1. **Assignments**
   - Hand in Homework #4.
   - Last homework, #5 handed out Wednesday, not due until Wednesday 5/30

2. **Announcement**
   - Bruce away most of next week (details reserved for oral announcement).
   - Kie Zuraw will take one of the classes (TBA) and I will cover the other in finals week at a time we can all come.

3. **Today**
   - The hierarchy of levels of OO-Faith
   - Weight and its possible phonetic basis

### THE HIERARCHY OF LEVELS OF OO-FAITH

4. **Levels**
   - I mean, informally, things like Root < Stem < Word < Phonological Word < Phrase.

5. **Conjecture**
   - OO-Faith increases the higher you go on this hierarchy.
   - This must have been proposed somewhere but I’m not sure where.

6. **A Spanish example from Harris (1983): stem to inflected form**
   - *Syllable Structure and Stress in Spanish*, MIT Press.
   - /n/ and /ŋ/ are phonemes, but only [n] may occur in codes.
   - Verbs always have a vocalic ending, so tolerate stem-final [ŋ]:
     - [desde,p-es] ‘disdains’
     - and same allomorph throughout the verbal paradigm
   - Nouns can have no ending, in some declensions, and so we have:
     - /desden/ → [desden] ‘disdain-n.’
   - The [n] is inherited in the plurals:
[desde.n-es] ‘instances of disdaining’
- This appears to be stem-inflected form correspondence.

7. Word-level: An Argentinian Spanish example from Harris (1983)
- [dʒ] is (sort of) an allophone of /j/, occurring in onset position.
- Caveat: the single learned word paranoia [para'noja] is an exception.
- Paradigm uniformity is enforced from word to phrase, not stem to word:
  
  \[
  \begin{align*}
  \text{[lej]} & \quad \text{‘law’} \\
  \text{[le\j es]} & \quad \text{‘laws’} \\
  \text{[le.j es]}, \text{syllabified [le.j es]} & \quad \text{‘law is’}
  \end{align*}
  \]
- From UCLA Argentinian-speaking undergraduates I have obtained [le.jes] for ‘laws’ as well — stem to word correspondence.
- Since PU is usually from misacquisition I’m tempted to call this a younger-generation innovation.

8. Phonological-word to phrase correspondence in Cibaeño Spanish
- Harris again, citing Guitart
- This dialect (probably optionally) converts coda [r, l] to [j].

\[
\begin{array}{lc}
\text{Before C} & \text{Before V} \\
\text{papel blanco} = \text{[papej]} & \text{papel azul} = \text{[papej]} \\
\text{‘white paper’} & \text{‘blue paper’} \\
\text{é}l \text{ da} = \text{[\'ej]} & \text{é}l \text{ avisa} = \text{[\'ej]} \\
\text{‘he gives’} & \text{‘he advises’} \\
\text{el dia} = \text{[ej]} & \text{el aviso} = \text{[el]} \\
\text{‘the day’} & \text{‘the advice’}
\end{array}
\]

- He gives no word-paradigm but I suspect plural of ‘paper’ is [papel-s]

9. The general law?
- Faithfulness to an element at some prosodic level implies Faithfulness to all higher levels.
- E.g. I doubt there could be a dialect that has
  \[
  \begin{align*}
  \text{[le\j es]} & \quad \text{‘law is’} \\
  \text{[le\j es]} & \quad \text{‘laws’}
  \end{align*}
  \]
- Conjectured possible factorial typology, assuming isolation [papej], [éj], [ej]
This is a stringency hierarchy, which you can read about how to enforce in work of Prince and DeLacy:


10. **English /l/ darkness**

- This is an embarrassingly sloppy paper by me from the days of low standards, but I think the generalization is correct.
- The higher the level of the base form, the stronger the urge to be faithful to darkness in /l/.
- N.B. the main cue to darkness may be allophony of preceding vowel
- “Light l goodness score” is obtained by subtracting subject ratings for light [l] vs. dark [l] in the same context.

