1. Introduction

Lecture 1 has given evidence that in SOV-syntax there is no SpecTP position and therefore no motivation for EPP-checking. In SOV-syntax the embedded CP looks as in (1), while it looks roughly like (2) in SVO-syntax:

(1) \[
[\text{CP} \ (\ldots) \ [C \ C' \ [\text{VP}<T> \ \ldots \ldots \ V_{<T>} ]]]
\]

(2) \[
[\text{CP} \ (\ldots) \ [C \ C' \ [\text{TP} \ \ldots [T' \ T \ [\text{VP} V \ \ldots ]]])]
\]

In (1), there is in principle an open space in which the arguments of V can line up a (indicated by many dots). In (2), however, the verbal projection is cut by T so that there is material to the left of T – usually the subject – and to the right, i.e. in post-verbal position.

In (1), A’-extraction from SpecTP yields a that-trace violation. In linear terms, A’-extraction may affect a similar configuration in (2), but since there is no initial T-head and the languages usually allow scrambling, the locus of the trace can mostly not be determined positionally. Thus, extraction could also start from a “low” position. As Bayer (2005a; 2005b) and Rizzi & Shlonsky (2005) show, many observations over the years have converged on the generalization that extraction can only take place from a low position. Elements which are merged in a high position – in Rizzi’s and Shlonsky’s view subjects1 – cannot undergo A’-raising across CP. The “strategies” of subject extraction Rizzi & Shlonsky have in mind are always strategies by which the subject is forced into a low position: expletive insertion, adverbial interveners in English, post-verbal focus in Italian etc.

One aspect which has apparently forgotten in the new account of the that-trace effect is the LF-side which had played a considerable role at times when the ECP was a leading principle of syntax.

2. Subject-object asymmetries of scope

(3)  
\begin{align*}
\text{a. } & \text{Je' ai exigé qu'ils n' arrêtent personne} & \text{FRENCH} \\
& I \ \text{have demanded that-they} \ \text{NEG} \ \text{arrest} \ \text{nobody} \\
\text{b. } & ?\text{Je n'} \ \text{ai exigé qu'ils arrêtent personne} \\
& I \ \text{NEG} \ \text{have demanded that-they} \ \text{arrest} \ \text{nobody} \\
\text{c. } & J' \ \text{ai exigé que personne ne soit arrêté} \\
& I \ \text{have demanded that nobody} \ \text{NEG} \ \text{be arreted} \\
\text{d. } & *\text{Je n'} \ \text{ai exigé que personne soit arrêté} \\
& I \ \text{NEG} \ \text{have demanded that nobody} \ \text{be} \ \text{arrested} \\
\end{align*}

\cite{Kayne81}

The neg-QP personne can be associated with a distant ne (head of NegP) as long as it does not occupy the subject position. In (3d), personne seems to activate negation in CP even without

\footnote{They in fact invoke a “subject criterion”}
ne (cf. Jespersen, 1924: 336). As a consequence, it cannot again engage in the higher scope of negation. Its scope is “frozen”.2

To see that what matters is not the subject as such, one may look at Italian. In Italian a post-verbal neg-QP subject can associate with a higher negation, but a pre-verbal neg-QP subject must activate its own negation.

(4)  
a. Non pretendo che nessuno sia arrestato  
NEG I-demand that nobody be arrested  
‘I do not demand that nobody be arrested’ (double negation)
b. Non pretendo che sia arrestato nessuno  
NEG I-demand that be arrested nobody  
‘I do not demand that anybody be arrested’ (simplex negation)  
(Rizzi, 1982)

The situation is even more puzzling in English because the scope of negation can be extended without there being an overt trigger such as ne and non in Romance.

(5)  
a. He required that no one marry her  (unambiguous; deontically strong)  
b. He required that she marry no one  (ambiguous; deontically strong or weak)  
(Klima, 1964: 285 ff.)

(6)  
a. *In all these years he suggested that not a single term paper be written  
b. In all these years he suggested that they write not a single term paper  
(Kayne, 1981)

Again, under proper conditions (subjunctive mood) there is the possibility of extending the scope of negation into the matrix clause, but never from the subject position.

Various authors have shown that this effect is not confined to negation.

