'ō-ǎm is pronounced uh-BIN-oh-am.

(7) When "ô" does not precede the consonant "r" it is pronounced "ao". Example: ô-gűs'tűs (i.e. Augustus) is pronounced ao-GUS-tuhs. Otherwise, it is pronounced "ohr". Example: ǎ'chĩ-ôr is pronounced AY-kee-ohr.

(8) A rule may need to be developed. The contexts where "ū" appears does not render well in all cases as "yoo". While "oo" seems reasonable in all instances, some might be better rendered "yoo" as the table's example word "cūbe" suggests.