# LINGUISTICS 105:
# Morphology



October 1, 2012:
Basic allomorphy and morphological practice

# Administrations

- **For Today**: *Language Files*, ch. 4

- Sections start tomorrow – go to them!

- **For Monday**:

  - Perlmutter (1988): The Split Morphology Hypothesis: Evidence from Yiddish

  - HW 1 – Esperanto

# Can't Get Enough Matt?

- Right after the course, I am giving a talk at a conference in Brussels (Belgium).
- S-Circle: Fridays, 4:30pm - ??, Location varies.
  - Papers in {syntax, semantics}
- My paper: *Person-Case Interaction Effects in Semitic and the Role of Morphology in Syntax*.
  - Short version: why you gotta *se lo* when you wanna *le lo*, except in Arabic and Maltese.

  *Le lo dio a mi hermano ⟶ Se lo dio a mi hermano
  "He gave it to my brother"

- Friday 30 November 2012, Location TBA

# Interlinear Glossing

*Schema:*

(#)       Source data in IPA

Morpheme-by-morpheme gloss

"Translation"

(1)   θɪs   ɪz   æn   ɪŋglɪʃ    glɔs-t      sɛntɪnz.
      this   is   an   English   gloss-PAST   sentence

"This is an English glossed sentence."

# Interlinear Glossing, II

(2)  noʊ  me        gusta      naða      la        ɛspɪnaka.
     NEG  1.SG.DAT  like.3.SG  nothing   the.FEM   spinach

     "I don't like spinach at all."

(3)  al-muħaabaraat    yɪ-hraq-uun          baantˤaaluun=ii
     the-secret.police  3.SG-burn.PRES-PL   pants=1.SG.POSS

     "The secret police are burning my pants."

# Interlinear Glossing, III

- *Always provide interlinear glosses for languages other than the language the paper is in (i.e., English).*
- Some glossing connectives:
  - -          morpheme boundary

    /bɔɪ-z/        /pɹud-ɪʃ-nɛss/

  - =          clitic boundary (later this month)

    /kʊd=n̩t/        /aɹtʃɛr=z/

  - .          logical boundary not in example text

    /muħaabaraat/        /la/
    secret.police        DEF.FEM

- <u>Leipzig Glossing Rules</u>

# Morphemes

## Easier to find than the Higgs Boson
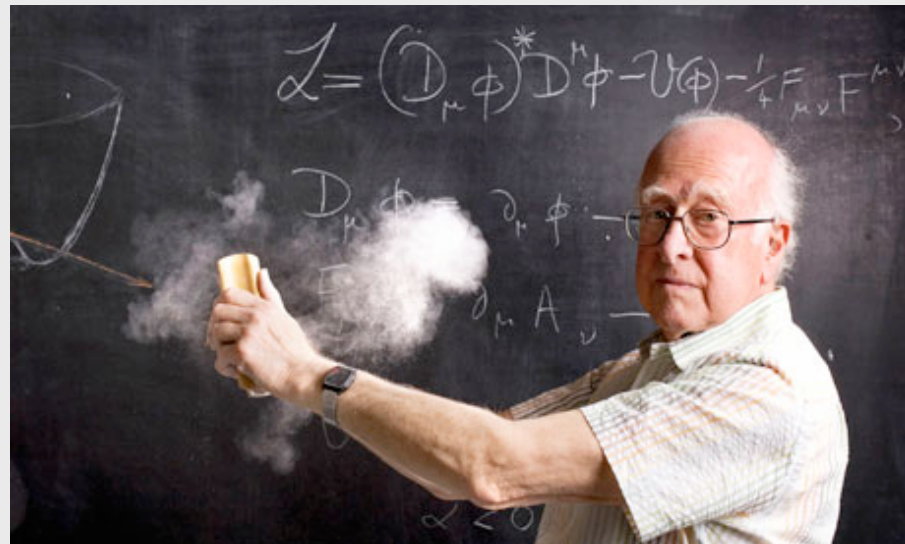
# Proving A Morpheme Exists

- MORPHEME $=_{def}$ the smallest unit of indivisible sound and meaning in a given language.
  - But morphemes aren't givens; we must *prove* that positing one helps us understand a language.
  - Morphemes are ABSTRACT elements posited by the analyst.
  - Concrete version of a morpheme: MORPH.
- This relationship should sound familiar:

  MORPH:MORPHEME :: PHONE:PHONEME

- Process for finding a morpheme:
  1. ISOLATE recurring morphs and recurring meaning.
  2. MATCH recurring morphs to recurring meanings.

# Practice: Find the Morphemes, I

List all morphs and morphemes:

(1) I parked the airboat.

(2) We parked the airboats.

(3) I park the airboat.

(4) He parks the airboats.

