θ-theory continued…

From last time:
- verbs have θ-roles (e.g., Agent, Theme, …) to assign, specified in the lexicon
- arguments chains receive θ-roles.
  - an argument is a referring expression (excludes wh-words).
  - a chain is a collection of positions the argument occupied.

• θ-criterion:
  - each argument must get exactly one θ-role.
  - each verb must assign each of its θ-roles to exactly one argument.
  - checked at the end of the derivation (evidence was wh-in-situ)

Some terminology:
- θ-position: a position in any given tree where a θ-role is assigned.
  (e.g., complement of V)
- θ’-position: positions in any given tree where a θ-role is not assigned.

Quantifiers, QR, and c-command

(1) a. John suspects everyone.
    b. SS: [IP John suspects everyone].
    c. LF: [IP everyone [IP [IP John suspects ti ]]].

(2) For every person x: [John suspects x].

(4) Everyone suspects someone.
   a. For every person x [ there is a person y [ x suspects y ]].
      ‘For everyone x, you can find a person y such that x suspects y.’
   b. There is a person y [ for every person x [ x suspects y ]].
      ‘There is a person y such that y is suspected by everyone.’

(5)\[
\begin{array}{c}
\text{IP} \\
\text{NP}_1 \text{IP} \\
\text{everyone} \text{IP} \\
\text{NP}_2 \text{IP} \\
\text{NP} \text{I'} \\
\text{NP} \text{IP} \\
\text{t}_k \text{VP} \\
\text{V+I}_k \text{NP} \\
\text{suspects} \\
\text{t}_j
\end{array}
\]

(6)\[
\begin{array}{c}
\text{IP} \\
\text{NP}_1 \text{IP} \\
\text{someone} \text{IP} \\
\text{NP} \text{I'} \\
\text{NP} \text{IP} \\
\text{t}_k \text{VP} \\
\text{V+I}_k \text{NP} \\
\text{suspects} \\
\text{t}_j
\end{array}
\]

(7) Scope
   The scope of α is the set of nodes α c-commands in the LF representation.

(8) C-command
   a c-commands b iff:
   i) the first branching node dominating α also dominates β.
   ii) α does not dominate β.

(9) A B c-commands C, D, and E
    D c-commands E (and vice versa)
    C c-commands B (and vice versa)

Informally: To find what a node c-commands, go up one level, and it is everything below it except the original node.
A-positions vs. A’-positions: A-chains vs. A’-chains

An **A-position** (argument position) is a structural position where an argument can be found at LF. For example, subject position (SpecIP), object position (complement of V).

An **A’-position** is a structural position where a non-argument can be found at LF.

It is also useful to distinguish movement chains into **A-chains** (movement to an A-position) and **A’-chains** (movement to an A’-position).

Nonstandard arguments

Passives

(13) a. Mary ate the sandwich.
    b. The sandwich was eaten.

The passive verb does not assign an external θ-role (to SpecIP). We create the passive verb by attaching -ed or -en to the verb (remains a verb).

Unaccusatives

(16) a. The vase broke.
    b. John broke the vase.

(17) break: Ø <Theme>

Adjectival passives

(21) a. CBS employees inhabited the island.
    b. John interrupted the performance.

We consider this derivation to take place in the lexicon (prior to insertion into X’ trees). Attaching -en suppresses the external θ-role:

(14) eat: Agent <Theme>  ➔  eaten: — <Theme>

EPP (SpecIP must be filled) forces movement of the sandwich to SpecIP.
The uninhabited island

The uninterrupted performance

The island seemed uninhabited.
The performance remained uninterrupted.

Derived in the lexicon with a category changing suffix (also -en, -ed):

\[\text{inhabit}: \quad [+V -N] \quad \rightarrow \quad \text{inhabited}: \quad [+V +N] \quad \emptyset \quad \text{<Theme>}\]

---

**Case Theory**

    John-SUBJ book-OBJ read(PAST)
    ‘John read a book.’

b. John-ga hon-o katta.
    John-SUBJ book-OBJ bought
    ‘John bought a book.’

c. Knigu on čital
    book-OBJ he-SUBJ read(past)
    ‘He read the book.’