(7) E’ proprio necessario che ci venga a trovare solo GIANNI  
is really necessary that us visit-SUBJ only Gianni  
It is really necessary that only Gianni visit us  
(i) the others must not come (narrow scope: □ < solo)  
(ii) the others need not come (wide scope: solo < □)  
(8) E’ proprio necessario che solo GIANNI ci venga a trovare  
It is really necessary that only Gianni comes to visit us  
(i) the others must not come (narrow scope: □ < solo)  
(ii) #the others need not come (*wide scope: solo < □)  
(Longobardi, 1991)

In (7) there is no trigger in the root clause which would signal an extension of the scope of solo, but as the reading in (7ii) indicates, wide scope must be available. Once solo is part of the pre-verbal subject, upper association is blocked. The scope of solo is frozen in place.

2 In terms of the ECP this was taken to be a consequence of the subject’s immobility due to a lack of proper government.
The following example from English is highly instructive as it shows that the scope of *only* remains mobile only as long as *only* is part of the object. The ambiguity disappears as soon as *only* occupies the pre-VP position.

(9)  
   a. They were advised to learn [**only** Spanish]  
       (ambiguous; Spanish is a must, but other languages may also be learned)  
   b. They were advised to **only** learn [Spanish]  
       (unambiguous; no other languages next to Spanish!)  
       (Taglicht, 1984); (Rooth, 1985)

Assume with Bayer (1996) that *only* in (9b) is the head of a Particle Phrase (PrtP) whereas it is part of the NP in (9a). Then *only* has scope over the complete functional complex (CFC) vP in (9b) as shown in (10),

(10) They were [IP advised [PRO to [PrtP **only** [vP learn [NP Spanish]]]]]

while in (9a) it must either raise to a scope position (PrtP) or be licensed by such a scope position under probe-goal agreement. (11) sketches a raising solution:

(11) They were [IP advised [PRO to [vP learn [NP **only** Spanish]]]]

(9b)/(10) is unambiguous because at Spell-Out *only* appears already in a proper scope position where it is subject to scope freezing. In minimalist terms, its scopal feature is deactivated, and it can therefore not move any further.

A proper generalization seems to be the following:

i. VP (or vP) being a CFC is the domain over which operators (negation, quantification) take scope.

ii. Call the operator position (of which there can be more than one) OpP for concreteness.

iii. Raising to SpecTP will pass through SpecOpP

iv. Once an XP with an operator feature <op> has accessed OpP, its scope is fixed due to valuation/deactivation of <op>.

v. XPs which don’t move to SpecTP have to access SpecOpP after Spell-Out.3

---

3 It is not clear how transclausal QR could be implemented in recent minimalist theory which rests on v*P* and CP as phases. Given the familiar clause-boundedness of quantifier, one would need a restrictive quantifier storage device which allows procrastinated checking of (certain types of) <op>. Kayne (1998) has suggested an alternative in terms of rigorous overt movement which then has to be accompanied by extensive remnant movement. I will not consider this solution here.
3. Scope in SOV-syntax

Interestingly, the options of transclausal scoping discussed in section 2 with examples from SVO-languages (Romance and English) seem to be systematically unavailable in the SOV-languages under consideration (German and South-Asian); cf. Bayer (1996; 2000) among others.

None of the relevant examples from section 2 shows a wide scope interpretation.

(12) Ich verlange **nicht**, dass niemand eingesperrt werde

*I demand NEG that nobody arrested be*

‘I do not demand that nobody be arrested’ (double negation)

(13) a. Er verlangte von ihr, dass sie **niemanden** heirate

*he demanded of her that she nobody marry*

‘He demanded of her to remain unmarried’ (no other reading)

b. Er verlangte von ihr, **niemanden** zu heiraten

*he demanded of her nobody to marry*

‘He demanded of her to remain unmarried’ (no other reading)

(13b) shows that the restriction has nothing to do with finiteness of the complement. The same is true of the scope of **nur** (‘only’).4

(14) Man hat ihnen geraten, **nur** Spanisch zu lernen

*one has them advised only Spanish to learn*

‘They were advised to learn no language other than Spanish’ (no other reading)

(15) Man hat die Sumo-Ringer **gezwungen**, nur Steaks zu essen

*one has the Sumo-wrestlers forced only steak to eat*

‘One forced the Sumo-wrestlers to heat nothing but steak, i.e. they had no chance to eat mizo soup or sushi etc.’

