

- **Prosodic structure:  
Grouping segments into  
larger units**

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*Background:*

- *Pitch accent outline and handout*

# 0. Today's plan

- Checking in on work groups
- Japanese poetic meter
- Moras in the mental grammar
- Are syllables universal?
- Algorithms for assigning prosodic structure in Japanese

# 1. Checking in: Work groups

- Work groups are designed to **create collaboration** between people with a linguistics background and people with a Japanese language background
  - This class benefits from these two perspectives

# 1. Checking in: Work groups

- Some misconceptions I've been seeing — watch out!
  - The point of work groups is **not** to make linguistics students explain all they know on some topic to language students; this is not a “knowledge dump”
  - Work group activities are (usually) designed with **specific questions** for the group to answer; **do these first** and *then* talk broadly about concepts in linguistics or Japanese if time permits

# 1. Checking in: Work groups

- Some misconceptions I've been seeing — watch out!
  - The linguistics students will **not** always have **experience** with the topic being worked on
    - Ideally, we start with some linguistics basics, and then take them into the realm of **new and unfamiliar data** or research questions
    - **Everyone** should practice **applying course concepts** to the data we are considering
    - Language students: Think about **other data** that might be relevant!

# 1. Checking in: Work groups

- Another point to keep in mind
  - Often, you are asked to **prepare** for class by doing a reading or working on a data set
  - If you do not do your part to prepare, you are **holding back** your work group
    - It's fine if you don't understand all the preparation materials, or have questions!
    - But you do need to be familiar with the concepts or the data before class when there is assigned preparation.

# 1. Checking in: Work groups

- The composition of this course is different every time; we will work to make adjustments
  - I'm sensing there is a need for more **explicit summaries** after work group activities
- Any other comments, questions, or suggestions?
  - You can use the Padlet board

## 2. Japanese poetic meter

**Work groups:** Answer on a sheet of paper to turn in

- What do you know about the rules for writing **haiku**, either in English or Japanese? Do all group members know the same rules?
- Does this haiku follow your stated rules? Discuss!

蘭の香や 蝶の翅に たき物す

[ ran-no ka ja / t̃soo-no t̃subasa-ni / takimono su ]

orchid-GEN fragrance EMPH butterfly-GEN wing-LOC incense do

'the fragrant orchid / into a butterfly's wings / it breathes the incense'  
— Bashô (trans. Makoto Ueda)



## 2. Japanese poetic meter

### Debriefing

- How many 'timing units' in these words?

[ t̂subasa ] 'wing'

[ ran ] 'orchid'

[ t̂çoo ] 'butterfly'

## 2. Japanese poetic meter

### Debriefing

- Speakers of English tend to count **syllables**

[ t̂su ba sa ] 'wing' 3

[ raN ] 'orchid' 1

[ t̂çoo ] 'butterfly' 1

## 2. Japanese poetic meter

### Debriefing

- Speakers of Japanese tend to count a smaller unit
  - [ t̂su ba sa ] ‘wing’ 3
  - [ ra n ] ‘orchid’ 2
  - [ t̂co o ] ‘butterfly’ 2
- This unit is often called 音節 [onsetu] ‘sound portion’ or 拍 [haku] ‘(musical) beat’ in Japanese
- It is known as a **mora** in the linguistics tradition (term originally from Latin, describing Ancient Greek poetic meter; borrowed as モーラ [moora] in Japanese)

## 2. Japanese poetic meter

- Does Japanese poetry count syllables or moras?

蘭の香や 蝶の翅に たき物す

[ ran-no ka ja / t̃soo-no t̃subasa-ni / takimono su ]  
orchid-GEN fragrance EMPH butterfly-GEN wing-LOC incense do

‘the fragrant orchid / into a butterfly's wings / it breathes the incense’  
— Bashô (trans. Makoto Ueda)

五六本 生木 掛けたる 水溜り [文字]LS

[ go-rop-pon / nama-ki t̃suke-taru / mizu-tamari ]  
five-six-CLS / raw-wood hang-CPLT water-pool

‘five or six pieces / of freshly cut timber / over a muddy pool’  
— Nozawa Bonchô (trans. Makoto Ueda)

- What kinds of segment sequences can form a mora?

### 3. Prosodic structure: Moras

- Data set - "[Mora structure in Japanese](#)"

After working through this data set, be able to answer these questions:

- What are possible moras in Japanese?
- What is some additional evidence that moras are relevant to the phonological mental grammar in Japanese?

### 3. Prosodic structure: Moras

- Handout - "[Prosodic structure in Japanese](#)"
  - More evidence for the psychological reality of the mora in Japanese
  - **Algorithm** for assigning mora structure

## 4. Does Japanese have syllables?

- We have seen plenty of evidence for the role of the mora in Japanese mental grammar
- Some have argued that Japanese has moras and *does not have syllables*
  - Is the syllable universal?
    - Is there any **evidence** that the **syllable** also plays a role in the grammar of Japanese?
- Strategy: Are there any phenomena in Japanese that are difficult to explain unless we propose that there are syllables?

## 4. Does Japanese have syllables?

### Work groups (time permitting)

- Data set - “Characterizing a pitch-accent rule”
  - How can we characterize the pattern in part (a), based on concepts previously covered in class?
    - State a clear generalization about how pitch-accent is assigned to the words in (a)
  - Can the same analysis be extended to part (b)?
    - If *yes*, step through a concrete example to show how it works
    - If *no*, what is different here?



## 4. Does Japanese have syllables?

### Debriefing

- Data set - “Characterizing a pitch-accent rule”
    - How can we characterize the pattern in part (a), based on concepts previously covered in class?
      - Accent location (vs. tone assignment)
      - Reference to the mora
    - Can the same analysis be extended to part (b)?
      - No (why not?)
- What does work?

## 5. Evidence for syllable structure

- Data set - [“More about mora structure”](#)
  - (1) Possible and impossible word shapes
  - (2) Possible locations for pitch accent (Tokyo)
  - (3) Another nickname pattern
  
- Do all mora types show the same phonological behavior?

## 5. Evidence for syllable structure

- Handout - "[Prosodic structure in Japanese](#)"
  - **Algorithm** for assigning syllable structure
- What about V moras? How can we tell if they are  $\mu_1$  or  $\mu_2$  in a given word? → We need evidence

Data set - "[More about mora structure](#)"

(5) More city names

## 6. Assigning prosodic structure by algorithm

### Putting it all together

- Try to assign **mora** and **syllable** structure and surface **tone** to the following word, according to the algorithms we have proposed

[ k e k k ó n ɕ i k i ] 'wedding'