Einführungsseminar Sprachwissenschaft B: Generative Syntax
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CLASS 6: Case and Empty Categories

No subject or an empty subject?

Are the following two sentences somehow **related** to each other or completely **different**?

(1) a. I would like you to learn syntax.
b. I would like to learn syntax.

More than on the intuitive level, they seem to be **very related** to each other: the main clause is identical, and the complement of the verb *like* is a clause in both cases. The "only" difference seems to be the nature of the **subject of the embedded (complement) clause** — in one case, it's **overt** (phonetically pronounced) and in the other **covert** ("null" or "empty" — not pronounced).

If this first pass of an analysis is on the right track, the **structure** must be something like this:

(2) a. [$_{IP}$ I would like [$_{IP}$ you to learn syntax]].
b. [$_{IP}$ I would like [$_{IP}$ Ø to learn syntax]].

We can make clear that Ø is the subject of the embedded clauses by paraphrasing the sentences:

(3) a. [$_{IP}$ **I** would like it if [$_{IP}$ **you** learned syntax]].
b. [$_{IP}$ **I** would like it if [$_{IP}$ **I** learned syntax]].

How do we make sure that '**Ø' is interpreted** as 'I'? Is there something **more general**?

(4) a. **We** don't want [**Ø** to upset them].
b. **They** demand [**Ø** to take charge].
c. **She** is sorry [**Ø** to have left you].
d. **The guy we all like** promised [**Ø** to come to the party].

It looks like in all these cases, the **interpretation of 'Ø'** in the subject position of the embedded clause is **identical to the subject** of the main clause. In other words, the interpretation of Ø is **controlled** by the matrix subject. The matrix subject is the **controller**, Ø the **controllee**.

In more technical terms, we call the controlled empty/null/covert subject ("controllee") **PRO**, and the controlling overt subject ("controller") the **antecedent**. So, just like an NPI or anaphor, PRO needs an antecedent to be licensed. And just like those guys it needs to be a licit antecedent.

Let's take a closer look at this empty animal, the **phonetically null subject PRO**.

Properties of PRO

It's one thing to posit an empty (PRO) subject. It's another to test this hypothesis. We would feel much better about it if PRO really behaved "just like a subject." And it does. Take **paraphrases**:

(5) a. The guy promised [$_{IP}$ PRO to come to the party].
b. The guy promised [$_{IP}$ he will come to the party].
c. The guy promised that [$_{IP}$ he will come to the party].

As we saw above, **reflexives** need a local antecedent; the overt matrix subject isn't local enough:

(6) a. The students want [**the teacher**$_i$ to express **himself**$_i$ better].
b. * **The students**$_i$ want [the teacher to express **themselves**$_i$ better].
c. The teacher wants [**PRO**$_i$ to better **himself**$_i$].

Just like elsewhere, predicate nominals have to **agree** with the covert, local subject (PRO):

(7) a. The students want [**the teacher** to be a linguist / *linguists].
b. The teacher wants [**his students** to be *a linguist / linguists].

(8) a. They want [**PRO** to be *a linguist / linguists].
b. He wants [**PRO** to be a linguist / *linguists].

Overt subjects need Case (nominative in finite, accusative/objective case in non-finite contexts). Could we posit a distinct **null Case** which is checked/licensed by the infinitival *to* for PRO?

(9) a. He *tells* [**them** to draw trees].
b. It would be a good exercise [*for* **them** to draw trees].
c. * [**Them** to draw trees] would be a good exercise.

Covert PRO is different from overt subjects of infinitival clauses. Control constructions differ from so-called **Exceptional Case-marking (ECM)** structures in the **active/passive asymmetry**:

(10) a. The teacher had promised [**PRO** to cancel a class].
b. It had been promised [**PRO** to cancel a class].

(11) a. The students believed [**him** to cancel a class].
b. * It had been believed [**him** to cancel a class].

A second difference is **adverbial modification**:

(12) a. The teacher **really** tried [PRO to teach syntax].
b. The teacher tried **hard** [PRO to teach syntax].

(13) a. The students **sincerely** believed [him to cancel a class].
b. * The students believed **sincerely** [him to cancel a class].

Let's now look at another **irregular subject**, that of **Exceptional Case-marking**.

Case and Complementation: Control vs. ECM

As we saw in the last class, Control structures are characterized by a **finite matrix clause** with a **control predicate** (*want*, *promise*, *try* etc.) whose overtly expressed **subject controls** (identifies) the **empty subject** of the **embedded infinitival complement** (the "Control clause").

(14) The teacher wanted [**PRO** to explain Control structures to the students].

ECM-constructions, on the other hand, look at first glance identical to Control structures, with the exception that the **embedded subject is overtly expressed** (different from the matrix one).

(15) The teacher wanted [**the students / them** to understand Control structures].

