Today's topics:
- **Syllable structure**
- **Syllable weight**
- **Sonority(?)**

Background preparation:
- Zec (2007), especially sec 8.3–8.4 (8.5?)

0. Today's objectives

After today's class, you should be able to:

- Define and represent **onset, nucleus, coda**

- Describe **typological implications** concerning nuclei, onsets, and codas and **relate** them to syllable-structure analyses in specific languages

- Find evidence for **syllable weight** in a data set, and determine what **factors** make a syllable heavy

- Use **syllable and mora notation** to communicate formal proposals about syllable structure

0. Course info and announcements

- **Analysis Assignment #1** — presentations next week

  - Any questions about structure or content?

1. Context — Syllable structure in our model

- Last time, we saw some evidence in favor of incorporating **syllable structure** into our model

- What were some justifications in terms of
    - **describing**
    - **predicting**
    - **explaining**

  phonological phenomena?

1. Context — Syllable structure in our model

- The Zec (2007) reading provides us with some **formal proposals** for how to incorporate syllable structure into our model

  - entities

  - interactions / behaviors

  - notation, definitions

- Zec formalizes some aspects of her proposals in the Optimality Theory (OT) grammar framework

  - We explore OT in more depth starting next week

2. Syllable-structure terminology

- Zec (2007: 163) lists the following four "simple" **syllable shapes**:

    (a) CVC   (c) VC
    (b) CV   (d) V

    - What do **C**, **V** represent? (this is a trick question!)

- How does Zec initially define the following terms? (to be revisited later in the chapter)

    - **nucleus**

3. Syllable-structure typology

- **Implicational relationships** among the basic syllable shapes

(a)	CVC	(c)	VC
(b)	CV	(d)	V

- What syllable subpart is universally **required**?

- For the subparts that are potentially **optional**, what are the actual "options"?

3. Syllable-structure typology

- Are there any implicational relationships between **complex onsets** and **complex codas**?

  - Side note: Why are linguists often interested in implicational relationships?

- When there is a **single consonant** between two nuclei (...VCV...), how is that consonant syllabified?

- This is considered a universally predictable pattern; claims to the contrary require careful argumentation

3. Syllable-structure typology

- What **two processes** do we frequently observe, given segment strings that do not meet a language's requirements for syllable structure?

- What sorts of **featural asymmetries** are observed between codas and onsets?
  - What is the implication of such asymmetries for

our theory of phonological **representations**?
(What must phonological processes refer to?)

3. Syllable-structure typology

- Discussion exercise: **Hanunoo problem** (3) in [Representing syllables and syllable structure](#)

  - How does an understanding of **syllable-structure typology** shed light on this data set?
    - To consider: Will we be able to get our grammar **model** to incorporate this insight?

4. Syllable weight

- What kinds of **evidence** show that our model must distinguish between **light** and **heavy** syllables?

  - What kinds of syllables can be light?

  - What kinds of syllables can be heavy?

  - How can we determine syllable weight in a given language?

- Data sets - **Sierra Miwok** (5), **Selkup** (6) in Representing syllables and syllable structure

4. Syllable weight

- Some details of implementation

  - How are **long vowels** represented in Zec's approach to syllable weight?

  - Does a **coda consonant** have a mora?

  - If a syllable has two moras, are they represented **identically**?

  - How are **onsets** represented in Zec's model of moraic structure? Why?

5. Formalizing syllable structure

- Zec argues that it is necessary to **encode** the nucleus as part of the phonological representation

    - Does she give any evidence for this assertion?

    - Can we add additional evidence?

5. Formalizing syllable structure

- According to Zec's formal model of syllable structure, how are the following formally defined?

    - **onset**

    - **nucleus**

    - **coda**

5. Formalizing syllable structure

- Zec (2007: 176): "We will take the strong position that the nuclear node is a defining structural property of the syllable, and as such <u>is not subject to the whims of constraint interactions</u>."

  - What does this mean?

- What is the nature of the arguments that Zec uses against the representation of subsyllabic structure presented in (32)?

6. Sonority (time permitting)

- See reading guide for discussion questions

- For discussion:
  What are **possible coda clusters** in English? What generalizations govern these possibilities?