## An example of context-dependent label format for HMM-based speech synthesis in English

## HTS Working Group

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\begin{array}{l} p_1 \hat{\ } p_2 - p_3 + p_4 = p_5 @ p_6 - p_7 \\ / \mathbb{A} : a_1 \_ a_2 \_ a_3 / \mathbb{B} : b_1 - b_2 - b_3 @ b_4 - b_5 \& b_6 - b_7 \# b_8 - b_9 \$ b_{10} - b_{11} ! b_{12} - b_{13} ; b_{14} - b_{15} | b_{16} / \mathbb{C} : c_1 + c_2 + c_3 \\ / \mathbb{D} : d_1 \_ d_2 / \mathbb{E} : e_1 + e_2 @ e_3 + e_4 \& e_5 + e_6 \# e_7 + e_8 / \mathbb{F} : f_1 \_ f_2 \\ / \mathbb{G} : g_1 \_ g_2 / \mathbb{H} : h_1 = h_2 \hat{\ } h_3 = h_4 | h_5 / \mathbb{I} : i_1 = i_2 \\ / \mathbb{J} : j_1 + j_2 - j_3 \end{array}
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	the phoneme identity before the previous phoneme
	the previous phoneme identity
	the current phoneme identity
	the next phoneme identity
	the phoneme after the next phoneme identity
	position of the current phoneme identity in the current syllable (forward)
	position of the current phoneme identity in the current syllable (backward)
	whether the previous syllable stressed or not (0: not stressed, 1: stressed)
	whether the previous syllable accented or not (0: not accented, 1: accented)
	the number of phonemes in the previous syllable
	whether the current syllable stressed or not (0: not stressed, 1: stressed)
	whether the current syllable accented or not (0: not accented, 1: accented)
	the number of phonemes in the current syllable
	position of the current syllable in the current word (forward)
	position of the current syllable in the current word (backward)
	position of the current syllable in the current phrase (forward)
	position of the current syllable in the current phrase (backward)
	the number of stressed syllables before the current syllable in the current phrase
	the number of stressed syllables after the current syllable in the current phrase
0	the number of accented syllables before the current syllable in the current phrase
1	the number of accented syllables after the current syllable in the current phrase
2	the distance per syllable from the previous stressed syllable to the current syllable
3	the distance per syllable from the current syllable to the next stressed syllable
4	the distance per syllable from the previous accented syllable to the current syllable
5	the distance per syllable from the current syllable to the next accented syllable
6	name of the vowel of the current syllable whether the next syllable stressed or not (0: not stressed, 1: stressed)
	whether the next syllable accented or not (0: not accented, 1: accented) whether the next syllable accented or not (0: not accented, 1: accented)
	the number of phonemes in the next syllable
	gpos (guess part-of-speech) of the previous word
	the number of syllables in the previous word
	gpos (guess part-of-speech) of the current word the number of syllables in the current word
	position of the current word in the current phrase (forward)
	position of the current word in the current phrase (folward)
	the number of content words before the current word in the current phrase
	the number of content words after the current word in the current phrase
	the distance per word from the previous content word to the current word
	the distance per word from the current word to the next content word
$\dashv$	gpos (guess part-of-speech) of the next word
	the number of syllables in the next word
_	the number of syllables in the previous phrase
	the number of synables in the previous phrase
	the number of syllables in the current phrase
	the number of synapies in the current phrase
- 1	position of the current phrase in this utterance (forward)
	position of the current phrase in this utterance (forward) position of the current phrase in this utterance (backward)
- 1	TOBI endtone of the current phrase
	the number of syllables in the next phrase
	the number of synables in the next phrase
	the number of syllables in this utterance
- 1	the number of syllables in this illierance
	the number of words in this utterance