<table>
<thead>
<tr>
<th>Context</th>
<th>Examples</th>
<th>“Light l goodness score”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word initial</td>
<td>light, Louanne</td>
<td>4.62</td>
</tr>
<tr>
<td>Suffix-initial</td>
<td>gray-ling, gai-ly, free-ly</td>
<td>1.78</td>
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<tr>
<td>Medial ambisyllabic</td>
<td>Mailer, Hayley, Greeley, Daley</td>
<td>0.74</td>
</tr>
<tr>
<td>Stem-final pre-suffix</td>
<td>mail-er, hail-y, gale-y, feel-y</td>
<td>-0.97</td>
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<tr>
<td>Word-final pre-clitic</td>
<td>mail it</td>
<td>-3.30</td>
</tr>
<tr>
<td>Phonological word final</td>
<td>mail Alice a letter</td>
<td>-5 (not tested, my own guess)</td>
</tr>
<tr>
<td>Absolute final</td>
<td>mail, help</td>
<td>-5.47</td>
</tr>
</tbody>
</table>

- So, the weight of PU-XO(⟨back⟩ in [+lateral]) must go up as we promote X from stem, to word, to Phonological Word.

11. **Bashing derivational approaches: optional cyclicity**

- “Optional cyclicity”: a rule must be made optional when it applies on an inner cycle, but then obligatory when the stem occurs by itself.

  ailing [ei̞l] or [i̞l] vs.
  grayling [etl]
• This seems at least inelegant to me: what is actually optional is whether you carry forward the effects of the base form on the derived form, per the principle of constraint ranking.
• Indeed, the /l/ example seems to need probabilistic cyclicity.

THE BAZAAR OF BASES

12. What can you be OO-Faithful to?

• This was already covered to some extent in Kie’s 201A so I will be brief.
• Perhaps there are different answers for derivation and inflection.

13. Inflectional bases

• McCarthy (2005): let the members of the paradigm take a vote!
  ➢ This seems diachronically unstable — if you lose your 2 plur. verbs, does convulsive paradigm change then happen?
• Bochner: anything can be a base for anything.
• Adam Albright’s scholarly oeuvre argues for early discovery by the child of the most informationally-nutritious category, adopting it for life as the base for all.
  ➢ N.B. This means a fair amount of memorization
• Bonami and Boyé (n.d.) (sort of) extend Albright, laying out a sort of tree theory, where you can follow the tree from base to base, each node permitting memorization.
  ➢ Olivier Bonami and Gilles Boyé (date?) Suppletion and dependency in inflectional morphology. Can’t find ref.

14. A couple of Bonami/Boyé trees for French

• A verb with two stems, *mourir* ‘die’:
A verb with three stems, *boire* ‘drink’:

- 15. Derivational bases
  - Here, we often have a very direct sense of the semantics that makes the base seem obvious: *good ~ goodness* is trivial.
  - But there are less obvious cases.

- 16. The -ation base for English word formation
  - He suggests that -ee frequently attaches to X in Xation.
  - We previous saw similar evidence for -able being attached to the -ate stem of verbs.
17. **What is the base for English -istic?**

- Again, idea taken from Aronoff; data from my searchable English lexicon.

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heuristic  heurist  heurism  bound stem
logistic  logist  logism  bound stem

- What is the likely source for -istic adjectives?

STERIADE’S RESEARCH PROGRAM IN BASES

18. References

- “Lexical conservatism”, a never-published item xxx
- “Lexical conservatism in French adjectival liaison”, UCLA ms., www.linguistics.ucla.edu/people/steriade/papers/LexicalConservatism.pdf
- Steriade, Donca. 2016. The morpheme vs. similarity-based syncretism: Latin t-stem derivatives. in Ana Luis and Ricardo Bermudez-Otero (eds.) The morpheme debate, Oxford University Press.

19. Two fundamental principles

- Lexical conservatism: you must make use of an allomorph that already exists (lexically listed, accepted for use by the speakers).
- Multiple bases possible: for some processes, you may search through the set of lexically listed allomorphs to find what you need.
  > I believe all here cases of this sort involve derivation, not inflection.

