Happy Valentine’s Day

Morphology cont.

**Inflection versus Derivation**

- Distinctions can be subtle. At times, it may not be clear what function an affix may have. The following criteria are often employed to determine the status of an affix:
  a. Category change: (nb: king → kingdom) (Meaning change).
  
  b. Order: A derivational affix must combine with the base before an inflectional affix does.
  Neigh + hood + s
  *Neigh + s + hood

  In general, the derivational affix must appear closer to the root or the stem.
  c. Productivity: This refers to the relative freedom with which affixes can combine with bases of the appropriate category.

**Some more morphological processes:**

1. **Co-occurrence restrictions** on derivational affixes: Can we attach any derivational affix to any word?

   ♦ **Rule Productivity**
   i.  *unsystem  ii.? Uncola (as a verb)  iii. dispaint  iv.  *miseat

   a. Restrictions on –en affix? Can it be added to any word?

   black  □ blacken,  fat → fatten,  new → *newen,  soft → soften
b. Restrictions on –ant affix?

Combat ⌣ combatant, battle → *battlant, enter → entrant, exit → ?exitant

c. What kinds of verbs can take the suffix -able? Which class of verbs cannot?

2. Lexical Gaps:
   a. Accidental or lexical gaps are well-formed but non-existing words. The actual words in a language constitute only a subset of possible words.

   i. . blick ii. slarm iii. krobe

3. Pullet Surprises (Some definitions offered by some undergraduates from an anonymous university)

(From An Introduction to Language, 7th Edition p. 91)

- deciduous able to make up one’s mind
- longevity being very tall
- fortuitous well protected
- gubenatorial to do with peanuts
- bibliography holy geography
- adamant pertaining to original sin
- diatribe food for the whole tribe
- polyglot more than one glot
- gullible to do with sea birds
- homogeneous devoted to home life

OTHER MORPHOLOGICAL MEANS:

4. Compounding:
   a. Enables one to form complex words by a "gloom"ing" them together. The strategy is quite productive in English e.g. blackboard design; blackboard design school, student-lover, faculty-hater.
   b. The resulting compound word, with very few exceptions, is a noun, a verb, or an adjective.
i. Noun: [N [v scrub [n nurse ]]] = scrub nurse
ii. ii. Verb: [V [v break [v dance]]] = break dance
iii. Adjective: [A [n nation [a wide]]] = nationwide

5. More Properties of Compounds:
   b. Compounds can be distinguished from phrases (non-compounds) on the basis of a variety of converging criteria.

   I. Stress: the White House v. the white house (across the street)

   II. Syntax treats compounds as units that cannot be separated by syntactic rules.
      a. plural and tense markers cannot typically be attached to the first element in a compound, although they can be added to the compound as a whole:

         *The player [dropped kick] the ball.
         The player [drop kicked] the ball.

         *The [foxes hunter] did not have a license.
         The [fox hunters] did not have a license.

   III. How would you account for the following data? What does this morphological test tell us?

      Compound with very: *We live next to a very [greenhouse].
      We live next to a very green house.

      b. *I wrote on the blackerboard on the wall.
      Of the two, I want the blacker board.

      c. the high, yellower chair.
      *the high yellowerchair.

      d. Very red-hot"
      *red-very-hot

⇒Attempt at the generalization:

Generally, the part of speech of the whole compound is the same as the part of speech of the rightmost member of the compound, which is termed the "head" of the compound, e.g., The baby sits in the [N[ahigh[nchair]]]." (chair is a noun; it is the head of the compound; thus, the entire compound is a noun.
IV. Compounds are not limited to two words:
   *bathroom towel-rack, mother-in-law, classroom metal detector.*

V. In English, the spelling system does not reflect the difference between simple words and compound words in any systematic way.

Compounds can be spelled as a single word (*bathroom*), as a hyphenated word (*ape-man*), or as two separate words (*high jump*).

