#### Structure of Japanese

- Verb morphology
- Further issues in verb, adjective morphology

#### Background:

- Handout: Morphology: Introduction
- Data set: Adjective morphology
- Data set: Verb morphology (part 1)
- Data set: Verb morphology (part 2)

## 0. Today's plan

- Verb morphology: Overview
  - Verb classes
  - Important V suffixes
  - Phonological rules (quick sketch)
- Are V and A distinct word classes in Japanese?
- Negative for V and A
  - Suffix or separate word?
- Morphological analysis of the formal verb suffixes

Quick review: How are we defining morpheme?

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  - Minimal unit of sound-meaning correspondence
  - What this means:
    - Sound shape is consistent (other than the effect of phonological rules)
    - Cannot be broken down into smaller parts that contribute consistent meaning
- Today we will consider: How well do these basic concepts fit verb morphology in Japanese?

- Data set <u>Verb morphology (full version)</u>
  - What morphemes did you identify in (2)?
    - See also partial data set (<u>Verbs, part 2</u>)
  - Which of these morphemes are roots, and which are affixes?
    - Are any of them hard to classify?
  - **Where** do we divide the verb roots from the affixes? How do we make this decision?

- Data set <u>Verb morphology (full version)</u>
  - What morphemes did we identify in (1) last time?
    - See also partial data set (<u>Verbs, part 1</u>)
  - Are there any systematic *phonological* differences between the affixes found in (1) and (2)?
    - What factors underly this big-picture pattern?
  - Should the affixes in (1) and (2) that share a meaning be considered to be the same morpheme or not? Why?
    - This is an advanced question what do you think?

- Data set <u>Verb morphology (full version)</u>
  - Two **classes** of verbs
    - Vowel-root verbs (1), '1-grade' (一段)
    - Consonant-root verbs (2), '5-grade' (五段)
    - → Verbs in <u>JDIC</u> are labeled v1 or v5C, where C is the root-final consonant
  - How are their **suffixes** different?

- How should we characterize the verbs in (3)? How can we understand this pattern?

- Data set <u>Verb morphology (full version)</u>
  - Which forms help diagnose vowel- / consonant-?
  - What vowels can a verb root end in?

nonpast	provisional	???	???	???	
kiru	kireba				'wear'
kiru	kireba				'cut'
deru	dereba				'go out'
keru	kereba				'kick'
nuru	nureba				'paint'

- Data set <u>Verb morphology (full version)</u>
  - Which forms help diagnose vowel- / consonant-?
  - What vowels can a verb root end in? [i], [e] only

nonpast	provisional	negative (nonpast)	formal (nonpast)	past	
k <u>i</u> -ru	kireba	kinai	kimasu	kita	'wear'
ki <u>r</u> -u	kireba	kir <u>a</u> nai	ki <u><b>ri</b></u> masu	kit <u>t</u> a	'cut'
d <u>e</u> -ru	dereba	denai	demasu	deta	'go out'
ke <u>r</u> -u	kereba	ker <u>a</u> nai	ke <u>ri</u> masu	ket <b>t</b> a	'kick'
nu <u>r</u> -u	nureba	nur <u>a</u> nai	nu <u>ri</u> masu	nut <u>t</u> a	'paint'

#### 2. V past and related suffixes

- Data set <u>Verb morphology (full version)</u>
  - How and where does the **past suffix** (and related suffixes, like the gerund) **change** its surface form?

 What kinds of changes affect verb roots when these suffixes are added?

#### 2. V past and related suffixes

- Data set <u>Verb morphology (full version)</u>
  - How and where does the **past suffix** (and related suffixes, like the gerund) **change** its surface form?
    - Becomes voiced after voiced stops
      (including nasals) (or: after voiced non-approximants?)
  - What kinds of changes affect verb roots when these suffixes are added?
    - Sometimes change place of articulation
    - Sometimes become nasal or vowel
    - Common factor: To create a legal mora

#### 3. More about V and A morphology

#### **Group discussion**

- Data set <u>Exploring verb and adjective morphology</u>
  - Adjectives take tense and negation like verbs. Should we consider them a third class of verbs? Or is 'adjective' a distinct word class (part of speech) in Japanese?
  - Is there any evidence here about whether adjective negation involves one single suffix -*kuna*-, or is built from the adverbial suffix -*ku*?
  - Is there any evidence here about whether the multiple examples of *na*-shaped negation forms involve one single morpheme, or multiple (though similar) distinct morphemes?

# 4. Morphological analysis of the FORMAL suffix

Can we break down these formal verbs any further?

	nonpast	neg nonpast	volitional	imperative	past
/tabe-/	tabe-	tabe-	tabe-	(tabe-	tabe-
'eat'	masu	masen	masyoo	mase)	masita
/jom-i-/	yom-i-	yom-i-	yom-i-	(yom-i-	yom-i-
'read'	masu	masen	masyoo	mase)	masita

- The formal suffix itself inflects (conjugates) like a verb: consonant-root verb or vowel-root verb?
- Two of the inflectional forms of this suffix are irregular — which ones?

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- Advanced analysis: We can treat the /i/ that shows up in the consonant-root verbs before the formal suffix as a "stemforming" morpheme (vowel-root verbs have a zero morpheme for their stem-forming morpheme);
  - More on this idea when we look at honorifics.

#### 5. Today's key points and skills

- 1 Apply the concept of **morpheme** as *systematic* sound-meaning correspondence to a data set
  - Divide words into morphemes
  - Justify your claims about morpheme divisions
- 2 What are some aspects of Japanese verb morphology where it gets tricky to:
  - identify morpheme boundaries?
  - determine whether two forms belong to the same morpheme?

## 5. Today's key points and skills

- 3 What **phonological rules** affect verb past-tense (and related) forms, and what is the general motivation for these rules?
- **4** Is there evidence for **adjective** as a distinct word class in Japanese?