

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

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$p_1 \hat{=} p_2 - p_3 + p_4 = p_5 / \mathbf{A} : a_1 + a_2 + a_3$
 $/ \mathbf{B} : b_1 - b_2 - b_3 / \mathbf{C} : c_1 - c_2 + c_3 / \mathbf{D} : d_1 + d_2 - d_3$
 $/ \mathbf{E} : e_1 - e_2 ! e_3 - e_4 - e_5 / \mathbf{F} : f_1 - f_2 \# f_3 - f_4 @ f_5 - f_6 | f_7 - f_8 / \mathbf{G} : g_1 - g_2 \% g_3 - g_4 - g_5$
 $/ \mathbf{H} : h_1 - h_2 / \mathbf{I} : i_1 - i_2 @ i_3 + i_4 \& i_5 - i_6 | i_7 + i_8 / \mathbf{J} : j_1 - j_2$
 $/ \mathbf{K} : k_1 + k_2 - k_3$

p_1	the phoneme identity before the previous phoneme	
p_2	the previous phoneme identity	
p_3	the current phoneme identity	
p_4	the next phoneme identity	
p_5	the phoneme after the next phoneme identity	
a_1	the difference between accent type and position of the current mora identity	-49 ~ 49
a_2	position of the current mora identity in the current accent phrase (forward)	1 ~ 49
a_3	position of the current mora identity in the current accent phrase (backward)	1 ~ 49
b_1	pos (part-of-speech) of the previous word	
b_2	inflected forms of the previous word	
b_3	conjugation type of the previous word	
c_1	pos (part-of-speech) of the current word	
c_2	inflected forms of the current word	
c_3	conjugation type of the current word	
d_1	pos (part-of-speech) of the next word	
d_2	inflected forms of the next word	
d_3	conjugation type of the next word	
e_1	the number of moras in the previous accent phrase	1 ~ 49
e_2	accent type in the previous accent phrase	1 ~ 49
e_3	whether the previous accent phrase interrogative or not (0: not interrogative, 1: interrogative)	
e_4	undefined context	
e_5	whether pause insertion or not in between the previous accent phrase and the current accent phrase	
f_1	the number of moras in the current accent phrase	1 ~ 49
f_2	accent type in the current accent phrase	1 ~ 49
f_3	whether the current accent phrase interrogative or not (0: not interrogative, 1: interrogative)	
f_4	undefined context	
f_5	position of the current accent phrase identity in the current breath group by the accent phrase (forward)	1 ~ 49
f_6	position of the current accent phrase identity in the current breath group by the accent phrase (backward)	1 ~ 49
f_7	position of the current accent phrase identity in the current breath group by the mora (forward)	1 ~ 99
f_8	position of the current accent phrase identity in the current breath group by the mora (backward)	1 ~ 99
g_1	the number of moras in the next accent phrase	1 ~ 49
g_2	accent type in the next accent phrase	1 ~ 49
g_3	whether the next accent phrase interrogative or not (0: not interrogative, 1: interrogative)	
g_4	undefined context	
g_5	whether pause insertion or not in between the next accent phrase and the current accent phrase	
h_1	the number of accent phrases in the previous breath group by the accent phrase	1 ~ 49
h_2	the number of accent phrases in the previous breath group by the mora	1 ~ 99
i_1	the number of accent phrases in the current breath group by the accent phrase	1 ~ 49
i_2	the number of accent phrases in the current breath group by the mora	1 ~ 99
i_3	position of the current breath group identity by breath group (forward)	1 ~ 19
i_4	position of the current breath group identity by breath group (backward)	1 ~ 19
i_5	position of the current breath group identity by accent phrase (forward)	1 ~ 49
i_6	position of the current breath group identity by accent phrase (backward)	1 ~ 49
i_7	position of the current breath group identity by mora (forward)	1 ~ 199
i_8	position of the current breath group identity by mora (backward)	1 ~ 199
j_1	the number of accent phrases in the next breath group by the accent phrase	1 ~ 49
j_2	the number of accent phrases in the next breath group by the mora	1 ~ 99
k_1	the number of this utterance by the breath group	1 ~ 19
k_2	the number of this utterance by the accent phrase	1 ~ 49
k_3	the number of this utterance by the mora	1 ~ 199