(5) She parked the airboat.

(6) She parks the airboats.

(7) We park the airboat.

(8) He parked the airboat.

# Practice, II

## (Lu)ganda [-TONE] (Bantu; Uganda)

(1) tulilaba kitabo  "we will see a book"

(2) tuligula katabo  "we will buy a little book"

(3) baalaba bitabo  "they saw books"

(4) tulilaba butabo  "we will see little books"

(5) balilaba kitabo  "they will see a book"

(6) tulilaba bitabo  "we will see books"

(7) baligula bitabo  "they will buy books"

(8) baligula bitabo  "they bought a little book"

# Answers, Luganda

| Nouns |
|---|
| -tabo "book" |

| Tense Marking | |
|---|---|
| -li- FUTURE | -a- PAST |

| Pronominal Agreement | |
|---|---|
| tu- "we" | ba- "they" |

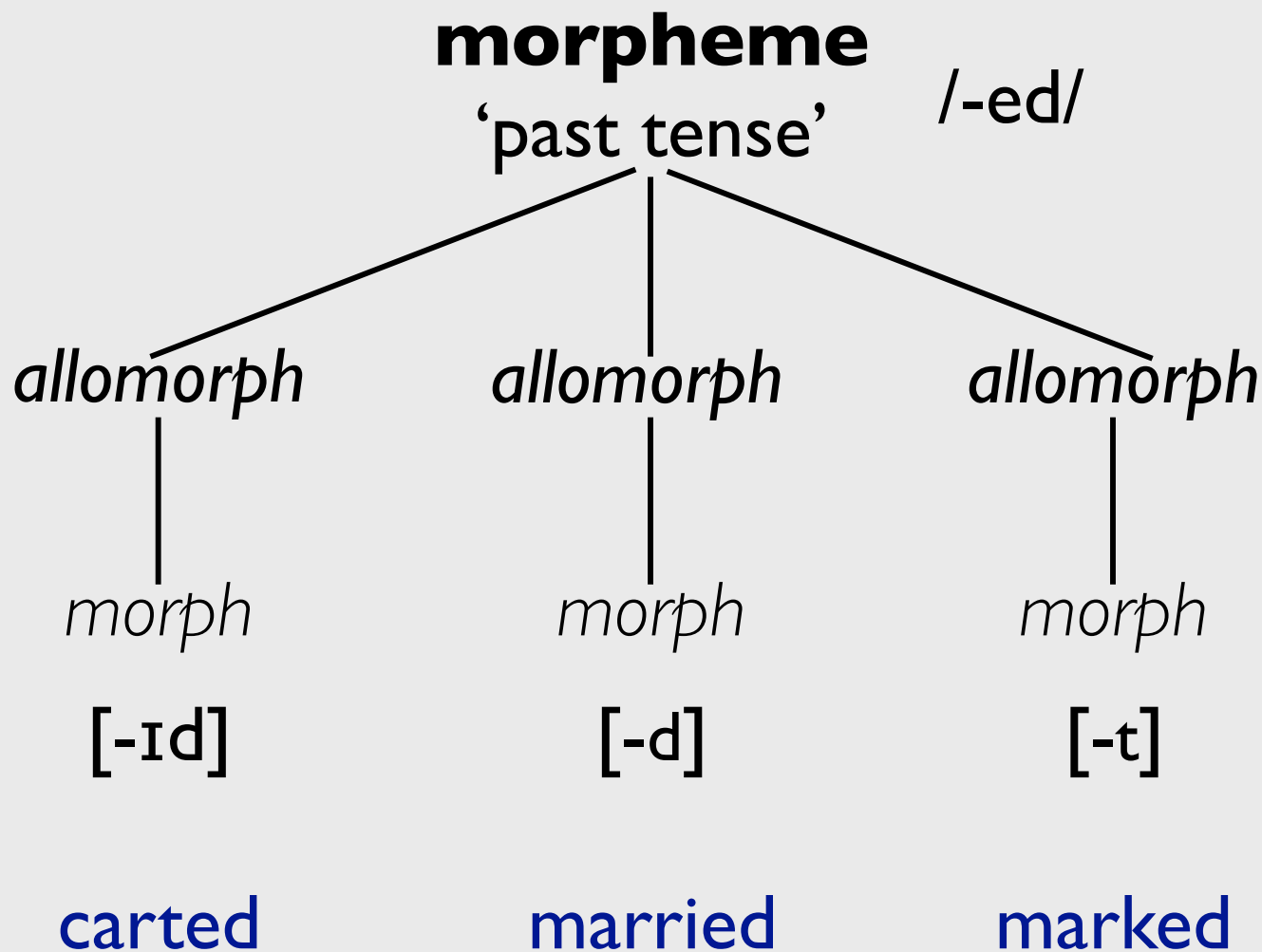| Verbs | |
|---|---|
| -laba "see" | -gula "buy" |

| Noun Class | SG | PL |
|---|---|---|
| Normal Size | ki- | bi- |
| Small Size | ka- | bu- |

# Allomorphy

- The parallels between phonology and morphology don't stop there!