In Bayer (1996; 2000) additional constructions are discussed which show analogous scope restrictions in SOV-syntax while SVO-syntax shows various wide scope option:

- the scope of disjunctive operators (Larson, 1985)
- the scope of temporal operators (Larson, 1990)
- the scope of **so** in result constructions (Guéron & May, 1984) and the scope of **too** in comparative constructions

3.1 Temporal operators

(14) I saw Mary in New York before she claimed that she would arrive

a. I saw Mary in New York [PP before [CP1 Op1 [IP she claimed t1 [CP2 that she would arrive]]]]

b. I saw Mary in New York [PP before [CP1 Op1 [IP she claimed [CP2 that she would arrive t1]]]]

4 Notice that one can hardly argue that **only** may attach to DP in English while German **nur** may only attach to the V-projection in German. This suggestion (cf. Jacobs, 1984 and Büring & Hartmann, 2001) leads to serious problems with the fact that **nur**+XP behaves as a constituent in the first position of V2-clauses.
(14a): I saw her before she made the claim that ...
(14b): I saw her before she arrived

(15) Ich sah Mary in New York [PP bevor [CP1 Op, [IP sie ti behauptete
[CP2 daß sie *ti ankommen würde]]]

I.e. in German the wide scope reading – (14b) – is not available.

3.2 So and too

(16) Ehrlichman believed that Nixon was so crazy that he acted irrationally
a. Ehrlichman believes that Nixon’s high degree of craziness caused Nixon to act
irrationally (narrow scope of so)
b. The degree to which Ehrlichman believes that Nixon was crazy caused Ehrlich-
man to act irrationally (wide scope so)

(17) Ehrlichman dachte, daß Nixon so verrückt war, daß er irrational handelte
(only reading (16a) is available)

Consider also the following remarkable contrast between English and German w.r.t. a Principle C effect.

(18) The teacher thought that he was too arrogant to consider John for the prize
(19) *Die Lehrerin meinte, daß er, zu eingebildet sei, um Hans für den Preis
vorzuschlagen

Raising too and its associated infinitival clause to the scope position of the root prevents the
Principle C effect. Such a rescuing operation is unavailable in German.

Similar cases can be made with respect to South-Asian SOV-languages with postverbal CPs
such as Bangla, Hindi etc. One of the most widely known facts about these wh-in-situ lan-
guages is that the scope of wh can never be extended into the matrix clause. Consider the fol-
lowing contrast between overt and covert movement in Bangla.

3.3 Wh scope in Bangla

(20) a. tumi [ki oSukhe], bhabcho [CP je ram ti, mara gæche]? BANGLA
you which illness-of think that Ram died went
‘Of which illness do you think that Ram died?’
b. *tumi bhabcho [CP je ram [ki oSukhe], mara gæche]?
you think that Ram which illness-of die went
‘*You think of which illness Ram died’ (S-selection violation)

The most elegant explanation for the lack of trans-clausal wide scope in SOV-syntax as seen
in (20b) would be to show that in this system an operator is essentially in its proper scope po-
osition where it is merged. Temporary suspension of scope assignment and post-Spell-Out
scope as seen in the SVO-system would then not be an option in the SOV-system. Overt
movement as in (20a) has to be triggered by a feature in the root clause.
3.4 The postverbal position in SOV-syntax

There is good evidence that in an SOV-system operators cannot be licensed in post-verbal position, although XPs without Case requirement can readily occur there.

(21) a. Wir haben [auf dich] gewartet 
   we have for you waited
   'We have been waiting for you'
   b. Wir haben gewartet [auf dich]
   c. Wir haben [auf niemanden] gewartet
   we have for nobody waited
   'We haven’t been waiting for anybody’
   d. * Wir haben gewartet [auf niemanden]

(22) a. Wir haben [auf ein Signal von Erna] gewartet
   'We have been waiting for a signal from Erna’
   b. Wir haben gewartet [auf ein Signal von Erna]
   c. Wir haben [nur [auf ein Signal von ERNA]]gewartet
   'We have been waiting only for a signal from ERNA’
   d. *Wir haben gewartet [nur [auf ein Signal von ERNA]]
   e. ?Wir haben nur gewartet [[auf ein Signal von ERNA]]

(23) a. tumi ki bhebe-cho
   you what think -PTS2
   ‘What did you think?’
   b. tumi bhebe-cho ki
   you think -PTS2 what
   ‘What the hell did you think you can get away with!’