Some types of compounds in English:
- Noun + Noun landlord
- Adjective + Noun lowrider
- Preposition + Noun overdose
- Verb + Noun swearword
- Adjective + Adjective red-hot
- Noun + Adjective nationwide
- Preposition + Adjective ingrown
- Preposition + Verb outrun

   d. What would you guess is the meaning of the compound *sidewalk-alligator laugh*?

   What is the head in this word?

**IMPORTANT CONCLUSION:** There is evidence from many languages of the world that word formation follows systematic morphological principles.

5. Compounds in other languages and other types of word formation.

   - Although the rules governing compound formation differs from language to language, the practice of combining lexical categories to build a new word is *very* common.
   - Compound nouns are especially common. Languages can have the head of the compound either to the left or the right. (This difference in *head-direction* will emerge again in other domains of language.)

<table>
<thead>
<tr>
<th><strong>Korean: Noun compounds</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kot elum (noun)</td>
</tr>
<tr>
<td>Straight ice</td>
</tr>
<tr>
<td>'icle'</td>
</tr>
</tbody>
</table>
Tagalog: Noun compounds

<table>
<thead>
<tr>
<th>Tagalog</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubig ulan</td>
<td>Water rain</td>
</tr>
<tr>
<td>tanod bayan</td>
<td>guard town</td>
</tr>
<tr>
<td>anak araw</td>
<td>child sun</td>
</tr>
<tr>
<td>'rainwater'</td>
<td>'policeman'</td>
</tr>
<tr>
<td>'albino'</td>
<td></td>
</tr>
</tbody>
</table>

German: Noun compounds

<table>
<thead>
<tr>
<th>German</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gast-hof</td>
<td>Guest inn</td>
</tr>
<tr>
<td>Wort-bedeutungs-lehre</td>
<td>word meaning theory</td>
</tr>
<tr>
<td>Fern-seher</td>
<td>far seer</td>
</tr>
<tr>
<td>'hotel'</td>
<td>'semantics'</td>
</tr>
<tr>
<td></td>
<td>'television'</td>
</tr>
</tbody>
</table>

a. **Incorporation:** this is a very common way for languages to form compounds. It usually involves the combination of a **noun** with a verb to form a compound **verb**. This process is not as common in English as it is in other languages. These compounds often involve phonological changes to the noun and/or the verb.

<table>
<thead>
<tr>
<th>Chukchee: Incorporation (NE Siberia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without incorporation</td>
</tr>
<tr>
<td>Ta-pelarken qorane</td>
</tr>
<tr>
<td>I leave reindeer</td>
</tr>
<tr>
<td>‘I’m leaving the reindeer.’</td>
</tr>
<tr>
<td>With incorporation</td>
</tr>
<tr>
<td>te-qora-pelarken</td>
</tr>
<tr>
<td>I-reindeer-leave</td>
</tr>
</tbody>
</table>
| ‘I’m in the process of reindeer-
  leaving.’                            |

<table>
<thead>
<tr>
<th>Ponapean: Incorporation (Micronesia)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without incorporation</td>
</tr>
<tr>
<td>I pahn pereki lohs</td>
</tr>
<tr>
<td>I will unroll mats</td>
</tr>
<tr>
<td>‘I will unroll the mats.’</td>
</tr>
<tr>
<td>With incorporation</td>
</tr>
<tr>
<td>I pahn perek-los</td>
</tr>
<tr>
<td>I will unroll-mats</td>
</tr>
<tr>
<td>‘I will engage in mat unrolling.’</td>
</tr>
</tbody>
</table>

b. **Conversion:** assigns an already existing word to a new syntactic category.
• This process is often called **zero derivation** because it does not add an affix but brings about a change in category and meaning.