20. Two amazing things about the allomorphs you search for

- The inventory of inflected stem-forms can serve as the basis for derivation; violating the classical ordering principle of these two components.
- In derivation itself, a semantically-illmatched form can serve as the base.
  > examples below

21. The -able example in English (Steriade ms., “Lexical conservatism”)

The phonotactic principles at stake are:
- *ɪσðð # (*preantepenultimate)
- *Heavy stressless between stressed and stressless; cf. Liberman and Prince’s *pódectal
• Representative data:
cómpensate  compénserory  compénsable
inundate  —  *inúndable, inundable
óbfuscate  obfúsatory  obfúscable, *óbfuscable

— */✓ depending on whether you possess obfúsatory

rémedy  remédial  remediable, ?rémediable
parody  —  *parodiable, ?párodiable

• Semantic mismatches:
  ➢ *compensable has the semantics of compensate and the allomorph of compensatory.
  ➢ *remediable is claimed to have the semantics of remedy and the allomorph of remedial.¹

22. Drawing bases for derivation from the inflection paradigm: Ukrainian and Russian

• Source: readings
• Basic picture:
  ➢ A quite complicated system of stress alternations
  ➢ This produces batches of accentually-distinct allomorphs
  ➢ These can be deployed for derivational morphology

23. The Ukrainian case

• The stress system has a penult preference.
• So
  ➢ monosyllabic -nyj begs for a finally-accented stem.
  ➢ disyllabic -ovyj begs for an unaccented stem.
• ‘hoop’ has two allomorphs in its inflectional paradigm:
  obrúťf, affixed obrúťf-i, obrúťf-ú, obrúťf-ý
  ➢ hence: obrúťf-óvyj, obrúťf-nyj
• This is all worked out in constraint conflict.
  ➢ E.g. if all the allomorphs of a stem have the same stress, just go head and use it.
  ➢ káktus always has initial stress in all of its paradigm, so káktus-ovyj, giving up on Paradigm Uniformity.

24. Cleanliness of the data

• Is imperfect
• They helpfully distinguish historically old forms from new ones;
  ➢ the latter darned well better obey the theory, and do

¹ Is it perhaps instead a formation from remediate?
➢ the former might include archaisms, lexically listed

25. Methodology

- Waxing preachy, I feel this part of the paper would have benefited from methods taught in this class:
  ➢ formalization of the system in maxent
  ➢ checking of the accuracy of quantitative generalizations
  ➢ checking for statistical significance of the constraints

26. The Russian case

- The suffixes themselves have accentual preferences, and stem allomorphs are selected from the inflectional paradigm.
- So, -іʃʃ wants to be stressed — but can only be so only if the stem’s paradigm provides a stressless allomorph; else stem stress wins.
- -остʃ wants to be stressless.
  ➢ If there is a stressed stem allomorph in the inflectional paradigm, use it, and all is well.
  ➢ Otherwise, a paradigm gap.

27. A controversial third principle propounded by Steriade

- Frankenstinism: you cobble together bits of a new allomorph from multiple existing allomorphs.

28. The best-case example of Frankenstinism: French liaison consonants

\begin{center}
\textit{vain espoir} \quad \textit{vain hope}
\end{center}

\begin{center}
\text{Feminine allomorph} \quad \text{Masculine isolation allomorph} \quad \text{Masculine prevocalic allomorph}
\end{center}

\begin{center}
\begin{array}{ccc}
v & & e & n \\
v & & \tilde{e} & n \\
\end{array}
\end{center}

- However, the morphosyntactic status of French liaison consonants (t, z, n) is rather in dispute — some even take them to be prefixes!

29. Frankenstein’s monster cases generally sound bad in English

- Such a case would look like *\text{[ˌɪntuˈɪʃən]}, from \textit{intuit} [ɪnˈtut] and \textit{intuition} [ɪntuˈɪʃən].
• On the other hand, the single example bureaucratism, taking its vocalism from bureaucracy and its final consonant from bureaucrat, looks Frankenstinian to me;
  ➢ It is the only example I know.

30. The Slavic cases

• Steriade and Yanovich p. 21 describe what a Frankenstinian case would look like and acknowledge that there are none.