But expressing the subject overtly or covertly is not enough to capture the differences. We would like to know **why** this should be so. A rule of nominal expressions in the grammar seems to be that they need to be **Case-marked**: **every DP/NP needs Case**. As Case-markings differ (*they* vs. *them*), it looks like each Case is licensed ("**checked**") in a particular syntactic environment.

(16) a.	**He / *Him *will*** eat a bagel.	*NOM (finite subject)*
b.	The princess ***kissed* *he / him** on the forehead.	*OBJ (object of a verb)*
c.	The peasant thinks ***of* *she / her** every day.	*OBJ (object of preposition)*
d.	***She / Her *eat*** a bagel?! I don't think so!	*OBJ (root infinitival subject)*
e.	Max didn't ***want*** [***she / her *to*** eat a bagel].	*OBJ (non-finite subject)*
f.	Max ***wanted*** [**PRO *to*** eat one himself].	*PRO (empty subject)* ***[???]***

(16a-c) are the **canonical environments**. Leaving (16d) aside, how can we capture **(16e) vs. (16f)**? In particular, if we only have **two morphological cases** to play with in English (NOMinative and OBJective, which in other languages may surface as accusative or dative), **does PRO have Case**, and if so, **does its Case fall within the range of the common cases** in English, or is it different?

We say that ECM is called **exceptional** because the matrix verb licenses the objective Case in an unusual manner (cf. (16b)). This allows us to uphold an important generalization:

(17) **Nominative Case is licensed by finite inflection.**

(I briefly illustrate **how/why we can disregard (16d)** in this respect, viz. "default" Case.) Arguments in favour of the matrix verb licensing the objective Case of ECM-subjects come from **passivization** or **adverb placement** (see Radford 1997: 87, last hand-out). One option to include PRO in a **Case Theory** is to say that it bears **Null Case** (licensed by infinitival inflection).

Empty Inflection

We have already seen many instances where the position of inflection (Infl or **I**) is not expressed. Does that mean that we don't have an I-node in these cases or could it also be sometimes empty?

(18) a. $[_{IP}$ Miss Emma $[_{I'}$ $[_{I}$ **will / has**] $[_{VP}$ eat-**Ø** / eat**en** her food passionately]]].
b. $[_{IP}$ Miss Emma $[_{I'}$ $[_{I}$ **Ø**] $[_{VP}$ eat**s** her food passionately]]].

(**It is not the case** that in structures like (18b), ***eats* shows up in I**; see classes 8-9 coming up.) For **X'-theoretic reasons** alone, presence of I must be assumed (**endocentricity**). And rather than throwing X'-Theory out of the window, we bite the bullet and assume a **null I** in those cases where I is not filled with an overtly expressed inflectional head. The **size of this bullet** becomes **smaller** the **more evidence** we accumulate about **empty categories** in general — *theoretical* (such as from X'-Theory or Case Theory) as well as *empirical* (distribution, modification etc.).

Let's look at some **empirical evidence for postulating en empty I-node** in some cases.

• **Gapping** (gapped or head-ellipsed auxiliary in I):

(19) a. Miss Emma **could *have eaten*** her food faster, or [we ***Ø have given*** it to her earlier].
b. … or $[_{IP}$ we $[_{I'}$ *e* $[_{VP}$ $[_{V}$ have] given it to her earlier]]]

① purported gapped/ellipsed *auxiliary* is ***interpreted***
② the *subject* of that clause shows up in ***nominative***
③ the *perfective auxiliary* is ***uninflected (infinitive)***

• **Cliticization** (reduced auxiliary attaches to subject):

(20) a. *Miss Emma***'s** eaten her food fast. / *You***'ve** learned syntax really well.
b. Miss Emma could have eaten her food faster or [*we* **have / *'ve** given it to her earlier].

• **(Non-)Auxiliarihood** (perfective auxiliary vs. causative/experiential *have*):

(21) a.	The enthusiastic teacher **had** *assigned enough homework* for a month.	*auxiliary*
b.	The tough teacher **had** *the poor students work hard* on their exercises.	*causative*
c.	The distressed teacher **had** *the rebellious students walk out* in protest.	*experiential*

• **Clausiness** (all clauses, finite or infinitival, form an IP):

(22) $[_{IP}$ subject $[_{I'}$ $[_{I}$ **auxiliary / Ø**] $[_{VP}$ predicate]]]

Empty Determiners

Keeping the best for last, we would then say that another "icky guy" can also be empty: **null D**. Claiming that **all nominals are DPs** allows for a **unitary analysis of nominal expressions**.

(23) a. **Students** hate the lectures, don't **they / *we / *you**?
b. $[_{DP}$ $Ø_{[3PL]}$ students] … $[_{D}$ they$_{[3PL]}$]

Homework: Exercise 6

A. 🕮 Go over the entire **chapter 4** of Radford (1997) again.
B. 🕮 Prepare next class by thoroughly reading the entire **chapter 5**.
C. ✎ **Exercise VII** in Radford: p. 100 (pick any *four* sentences).