<table>
<thead>
<tr>
<th>subjective forms</th>
<th>objective forms</th>
<th>possessive forms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1sg I</td>
<td>me</td>
<td>my</td>
</tr>
<tr>
<td>2sg you</td>
<td>you</td>
<td>your</td>
</tr>
<tr>
<td>3sg masculine he</td>
<td>him</td>
<td>his</td>
</tr>
<tr>
<td>3sg feminine she</td>
<td>her</td>
<td>her</td>
</tr>
<tr>
<td>1pl we</td>
<td>us</td>
<td>our</td>
</tr>
<tr>
<td>2pl you</td>
<td>you</td>
<td>your</td>
</tr>
<tr>
<td>3pl they</td>
<td>them</td>
<td>their</td>
</tr>
</tbody>
</table>

(27) a. I met Pat.
b. * me met Pat.
c. * my met Pat.

(28) a. * Pat met I.
b. Pat met me.
c. * Pat met my.

(29) a. * I cousin met Pat.
b. * Me cousin met Pat.
c. My cousin met Pat.

Suppose: Since we see some evidence of Case differentiation in English, all nouns in English get Case—only on most nouns, you can’t tell the difference between subjective, objective, and possessive forms.

In fact: We’ll suppose that all noun phrases in all languages get Case. A well-formed noun phrase is a noun phrase that has Case.

(30) a. * John to leave suddenly is foolish.
b. For John to leave suddenly is foolish.
c. To leave suddenly is foolish.
d. * For to leave suddenly is foolish.

Overt subjects cannot appear in the subject position of a nonfinite clause unless they are preceded by a prepositional complementizer (that is, for).

Suppose: NPs are assigned Case by something (like θ-roles are assigned by verbs)
Overt NPs without Case are ill-formed (PRO can get away without Case).

Slightly more specifically:
- Infl can assign subjective Case to NPs “in its vicinity”
- (Transitive) V assigns objective Case to NPs “in its vicinity”
- P assigns objective Case to NPs “in its vicinity”

(31) IP \[\rightarrow \quad \text{VP}\]

<table>
<thead>
<tr>
<th>NP</th>
<th>I</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>She</td>
<td>VP</td>
<td>N P</td>
</tr>
</tbody>
</table>

(32) a. For him to leave suddenly was foolish.
b. * For he to leave suddenly was foolish.
c. * For his to leave suddenly was foolish.

So: Finite Infl assigns subjective Case to the subject, but nonfinite Infl does not.
The explanation, then:

- *for* assigns objective Case
- finite Infl assigns subjective Case
- nonfinite Infl does not assign Case at all
- overt NPs need Case.
- (temporarily suppose that) PRO needs *not* to get Case.

(33) **Case Filter**

*NP if NP has phonetic content and has no Case.

---

### What it means to “be in the vicinity” of a Case-assigner: Government

<table>
<thead>
<tr>
<th>(34)</th>
<th>PP</th>
<th>VP</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>to</td>
<td>me</td>
</tr>
<tr>
<td>P'</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
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<table>
<thead>
<tr>
<th>(35)</th>
<th>CP</th>
<th>IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>for</td>
<td>NP</td>
</tr>
<tr>
<td>C'</td>
<td></td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I</td>
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</tbody>
</table>

| (36) **Government** (first statement) |

\[\alpha \text{ governs } \beta \text{ iff} \]

i) \(\alpha\) is an X° category (that is, \(\alpha\) is a head)

ii) \(\alpha\) c-commands \(\beta\)

iii) Minimality is respected.

In English, there appears to be an additional constraint:

An NP can only receive Case if it is (string) adjacent to the Case-assigner.

| (37) **C-command** |

\[\alpha \text{ c-commands } \beta \text{ iff} \]

i) the first branching node dominating \(\alpha\) also dominates \(\beta\)

ii) \(\alpha\) does not dominate \(\beta\).

---

### Minimality Condition

In the configuration \([XP \ldots X \ldots YP \ldots Y \ldots ZP \ldots]\) ...

\(X\) does not govern \(ZP\).

| (39) |

<table>
<thead>
<tr>
<th>X</th>
<th>YP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spec</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td>ZP</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| (40) **Government** |

\[\alpha \text{ governs } \beta \text{ iff} \]

i) \(\alpha\) is an X° category (that is, \(\alpha\) is a head)

ii) \(\alpha\) c-commands \(\beta\)

iii) Minimality is respected.

| (41) a. | * John makes frequently mistakes. |
|         | b. John frequently makes mistakes. |

| (42) a. | John knocked repeatedly on the door. |
|         | b. John repeatedly knocked on the door. |

| (43) a. | John knocked on the door repeatedly |
|         | b. John knocked \(t_i\) repeatedly [on the door]. |

| (44) a. | Mary gave the book to John. |
|         | b. * Mary gave to John the book. |

---

### Subjective case and Spec-Head agreement

| (45) |

<table>
<thead>
<tr>
<th>IP</th>
</tr>
</thead>
<tbody>
<tr>
<td>NP</td>
</tr>
<tr>
<td><em>She</em></td>
</tr>
<tr>
<td>I</td>
</tr>
<tr>
<td>VP</td>
</tr>
<tr>
<td>...</td>
</tr>
</tbody>
</table>

Here, Infl governs VP, but does *not* govern the NP in its specifier.
Two approaches have been taken to this in the past:
- Redefine c-command such that Infl c-commands the NP too.
- Suppose that Infl assigns Case via a mechanism other than government.