<table>
<thead>
<tr>
<th>V derived from N</th>
<th>N derived from V</th>
<th>V derived from A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ink (a contract)</td>
<td>(a building) permit</td>
<td>dirty (a shirt)</td>
</tr>
<tr>
<td>Butter (the bread)</td>
<td>(an exciting) contest</td>
<td>empty (the box)</td>
</tr>
<tr>
<td>Ship (the package)</td>
<td>(a new) survey</td>
<td>better (the score)</td>
</tr>
</tbody>
</table>

c. **Blends:** Words that are formed from non-morphemic parts of two already existing lexical items.  
   **Smog** (smoke and fog)

6. **Morphology and Syntax**

Some grammatical relations can be expressed either inflectionally (morphologically) or syntactically as part of the sentence structure.

- England's queen is Elizabeth II.  
- He loves books.  
- The planes which fly are red.  
- He is hungrier than she.

The Queen of England  
He is a lover of books.  
The flying planes are red.  
He is more hungry than she.

What one language signals with inflectional affixes, another does with word order and another does with function words.


8. **Syntax**

- Refers to the part of the grammar that represents a speaker’s knowledge of sentences and their structures.

***Goals of syntactic inquiry: ****

1. Account for all the grammatical sentences in a language under investigation.
2. Provide the simplest description possible of the syntax.

3. Isolate those features which may be common to all human languages. 
→ Provide an explanatory account for language.

   a. Novelty and productivity:
      i. *House painted student a the.
      ii. The student painted a house.

   b. Grammaticality:
      *NB*: Do not confuse being able to understand an utterance even when ill-formed and ngrammaticality (licensed by the syntax/grammar of a particular language.

      *Disa slept the baby.
      Disa slept soundly.

Zack believes Robert to be a gentleman.
*Zack believes to be a gentleman.
*Zack tries Robert to be a gentleman.

Zack tries to be a gentleman.
Zack wants to be a gentleman.
Zack wants Robert to be a gentleman.

   c. The ability to make grammaticality judgments does not depend on

      i. -on having heard or read the sentence before.
      ii. on whether the sentence is meaningful or not
      *Colorless green ideas sleep furiously.*
      *A verb crumpled the milk.*
      *The Beatles snarled the song.*

      iii. Grammatical sentences may be uninterpretable:
          *‘Twas brillig, and the slithy toves
             Did gyre and gimble in the wabe.

          Compare: *Toves slithy the and brillig ‘twas
          Wabe the in gimble and gyre did

   d. Syntactic knowledge:
      - goes beyond our ability to make judgments about grammaticality.

      - it accounts for the multiple meanings or ambiguity of expressions depending upon the structure we impose on the utterance (just as in morphology).

Structural Ambiguity (as in the unbuttonable example from morphology)
1. Synthetic buffalo hides.
   What two phrasal structures are possible?
2. Dick finally decided on the boat.
3. The design has big squares and circles.
4. That sheepdog is too hairy to eat.
5. I cannot recommend him too highly.
6. No smoking section available.
7. For sale: an antique desk suitable for a student with thick legs and large drawers.

e. **Grammatical relations:**
   Our knowledge of syntax also enables us to determine the grammatical relations in a sentence such as *subject* and *direct object* and how they are to be understood.
   1. The nurse informed the doctor.
   2. The doctor informed the nurse.
   3. The doctor was informed by the nurse.

To summarize thus far:
Syntactic rules of a grammar account for at least the following:

1. The grammaticality of sentences
2. Word order
3. Hierarchical organization of sentences
4. Grammatical relations such as subject and object
5. Whether different structures have the same meaning or not
6. The creative aspect of language

f. **Phrase Structure and constituents:**

Intuitions that native speakers have about their languages are of two types:

1. Intuitions about sound sequences;
2. Intuitions about whether particular sets of constituents belong to the same category (*Lexical or Functional*).

*Hierarchical structure:* words in a sentence are grouped together into successively larger structural units.

   a. **The students work hard.**
   b. **((the students) (work hard))**
   c. **(((the)(students))((work)(hard)))**

- As in morphology, the bracketing of constituents can be illustrated in an *inverted tree* structure.
The students work hard

g. **Syntactic Categories:**
   A family of expressions that can substitute for one another without the loss of grammaticality is called a syntactic category.

   The student * found *the book *in the cellar.