Basic Syntactic Concepts

Carl Pollard

Syntax 2
(Linguistics 602.02)
January 3, 2012

According to Saussure (c. 1907-1911)

- A natural language is made up of **signs**.

- A sign is a mentally represented entity shared by members of a speech community.

- A sign consists of an associative bond between

    - a **sound image** or **signifiant** (mental representation of linguistic sound), and
    - a concept or **signifié**.

The Saussurean Sign Updated (1/2)

In more contemporary terminology:

- the notion of a sign corresponds closely to the notion of a **word** (as syntacticians conceive of it)

- the *signifiant* of a sign corresponds closely to the (segmental) lexical phonology of a word.

The Saussurean Sign Updated (2/2)

- the *signifié* of a sign corresponds roughly to the lexical semantics of a word. But:

    - Most semantic theorists follow Frege, Carnap, Montague, Lewis, etc. in thinking of meanings as as *nonmental* entities (either in the actual world, or in 'Frege's Heaven', or as some kind of abstract object involving possible worlds).
    - The most notable exception to this generalization in recent decades is Ray Jackendoff's **conceptual structures**.
    - One possible way to resolve the dichotomy is to think of Saussurean (or Jackendoffian) concepts (or conceptual structures) as mental representations of (nonmental) meanings.

1

The Saussurean Syntagm

- For Saussure, signs were all lexical.

- For linear combinations of two or more linguistic units, he used the term **syntagm**.

- Syntagms include both:

    – word-internal combinations of morphemes

    – multi-word combinations (**phrases**).

- Saussure seems not to have taken the intellectual leaps to

    – view phrases as more complex signs with *signifiants* and *signifiés* of their own, or

    – classify signs and syntagms into categories on the basis of their ability to become constituents of larger syntagms.

Bloomfield's Linguistic Forms (1/2)

- Bloomfield (1933:158) defined a **(linguistic) form** to be "a fixed combination of phonemes" with "a constant and definite meaning, different from the meaning of any other linguistic form in the same language."

- This notion of form subsumes:

    – Saussure's signs (syntactic words),

    – morphemes (forms without meaningful subparts)

    – Saussure's syntagms, both the super-lexical (phrases) and the sub-lexical (multimorphemic parts of words)

Bloomfield's Linguistic Forms (2/2)

Bloomfield (1933:159-160) distinguished **bound** forms (ones which "occur … only as parts of larger forms") from **free** forms.

- In Bloomfield's terminology (1933:178), a **phrase** is "[a] free form which consists entirely of two or more lesser free forms", and

- a **word** is "a free form which does not consist entirely of (two or more) lesser free forms; in brief, a word is a *minimal free form*."

- Bloomfield's notion of free form corresponds quite closely to contemporary usage of the term **(syntactic) expression**. Many linguists also use Saussure's term **sign** (in an extended sense) in much the same way.

Suggested Revisions to Bloomfield (1/2)

Bloomfield's notion of free form as the things that syntax is about is too rigid. Probably we should include among the syntactic expressions (or signs in the extended sense):

- "function words", many of which (arguably) cannot occur on their own, such as

  1. coordinate conjunctions, e.g. *and, or*

  2. negation markers, e.g. *not*

  3. complementizers (aka subordinate conjunctions), e.g *that, whether, than, as*

  4. prepositions, e.g. *of, at*

  5. determiners, e.g. *a, the, every*

  6. degree words, e.g. *too, as, so*

  7. auxiliary verbs, e.g. *is, have, will*

Suggested Revisions to Bloomfield (2/2)

- "bound words" aka **clitics** or **phrasal affixes**, which cannot be analyzed as parts of words but instead attach to (possibly multi-word) syntactic expressions, e.g.:

  1. unstressed/phonologically reduced variants of function words such as pronouns, conjunctions, determiners, auxiliaries, etc.

  2. case markers that attach to syntactic expressions (distinct from case inflectional affixes) as in Japanese and Korean, or English possessive *-'s*

  3. Sentence-final particles in languages like Chinese that function much as tunes (intonation contours) function in other languages

  4. pragmatically (or information-structurally) meaningful elements of tune (such as pitch accents and boundary tones)

  5. syntactic analogs of non-affixal morphological processes, such as full or partial reduplication

Bloomfield's Constructions and Form Classes (1/2)

- (1933:169) "When two (or rarely more) forms are spoken together, as consituents of a complex form, the grammatical features by which they combine make up a **construction**."

- (1933:184) "*Syntactic* constructions ... are constructions in which none of the immediate constituents is a bound form."

- We would want to revise this to define a syntactic construction as a contruction whose immediate constituents are all signs.

Bloomfield's Constructions and Form Classes (2/2)

- (1933:185) "All the forms which can fill a given position [in a construction] ... constitute a **form class**." For example, what Bloomfield (not quite accurately) calls the "English actor-action construction" (nowadays usually written something like

  S → NP$_{\mathbf{nom}}$ VP$_{\mathbf{fin}}$

  has two positions, one which can be filled by expressions in the form-class of "nominative expressions" (e.g. *Mary, he, every student*), and another which can be filled by expressions in the form-class of "finite verb expressions" (e.g. *left, did so, went to the park*).

- Bloomfield's notion of form-class, when limited to signs, corresponds closely to what is nowadays called a **syntactic category**, which is the term we will usually use.

Hockett (1958) on Forms and Constructions (1/2)

- (1958:162) "A class of forms which have similar privileges of occurrence in building larger forms is a **form-class**."

- (1958:164) "A construction is ... a pattern for building composite forms of a specific form-class out of ICs [immediate constituents] of specific form classes."

- "The description of a specific construction asserts that 'any member of such-and-such a form-class, conjoined to any member of a certain other form class, produces a form which belongs to a certain third form-class'."

Hockett (1958) on Forms and Constructions (2/2)

- "All constitutes built by a single construction are necessarily members of the same form class. The form-class, however, may also include forms built by some other construction, and even single morphemes."

- "The common feature of meaning of ... composite forms built by a single construction ... is the meaning of the construction."

CF-PSGs (Chomsky 1957)

  S → NP VP

  NP → D N

  VP → Verb NP

  D → **the**

N → **man**, **ball**, etc.

V → **hit**, **took**, etc.

N.B.: Chomsky thought of such rules as *instructions for rewriting strings* of nonterminal (e.g. NP) and terminal (e.g. hit) symbols.

Derivations

In an obvious way, CF-PSGs license *derivations* like

```
                    S
            ┌───────┴───────┐
           NP              VP
         ┌──┴──┐        ┌───┴───┐
         D     N        V       NP
         │     │        │     ┌──┴──┐
        the   man      hit    D     N
                              │     │
                             the   ball
```
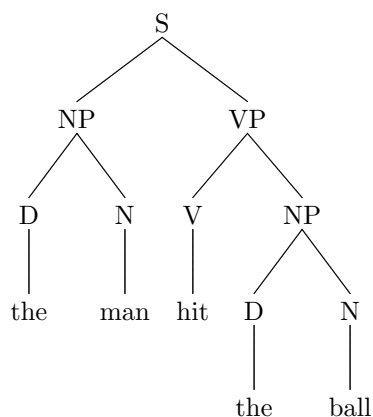
CF-PSGs from a Structuralist Perspective

Intuitively, Chomsky's rules also lend themselves to a "structuralist" intepretation, e.g.

- The word **man** is a member of the form class N

- There is a construction that takes a (member of the form class) NP and a VP and constructs a S.