Today's objectives:

- **Review alternating morphemes/URs**
- **Discuss some goals, concerns of *model-building* in research**
- **Apply a traditional feature model**

Background preparation:

- Data sets - Turkish and Javanese
- Hall (2007) (assigned for next class)

0. Today's key points

- Wrap-up: Alternating morphemes, URs
- Models, and how they are used in research
- Introduction to the feature model reviewed and summarized in Hall (2007)

1. Alternating morphemes and URs, cont.

- What are the possible URs for the alternating morphemes in Javanese?
  - For each choice, what are we now required to say the grammar is doing?
  - How do we decide which approach is more appealing?

1. Alternating morphemes and URs, cont.

- What are the possible URs for the alternating morphemes in Turkish?
  - For each choice, what are we now required to say the grammar is doing?
  - How do we decide which approach is more appealing?
  - We may return to this question after we've started to talk about a **feature model**

2. Model-building in linguistics

- What is a model?
- How are models used in research?

2. Model-building in linguistics

- Handout - Model-building in scientific research
  - A model is an abstract explanatory device that captures structure in the data
  - In building a model, key goals are to
    - **describe**
    - **predict**
    - **explain**

    the phenomena of interest
  - See handout for additional discussion

2. Model-building in linguistics

- Is there a difference between these statements?
  - *The consonant [m] is voiced.*
  - *The consonant [m] is [+voice].*

2. Model-building in linguistics

- Is there a difference between these statements?
  - *The consonant [m] is voiced.* → *fact about the **world***
  - *The consonant [m] is [+voice].* → *element in our **model***

2. Model-building in linguistics

- Is there a difference between these statements?
  - *The consonant [m] is voiced.* → *fact about the **world***

    This is a **descriptive generalization**
    - It states what we've observed in the world, highlighting factors we think are important

  - *The consonant [m] is [+voice].* → *element in our **model***

    This is an **analysis**
    - It states how we apply the tools of our model to represent the state of affairs

3. A traditional feature model — Hall (2007)

- Why have a model of **phonological features**?
  - also called: **distinctive features**
  - Hall says **segmental features** (why?)

  - What facts about the world is this model intended to describe, predict, and explain?

3. A traditional feature model — Hall (2007)

- Why have a model of **phonological features**?
  - also called: **distinctive features**
  - Hall says **segmental features** (why?)

  - What facts about the world is this model intended to describe, predict, and explain?
    - Native-speaker behavior concerning
      - natural-class behavior
      - segmental contrasts

3. A traditional feature model — Hall (2007)

- Note: We will use the feature model that Hall (2007) presents as a **reference point** for feature analysis
  - Be aware of points of controversy
  - We'll consider some different points of view when we read Mielke (2005)

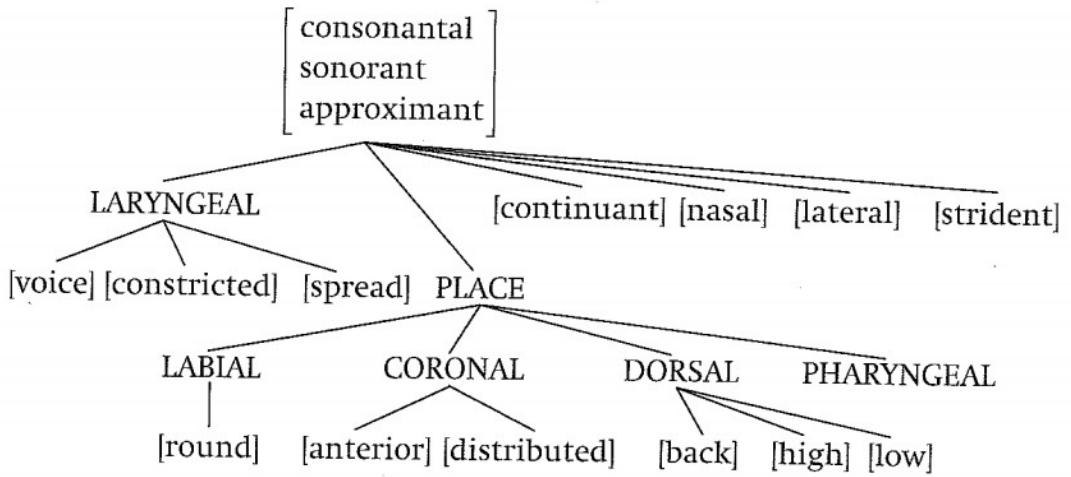
3. A traditional feature model — Hall (2007)

- Overview of the model that Hall (2007) presents

  Note that (most of) this model is not *original* with Hall!

  - Why are **features** and **nodes** distinguished?
  - What do each of these features/nodes do?
  - How do binary vs. privative features differ?

(2) *A feature tree*



4. Applying this feature model

- Back to the alternating morphemes in Turkish
  - For each UR choice, what are we required to say the grammar is doing?
  - How do we decide which approach is more appealing?
  - How does using the vowel features from Hall's model influence this discussion?

5. Some conventions for this course

- We will use Hall's feature model as our course reference model, in general
  - We can ignore feature geometry unless it is relevant (i.e., we can just specify lists of feature values when that is sufficient)
- But: We should be prepared to **override** the default feature specifications for a class of sounds when the **data** requires this
  - More discussion on this point next time!