- Morphemes also have ALLOMORPHS $=_{def}$ different morphs of the same morpheme conditioned by some *regular* rule.

$$\left\{ \begin{array}{l} \text{Allomorphy} \\ \text{Allomorph} \\ \text{Morpheme} \\ \text{Morph} \end{array} \right\} \longleftrightarrow \left\{ \begin{array}{l} \text{Allophony} \\ \text{Allophone} \\ \text{Phoneme} \\ \text{Phone} \end{array} \right\}$$

# A Simple Example

**morpheme**
'past tense'  /-ed/

*allomorph*  *allomorph*  *allomorph*

*morph*  *morph*  *morph*

[-ɪd]  [-d]  [-t]

carted  married  marked
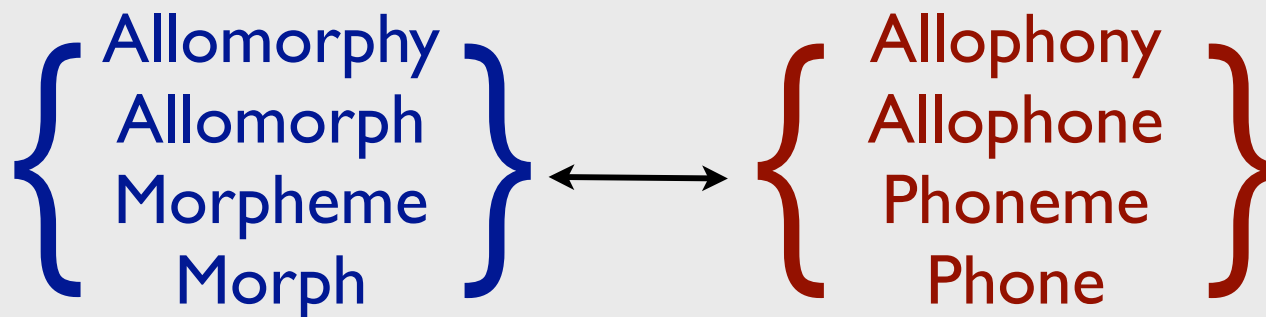
# Allomorphy, II

- There are three main kinds of allomorphy, *based upon what the regular condition is* that determines allomorph selection.
- Proper vocab: _____ CONDITIONED ALLOMORPHY
  - PHONOLOGICALLY: allomorph selection conditioned by surrounding phones (only!).
  - GRAMMATICALLY: allomorph selection conditioned by surrounding morphs.
    - Also sometimes called CONTEXTUAL ALLOMORPHY.

# Phonologically Conditioned Allomorphy

The condition is *phonological only*.

## Korean Nominative Suffix

| ALLOMORPH | ENV. | EXAMPLE | GLOSS |
|-----------|------|---------|-------|
| -i | /C__ | pap-i | "rice" |
| -ka | /V__ | ai-ka | "child" |

## English Plural Marker

| ALLOMORPH | ENV. | EXAMPLE |
|-----------|------|---------|
| -s | /[-voi]__ | stacks |
| -z | /[+voi,-cont]__ | birds |
| -ɪz | /[+cont]__ | bushes |

(Embick, 2001)

# Grammatically Conditioned Allomorphy

The condition is *the presence of a grammatical element.*

**Question:** What governs the choice of the following English past tense allomorphs?

| PRESENT | PAST | ALLOMORPH |
| --- | --- | --- |
| walk | walked | [-t] |
| kiss | kissed | [-t] |
| grasp | grasped | [-t] |
| weep | wept | [-t] + V? |
| sweep | swept | [-t] + V? |
| shake | shook | V? |
| take | took | V? |

# Mixed Cases

- Not always the case that a given instance of allomorphy is totally analyzable as grammatically conditioned or phonologically conditioned.
  - In this case, we're looking for the *best description of the empirical situation.*
  - *Usually*, this involves positing some allomorphs which are grammatically conditioned and others which are phonologically conditioned.
- However, judicious use of phonological rules might make it possible to treat all the allomorphs as grammatically conditioned.

