Basic references: Kitagawa (1986); Koopman & Sportiche (1991); Sportiche (1988)

The analysis of subjects in transformational grammar:

(1)

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TP
  NP T'  VP
  Mary T  V
       V'  sings
```

The subject is generated in the specifier of TP, whereas the rest of the arguments of the verb appear within VP. This creates an asymmetry which, as we have been discussing in several sessions, is consistent with several contrasts between complements and subjects/adjuncts regarding extraction. However, it also creates an undesirable asymmetry in predicate-argument relations: while the thematic roles and selectional restrictions associated with the complements are satisfied at the very local space of sisterhood, the ones associated with the subject are non-local and necessarily mediated by a non-lexical head T. For instance, in the Principles and Parameter model, the theta-role of the subject is assigned in a purely ad hoc fashion by the VP.

This theoretical problem was paired with empirical discoveries in Romance languages, where the preverbal subject position wasn't the only option:
(2)  a. Mary sings. /*Sings Mary.
    b. La Maria canta. / Canta la Maria.
    c. María canta. / Canta María.

To account for postverbal subjects in null subject languages (NSLs), one had to assume either a quite weird movement to a non-commanded position or a base-generation in the VP associated with a null expletive pronoun (a null version of English *there* or French *il*) Rizzi (1982).

\[
\begin{align*}
\text{TP} & \rightarrow \text{T'} \rightarrow \text{T} \rightarrow \text{NP} \rightarrow \text{pro}_{i} \rightarrow T \rightarrow \text{VP} \\
& \rightarrow \text{VP} \rightarrow \text{DP} \rightarrow \text{V'} \rightarrow \text{V} \rightarrow \text{la María} \\
& \rightarrow \text{V} \rightarrow \text{canta}
\end{align*}
\]

So, if NSLs allow subjects in VP, we could extend this idea to all languages:

\[
\begin{align*}
\text{TP} & \rightarrow \text{T'} \rightarrow \text{T} \rightarrow \text{VP} \\
& \rightarrow \text{VP} \rightarrow \text{DP} \rightarrow \text{V'} \rightarrow \text{V} \rightarrow \text{subject}
\end{align*}
\]

Then, we could explain the difference between English or French and NSLs as the obligatoriness of filling the specifier of TP, by moving the internal subject:

\[
[\text{TP Mary } [\text{T' T } [\text{VP t [VP sings ]}]])
\]

The question is: can we find support for this analysis in languages like English? Yes, we
can!

Consider the following example (see Burton & Grimshaw 1992; McNally 1992), a simplified version to the one in the exercise we discussed in class on October 26:

(6) They will sing and be acclaimed.

The problem that this sentence raises becomes apparent when we try to offer a plausible syntactic analysis. The first option is assuming that we are coordinating two sentences:

(7) \[ [TP \text{ They will sing }] \text{ and } [TP \text{ be acclaimed }] \]

We can easily see that the subject of the second TP is missing, but it cannot be a null subject (like in Catalan *Menjo* or Spanish *Como*), for English is not a null subject language.

We must follow, thus, the VP-coordination analysis:

(8) \[ [TP \text{ They will } [VP \text{ sing } ] \text{ and } [VP \text{ be acclaimed } ] ] \]

But then we have a problem with the passive sentence: the subject is originally generated as an object, and then raises to the specifier of TP. Yet, we cannot do that in (8): either the position is already filled by the subject of the first TP (9)-a, or we move the subject of *be awarded* from the original position to the specifier of TP (9)-b, out of a coordinate island, which is impossible.

The only option is considering that we are moving *They* from both coordinates at the same time (i.e. ACROSS-THE-BOARD MOVEMENT) like in

(9) \[ [TP t \text{ will sing } ] \text{ and } [TP t \text{ will be acclaimed } ] \]

This is unproblematic for the passive VP, for the NP would move from the object position, but which would be the moving position of the first VP, if the subject is generated in the specifier of TP?