SYLLABLE WEIGHT

31. What is it good for? Clearer cases

• Heavy syllables attract stress in many languages.
  ➢ More subtly: they attract foot-headedness: the amazing case of CVCCVCV in Cairene Arabic.
• Heavy syllables are double units in quantitative meter; e.g. the Greek/Latin dactylic hexameter.
• The prosodic templates of the world are definable by syllable weight.
  ➢ Ilokano has contrasting heavy and light reduplication patterns, with the heavy manifested as CVC- in some cases, CV:- in others.
  ➢ trab-trabaho, da:-da?it ‘is working, sewing
  ➢ agin-tra-trabaho, agin-da-da?it ‘pretends to be working/sewing’
• In many languages, English included, a monosyllable can be a word only if it is heavy.

32. What is it good for: less clear cases

• Heavy syllables often can host contour tones.
  ➢ Caveat: often this involves a special definition of heavy, as in Lithuanian: only sonorant codas are tone-hosting.
  ➢ See below on processs-specific weight.

33. This and that: Paul Newman on syllable weight in Chadic

• Reference:

SYLLABLE WEIGHT AS A PHONOLOGICAL VARIABLE
The Nature and Function of the Contrast Between "Heavy" and "Light" Syllables

Studies in African Linguistics
Volume 3, Number 3, December 1972
• Predictable tone in Bolanci verbs is based on whether the first syllable is heavy or not:

<table>
<thead>
<tr>
<th>Heavy</th>
<th>Light</th>
</tr>
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<tbody>
<tr>
<td>ràamú 'to repair'</td>
<td>tónú 'to sharpen'</td>
</tr>
<tr>
<td>sòorú 'to fall'</td>
<td>shífù 'to steal'</td>
</tr>
<tr>
<td>mòyyù 'to wait for'</td>
<td>mòyù 'to see'</td>
</tr>
<tr>
<td>lèmdú 'to lick'</td>
<td>ngàdú 'to eat (meat)'</td>
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<tr>
<td>wùndú 'to call'</td>
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</table>

• Look at these plurals in Hausa:

(18) kákóo → kásàakée 'bowl'
(19) jírfí → jíjągée 'train'
(28) káfàa → káfàafée 'hole'
(29) wúrfí → wúràarée 'place'
(30) dámóó → dámàamée 'monitor'
(31) zúgúu → zúgàagée 'roll of cloth'
(32) kíffí → kíffèayée 'fish'
(33) gáullàa → gáulàayée 'idiot'
(34) zómóó → zóomàayée 'hare'
(35) súunàa → súunàayée 'name'

34. Different criteria

• Some languages make the heavy-light divides at CVV/CVC, CV
• Others at CVV, CVC/ CV

35. The era of explanatory glory in syllable weight: the consistent-in-language hypothesis

• It’s a structural principle, set once, obeyed thereafter.
• A case that makes you think this is true: Latin, with CVV, CVC/ CV
• This didn’t last; people found inconsistencies, or indeed triple distinctions:
  CVV/CVC/ CV
  ➢ Hayes (1995, Metrical Stress Theory)
    Phonetically-based phonology, Cambridge.
36. An example of a triple distinction

- Finnish stress is left-to-right syllabic trochees.
- But you skip a syllable medial, if this will let you form better feet.
  - 'CV CVC, 'CV CVV are bad, producing the skip.
  - 'CVC CVC is bad, too

37. Ugly little things want to come in and participate in the same area

- They aren’t as “powerful” in effect (readings)
  - Branching onsets make syllables a bit heavier
  - Onsets vs. no onsets make syllables a bit heavier.
  - Non-sonorous onsets make syllables a bit heavier.
  - Lower vowels make syllables a bit heavier

38. But it’s not a complete and total mess

- We know what factors tend to make syllables prominent.
- We know what factors are stronger
  - We would be surprised to see a where CVV is light?²

39. Phonetics offers hope of bring order to the mess

- We can develop a theory of phonetic properties lending auditory prominence, and
  roughly deduce the typology of what counts as heavy.
- Slogan: syllables are heavy when they sound heavy
- Then we need a formal theory that governs/deploys this phonetic influence as
  phonological grammar.

² BH check Hebrew, Seneca