# English Plurals, Redux

| Singular | Plural | Allomorph |
|----------|--------|-----------|
| airstream | airstreams | [-z] |
| dad | dads | [-z] |
| airboat | airboats | [-s] |
| bank | banks | [-s] |
| press | presses | [-ɪz] |
| crèche | crèches | [-ɪz] |
| ox | oxen | [-ɛn] |
| goose | geese | V? |
| alumnus | alumni | [-aɪ] + deletion |
| octopus | octopodes | [-oʊdeɪs] + del. |
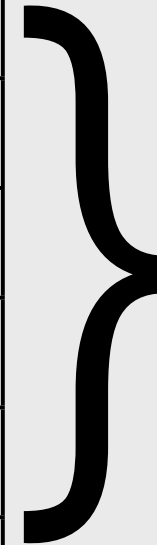
Phonologically Conditioned

Grammatically Conditioned

# Morphology and Syntax: Timing

- So far, we have not discussed the relationship between all this morphology and the syntax you already know.
- **Tell me:** how did you deal with morphology in your syntax class?
  - Form rules are a good way to relate syntactic structure to morphological form which is determined *by* syntactic structure.
- Another answer to the English plurals problem is based on this observation:
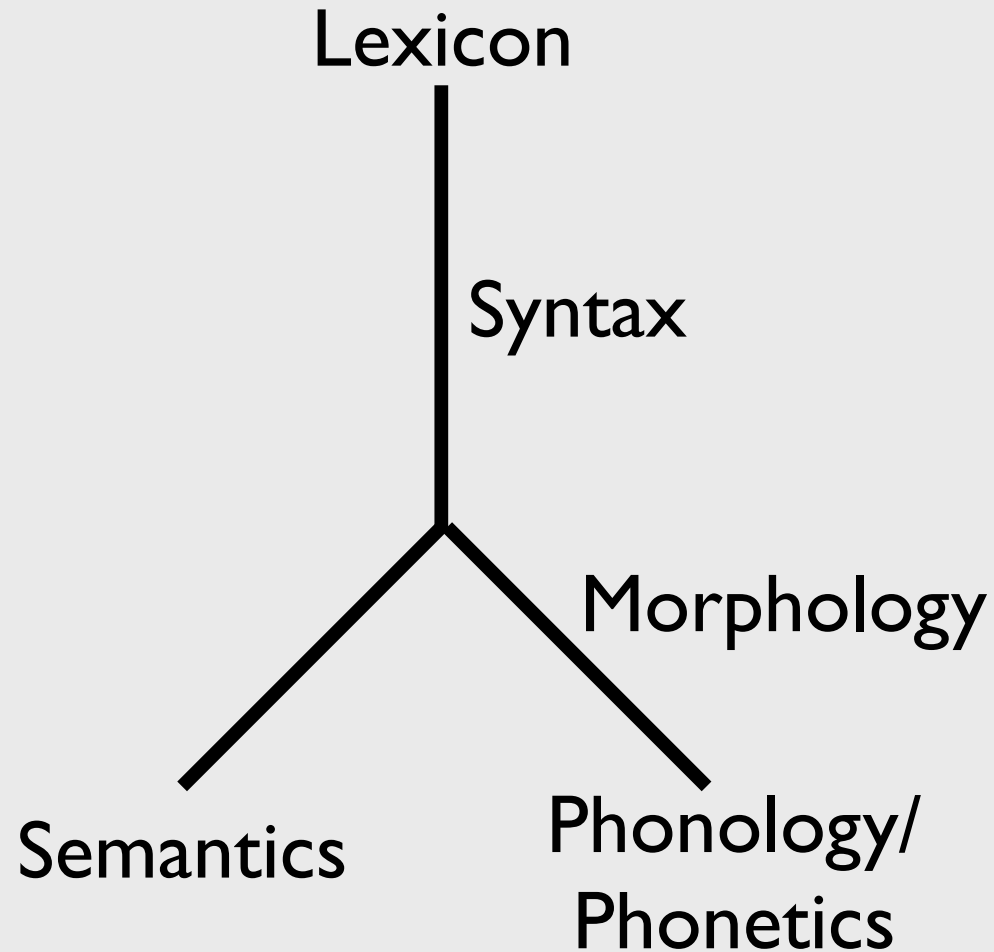  - *Idea:* make *all* the allomorphy grammatically conditioned, and deal with the s/z/ɪs in the phonology.

# A Modular Solution

| ALLOMORPH | CONDITION |
|-----------|-----------|
| [-z/-s/-ɪz] | airstream, airboat, crèche, ... |
| [-en] | ox, child, ... |
| [-aɪ] | alumnus, ... |
| [-ø] | goose, fish, ... |
| [-oʊdeɪs] | octopus, ... |

/-z/ ⟶ [-voice]/[-voice]___

/-z/ ⟶ [+cont]/[+cont]___

# The Y-Model

Lexicon

Syntax

Morphology

Semantics

Phonology/
Phonetics

# For Wednesday

- GO TO SECTION.

- Finish *Language Files* ch. 4 if you have not already.

- Begin looking at HW 1.