## Homework assignment #3: Morphological analysis and word class

## Due Thursday, October 5

Please submit your assignment on paper (use a separate sheet!) at the beginning of class. HW assignments may be handwritten or typed. If you prefer to type, note that IPA symbols and Japanese characters can be coped from course PDFs or web pages and pasted into your documents.

- (1) Present a list of all the **distinct morphemes** that appear in the data set shown here. Think carefully, because this problem is trickier than it looks. Be systematic in your analysis.
  - (a) List both roots and affixes, but don't list the *same* morpheme more than once.
  - (b) Propose a gloss (translation) for each morpheme in your list, including the affixes.
  - (c) For any morphemes that are verbs, are they consonant-root verbs or vowel-root verbs?

katai	'hard'	katakatta 'was hard'	katamaru '(something) hardens'	katamatta '(something) hardened'	katameru 'harden (something)'	katameta 'hardened (something)'
usui	'thin'	usukatta	usumaru	usumatta	usumeru	usumeta
kiyoi	'pure'	kiyokatta	kiyomaru	kiyomatta	kiyomeru	kiyometa
kuroi	'black'	kurokatta	kuromaru	kuromatta	kuromeru	kurometa
hayai	'fast'	hayakatta	hayamaru	hayamatta	hayameru	hayameta
hiroi	'wide'	hirokatta	hiromaru	hiromatta	hiromeru	hirometa
hukai	'deep'	hukakatta	hukamaru	hukamatta	hukameru	hukameta
yowai	'weak'	yowakatta	yowamaru	yowamatta	yowameru	yowameta

- (2) The following four verbs are each irregular in some way—some of their conjugational forms are as expected, but some of them are not. (Note that the verbs are irregular in different ways.) For each verb, answer these questions:
  - (a) Is the verb's basic pattern that of a vowel-root verb or a consonant-root verb?
  - (b) What would you say is the verb's root? (If this is hard to establish, discuss why.)
  - (c) Which specific forms in the chart are irregular? If the verb had been regular, what forms would have been expected instead?

	nonpast	past	negative nonpast	provisional	volitional/ tentative	imperative	formal nonpast
'exist' (inanimate)	aru	atta	nai	areba	aroo	are	arimasu
'go'	iku	itta	ikanai	ikeba	ikoo	ike	ikimasu
'do'	suru	sita	sinai	sureba	siyoo	siro	simasu
'come'	kuru	kita	konai	kureba	koyoo	koi	kimasu

(3) For this question, you will be searching the BCCWJ corpus using the *Syoonagon* interface.

Use these links:

- The corpus interface: [https://shonagon.ninjal.ac.jp/]
- Instructions for using the corpus interface:
- [https://users.castle.unc.edu/~jlsmith/ling563/handouts/kotonoha\_corpus\_info.pdf]
- The English version of the corpus overview page: [https://clrd.ninjal.ac.jp/en/tool.html]

There is a word in Japanese that means approximately '(is) ambiguous, vague' and is pronounced [aimai]. It has kanji, but it is often spelled out in hiragana:  $\mathfrak{B} \cup \sharp \cup$ Based on this information, it is plausible to consider that *aimai* might be an nonpast adjective (A) conjugated with *-i*, a noun (N), or an adjectival noun (AN).

- (a) If *aimai* is an A, then *aimakatta* should be a legal word of Japanese. If *aimai* is a N or an AN, then *aimakatta* should not be a word. Briefly explain why this is.
- (b) The word(?) *aimakatta* would be spelled in hiragana like this: あいまかった Go to the BCCWJ corpus *Syoonagon* interface and search on the following strings (use the kana spellings; you can copy/paste from here): あいまい *aimai* あいまかった *aimakatta*

Report how many corpus hits you get for each string search (look for the number before '件', right above the box where the list of examples starts). Do your results support any conclusions about whether *aimai* is an A?

(c) Consider the following three strings. (表現 hyoogen is a N meaning '(verbal) expression') あいまい表現 aimai hyoogen

めいよい衣玩	aimai nyoogen
あいまいの表現	aimai no hyoogen
あいまいな表現	aimai na hyoogen

Search on each of these strings in the BCCWJ corpus and report how many hits you get. Then discuss: Do your results provide evidence about whether *aimai* is best analyzed as A, N, or AN? If so, why? Are there any complications?