(46) IP
    NP
    He
    [3sg] I
    "s
    [3sg] VP
    V
    eat
    NP
    lunch

(47) Spec-Head Agreement
A head (X°) and its specifier (SpecXP) must agree in relevant features.

We said that person, number, gender features (φ-features) were “relevant” in terms of agreement. We can add to that [subjective Case], which is “relevant” for Case assignment.

Issues of Objective Case

(48) a. The boy relies [pp on the girl].
   b. * The boy relies.

Ouhalla uses the term transitive to refer to verbs which assign Case. In this sense, rely is an intransitive verb although it still requires an argument.

(49) a. I listened *(to) him.
    b. I heard him.

We also find examples where verbs assign Case to something which is not its argument at all: Exceptional Case Marking (ECM).

(50) a. Mary believes [John to be intelligent].
    b. Mary believes [him to be intelligent].
    c. * Mary believes [he to be intelligent].
    d. Mary sincerely believes [him to be intelligent].
    e. * Mary believes sincerely [him to be intelligent].

(51) [For him to leave suddenly] would be foolish.
Possessive Case and the DP hypothesis

(56)  a. His house
     b. Mary’s translation of the book.

(57)  

D here is for **Determiner**; this is a **Determiner Phrase**.

(58)  

**Gerundive phrases:**

(59)  a. [Mary’s watching TV] annoys her roommates.
     b. Her roommates are against [Mary’s watching TV].

Incidentally, **pronouns** (despite their name) are also of category D.

(60)  

Ouhalla glosses over something which might be confusing—

- Under the DP hypothesis DPs receive Case (rather than NPs).
- The genitive (possessive) Case is assigned to SpecDP by Spec-Head agreement
  (D has a feature [G EN] which agrees with a genitive Case DP in SpecDP).
- The case of the whole DP, however, is reflected in a pronoun in D.
  (D has a feature [Acc] which reflects the case assigned to the whole DP).

(61)  

(62)  a. You politicians are all alike.
     b. We linguists know the truth.
     c. People trust us linguists.

(63)  

Here, *Mary’s homework*, the whole DP has accusative Case (cf. *I saw him*). Hence, D has an [Acc] feature (assigned by the verb to the whole DP). However, *Mary’s* (in SpecDP) has genitive Case (assigned by D via Spec-Head agreement). Hence, D also has a [Gen] feature.

It appears that in general, when D is spelled out as a pronoun, it can’t assign genitive Case (doesn’t have the [Gen] feature): *John admires Carol’s us linguists.*

Head-movement in DPs

(65)  a. The army totally destroyed the city.
     b. * The army destroyed totally the city.
The army’s total destruction of the city  
* The army’s destruction total of the city  
John’s unfounded allegations  
* John’s allegations unfounded  
People’s continuous donations to the fund  
* People’s donations continuous to the fund

**Case and movement**

John seems to be happy.  
It seems that John is happy.  
* It seems John to be happy.

So, we have **two reasons** to move John in (67a):  
i) To satisfy the EPP, ii) to get Case on John.

- In raising constructions (e.g., seems) the DP moves because if it didn’t it would violate the Case Filter.

Passives and unaccusatives:

The book was written.  
Attaching passive –en/ed to a verb removes (“absorbs”) the verb’s ability to assign accusative Case.

Unaccusative verbs:

The vase broke.

**Burzio’s Generalization**  
A verb (with an object) Case-marks its object iff it θ-marks (i.e. assigns a θ-role to) its subject.

The VP-internal subject hypothesis

All the travelers should drink from the well.

**Movement and chains**

A chain is Case-marked if it contains exactly one Case-marked position.

* John seems is happy  
* [John], seems [t, is happy].

What did John see t,?  
John suspects everyone.

Incidentally: This means that V can only assign Case via government and Infl can only assign Case via Spec-Head agreement.

What did John see t,?  
John suspects everyone.

[Inn [everyone], [In [John suspects t,]]]