Semantic roles
Thematic (or θ-roles) are semantic roles that constituents play

(0)  

a. The dog bit the man.

b. The man bit the dog.
Thematic (or $\theta$-roles) are semantic roles that constituents play.
A smattering of $\theta$-roles

**Table 6.14** Thematic roles

<table>
<thead>
<tr>
<th>Role</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>the entity that performs an action</td>
</tr>
<tr>
<td>Theme</td>
<td>the entity undergoing an action or a movement</td>
</tr>
<tr>
<td>Source</td>
<td>the starting point for a movement</td>
</tr>
<tr>
<td>Goal</td>
<td>the end point for a movement</td>
</tr>
<tr>
<td>Location</td>
<td>the place where an action occurs</td>
</tr>
</tbody>
</table>
\( \theta \)-roles can stay constant while subcat frames vary

(1)  

a. Mary gave the book to John

b. Mary gave John the book
\(\theta\)-roles can stay constant while subcat frames vary

1. Mary gave the book to John
2. Mary gave John the book
Other categories beyond V have $\theta$-role-assigning powers

(2) Jenna’s sister is in St. Tropez

(3) The spinmeisters are crafty
Theta-criterion:

Each obligatory $\theta$-role selected by a predicate must be assigned to some referential expression

(4) a. Julie telephoned the donors.
b. *Telephoned the donors.
Theta-assignment at deep structure:
this question is about the THEME of the taking
11. Each of the following sentences has undergone a movement transformation.
   a) What should Larry give to the bride?
   b) Who will Liane kiss?
   c) Which house will the group leave from?
   d) What might Marvin forget on the bus?

Write out the deep structure string for each of these sentences and mark all thematic roles and thematic role assigners.

Example: a) Larry should give what to the bride
            <ag, th>  <goal>
Human sentence understanding as an algorithm

1. Use the grammar to parse the sentence; determine a syntactic tree
2. Use the tree from step 1 to work out $\theta$-role assignments
3. Return the $\theta$-role assignments (throw away tree)
Pronoun interpretations
### Table 6.16  Subject and object pronouns in English

<table>
<thead>
<tr>
<th></th>
<th>Pronominals</th>
<th>Reflexives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SG</td>
<td>PL</td>
</tr>
<tr>
<td>1st person</td>
<td>I, me</td>
<td>we, us</td>
</tr>
<tr>
<td>2nd person</td>
<td>you</td>
<td>you</td>
</tr>
<tr>
<td>3rd person</td>
<td>he, him</td>
<td>they</td>
</tr>
<tr>
<td></td>
<td>she, her</td>
<td></td>
</tr>
<tr>
<td></td>
<td>it</td>
<td></td>
</tr>
</tbody>
</table>

*Spelled not with -self*
Co-indexation notates *same-reference*

(5) a. John$_i$ hurt himself$_i$
   
   b. *John$_i$ hurt him$_i$
      "John hurt John"

   c. John$_i$ hurt him$_j$
      "John hurt some other guy"
Some (sentence,reference) pairings are unacceptable

(6)  a. Claire$_i$ knew that Alexis$_j$ trusted her$_{i,*j}$
    b. Claire$_i$ knew that Alexis$_j$ trusted herself$_{*i,j}$
Some (sentence,reference) pairings are unacceptable

(7) a. [John’s sister]$_i$ did enjoy herself$_i$
b. * [John’s]$_j$ sister did enjoy himself$_j$
Principle A: Only NP1 (not NP2) is in the right configuration to be coindexed with the reflexive.
A relationship between tree nodes

**C-command**

Node A c-commands node $B$ if A’s sister contains $B$
John's sister did enjoy herself

A=NP1 c-commands B

containment
John's sister enjoyed herself.

A = NP1 c-commands B
A’s sister N’ fails to contain B
⇒ NP2 does not c-command “himself”
Principle A

A reflexive must have a c-commanding antecedent in its binding domain

(8) a. John\textsubscript{j} should promote [Iron Maiden]\textsubscript{i}
    b. *John\textsubscript{j} should promote himself\textsubscript{i}

(9) a. John\textsubscript{j} should promote himself\textsubscript{j}
    b. *Himself\textsubscript{j} should promote John\textsubscript{j}
Principle B

A pronominal must not have a c-commanding antecedent in its binding domain

(10)  
a. \( \text{John}_j \) should promote \([\text{Iron Maiden}]_i \)  
b. \( \text{John}_j \) should promote them\(_i \)  
c. \( ^* \text{John}_j \) should promote him\(_j \)  
d. \( \text{He}_j \) should promote John\(_j \)
Licensed by Principle B

```
IP
  └── I'
    └── VP
      └── V' + Pst
        └── V
            └── NP_j
                └── him
  └── NP1
      └── N'
        └── N
            └── sister
  └── NP2_j
      └── John's
```

“him” not c-commanded by coindexed antecedent
i) Who does *herself* refer to in this sentence?

ii) Does NP₂ c-command NP₃?

iii) How does your answer to ii relate to your answer to i?

iv) Does the antecedent change if you change *herself* to *her*? Why?
Homework

In preparation for Thursday, read the Larson chapter posted on the class website.

Be able to answer the question “What are truth conditions?”