 syntax 3

c-selection, s-selection, 
Textbook pg. 226-233
X-bar theory – not in textbook

s-selection

• A part of predicate’s meaning is the type of θ roles it assigns (its θ-grid):
  – a predicate that assigns an agent and a theme θ-roles to its arguments has a different meaning from the one that only assigns a theme θ-role.
  – Each θ-role in the predicate’s meaning entails (requires) that the verb’s argument possess certain general properties (e.g., be animate, have volition, be movable, etc.)
  – Each predicate also imposes specific requirements on its arguments – due to its own specific meaning (e.g., be liquid, be edible, etc.)
  – If a predicate combines with arguments that do not satisfy these expectations the result is semantic anomaly

s-selection

!My toothbrush is pregnant

 pregnant < property >
 [+female]

!The pizza is too hot to drink.

 drink < agent, theme >
 [+fluid]

!The witch used her dream to fly out to the forest

C-selection

• A part of predicate’s syntax is:
  – Information about syntactic category of its arguments
  – This information must be in the lexical entry of the predicate because it is not predictable from the meaning of the predicate

C-selection

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Neurolinguistic evidence for semantic and categorial selection

- Violations of semantic selection and categorial selection can be detected in electrical activities of the brain.

- ERP (brain event related potentials)
  Munte et al (1998) have found that there are two different types of electrical brain activity that correspond to the two types of selection:

  - **N400 effect** associated with semantic violations
  - **P600 effect** associated with syntactic violations

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The structure of NP

I want the book

I want the book on the shelf

I want the book on the shelf with a blue cover

I want the one

I want the one with the blue cover and the one with the red cover

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The structure of VP

Mary will eat five apples

I will do so too

Mary will eat five apples in the garden

Mary will eat five apples in the garden every day

I will do so too

I will do so on the veranda

I will do so on the veranda every week
**The structure of AdjP**

- I saw an excellent film
- I saw a really excellent film
- John is fond of Mary
- John is very fond of Mary
- John isn’t that fond of Mary

**Structure of PP**

- He is so out of touch in some ways

**Adjuncts**

- John is a student from Italy
- John is from Italy
- a student from Italy is a constituent that expresses two separate properties of John
- ⇒ the PP from Italy is an adjunct of the noun student
Complements

John is a student of physics.
- John is a student
- *John is of physics

A student of physics is a constituent that expresses only one property of John

⇒ the PP of physics is a complement of the noun student

Complement vs. Adjunct

Rough approximation:
- Complement
  - completes the meaning of a predicate
  - Can not be reiterated
    - *buy a book a magazine
  - *a student of physics of math
- Adjunct
  - adds more information to the already complete predicate
  - Can be reiterated
    - buy a book a day on the street
    - a big red fluffy cover
    - A student of physics from Italy in my class

Original motivation for X-bar theory

ACTIVE
- The Romans destroyed the city
- the Roman’s destruction of the city

PASSIVE
- The city was destroyed by the Romans
- the city’s destruction by the Romans

Grammar (revised)

- Lexicon
  - Morphemes augmented with
    - syntactic category information (A, N, V, P, C, …)
    - Subcategorization frames (c-selection)
    - Theta grid (s-selection plus specific semantic constraints)
  - Morphological rules
- X-bar schema
  
  To be augmented further

Ambiguities

Lexical
- He gave her a slip.
  - She saw a bat.

Syntactic
- At a Santa Fe gas station:
  - We will sell gasoline to anyone in a glass container
  - Our motto is to give our customers the lowest possible prices and workmanship
  
Dry cleaners ad:
- “38 years on the same spot”