All these problems disappear when we assume that subjects are generated in a VP internal position:\footnote{There is much discussion on the exact position of the subject in the VP (to the left, to the right, as a sister to V'), but it is irrelevant for our purposes.}
Now we have the required parallel coordination:\(^2\)

(11)  

\begin{align*}
&\text{a. } [\text{VP } \text{they } [\text{VP sing } ] ] \\
&\text{b. } [\text{VP } \text{they } [\text{VP be acclaimed they } ] ]
\end{align*}

Now we can raise both subjects with across-the-board movement to the specifier of TP:

---

\(^2\)Or the copy version:

(i)  

\begin{align*}
&\text{a. } [\text{VP } \text{they } [\text{VP sing } ] ] \\
&\text{b. } [\text{VP } \text{they } [\text{VP be acclaimed they } ] ]
\end{align*}
Hence, the internal subject hypothesis offers a simple explanation for an otherwise unsolved problem.

This analysis extends far beyond English, as Huang (1993) discusses. He considers the following contrast:

(13) a. Those pictures of himself, John thinks t Bill will buy t.
    b. Criticize himself, Johni thinks t Billj will not t.

In (13)-a, we are fronting a DP which includes a reflexive. Interestingly, the antecedent of this reflexive can be both the main (John) and the subordinate subject (Bill). In the ‘good old times’ this was explained by the rule of RECONSTRUCTION, which restored the moved element to the position of its traces for interpretative purposes (note that the movement applies cyclically: first to the periphery of the embedded sentence, and then to that of the main sentence, leaving a trace behind in each position). Last day, we saw that the same effect could be captured by copy theory. So at LF we can realize two different copies:

(14) a. Those pictures of himself, John thinks those pictures of himself Bill will buy those pictures of himself.
    b. Those pictures of himself, John thinks those pictures of himself Bill will buy those pictures of himself.
If the lowest copy is realized, the only possible antecedent for the reflexive will be Bill. Instead, if we realize the intermediate copy, the antecedent will be John. So we can explain the ambiguous binding behavior of DP fronting.

Let’s consider now the case of VP fronting. If we apply the same analysis, we obtain the following:

(15)  a. criticize himself, John thinks criticize himself Bill will not criticize himself.  
     b. criticize himself, John thinks criticize himself Bill will not criticize himself.

Realization of the lower copy gives the correct result: Bill is the antecedent of the reflexive. However, we wrongly predict the other option to be possible with the realization of the intermediate copy. Which could be the difference, then, between DP and VP fronting? The answer is clear once we assume the internal subject hypothesis: the fronted VP piggybacks a trace/copy of the internal subject, which will always be the closest antecedent. Schematically:

(16)

So, it doesn’t matter which copy we realize at LF, for a copy of Bill in the VP will always bind the reflexive:

(17)  a. [VP Bill criticize himself], John thinks [VP Bill criticize himself] Bill will not 
     [VP Bill criticize himself] 
     b. [VP Bill criticize himself], John thinks [VP Bill criticize himself] Bill will not
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\[ \text{[vp Bill criticize himself]} \]

Moreover, as Huang shows, this analysis extends successfully to similar cases in Chinese:

(18) a. taziji\textsubscript{i/j} de shi, Zhangsan\textsubscript{j} xiwang Lisi\textsubscript{i} neng guan-yi-guan.  
    himself’s CLASS matter Zhangsan hope Lisi can care-a-little  
    ‘His\textsubscript{i/j} own business, Zhangsan\textsubscript{j} hopes Lisi\textsubscript{i} will care for a bit.’

b. piping taziji\textsubscript{i/j}, Zhangsan\textsubscript{j} zhidao Lisi\textsubscript{i} juedui bu hui.  
    criticize himself Zhangsan knows Lisi definitely not will  
    ‘Criticize himself\textsubscript{i/j}, Zhangsan\textsubscript{j} knows Lisi\textsubscript{i} definitely will not.’

Again, the fronted VP (\textit{piping taziji}) will contain a copy of the internal subject \textit{Lisi} (i.e. \textit{[vp Lisi piping taziji]}), so only this name will count as the antecedent for the reflexive.

References