Although Bangla allows leaking into the postverbal position, (23b) is impossible as an information seeking question. Regular scoping of the wh-word seems to be impossible from this position. The special interpretation that (23b) gets may well be compatible with this conclusion.

The proper generalizations seems to be the following:

i. In SOV-syntax, operators take scope more or less where they are merged.
ii. A parallel between SOV and SVO suggests itself: In both systems the scope of operators freezes in preverbal position.
iii. Operators take scope as in the SVO-system, VP (a CFC) being a proper scope domain.
iv. Due to the lack of a privileged SpecTP position, there is no visible step into a scope position before Spell-Out.
v. The fact that operator scope may be frozen in a low position is compatible with iii. because there is scrambling.
This squares with the overall impression that German lacks various scope ambiguities that have been found in English.5

4. A note on wh-scope and wh-scope freezing

(24) a. **Who** remembers where we bought **which books**? C. L. Baker (1970)
   b. **Wer** erinnert sich, **wo** wir welche **Bücher** gekauft haben?

(24a’)

\[
[CP \text{Who}_1 [c_1 + \text{wh}_1 \text{TP}_1 \text{t}_1 \text{remembers}\ [CP \text{where}_2 [c_2 + \text{wh}_2 \text{TP}_2 \text{we bought}\ \text{which books}_3 \text{t}_2] ]]]
\]

Solid lines:
a. Low association of **which books**: Simplex answer, e.g. John (remembers where ....)
b. High association of **which books**: Pair-list answer, e.g. John remembers where we bought War and Peace, Gertrud remembers where we bought East of Eden, Frank remembers ...

Broken line:
not licit because **where** is already in a scope position.

Assuming that the subject **who** may already have taken wh-scope in SpecTP (cf. constraint against vacuous movement) we predict the following without reference to the ECP.6

(25) *Who said that **who** left? (Aoun et al. 1987)
(26) *Jean a dit que **qui** est venu? (Aoun et al. 1981)

The German example in (24b) works like in English because wh-scope is checked in CP rather than in VP. Nevertheless, German allows high scoping of the subject while this is impossible in English.

(27) a. **Wer** erinnert sich, **wen** gestern **wer** anrufen wollte?
   who remembers who-ACC yesterday who-NOM call wanted
   b. *Who remembers whom who wanted to call yesterday?

If superiority has no status in the theory (cf. Chomsky, to appear), (27b) can still be ruled out if we assume that the subject **who** is frozen in a wh-scope position and can therefore neither associate with either one of the other two wh-operators in scope positions. In the German example (27a), **wer** is a “low” nominative which cannot have reached a wh-scope position at Spell-Out. Thus it is able to associate with either one of the wh-elements which are in scope positions.

---

5 It appears that even sentences with easily processable inverse scope such as Paul Hirschbühler’s example *A flag was hanging from every window* seem to preferentially invoke the awkward reading in German such that **dass eine Fahne aus jedem Fenster hing** suggests that one and the same flag could hang from all the different windows. The distributive reading may be blocked by the word order option **dass aus jedem Fenster eine Fahne hing**.

6 A more appropriate view might be that with respect to a subject question TP ceases to be distinct from CP such that TP and CP “collaps” as Haiders (1988) approach in terms or matching projections.
5. Conclusions

- Scope constraints which formerly inspired an ECP-based theory of LF reduce to the fact that the subject position is a potential scope position. The reason is presumably that on its way to SpecTP a subject with an operator feature <op> passes through a vP-initial operator in which <op> is activated. This leads to scope freezing.
- If we are right, scoping of the subject is an epiphenomenon of EPP-checking in SpecTP.
- Operators which are “too low” to access the operator position before Spell-Out must be licensed after Spell-Out. Whatever the exact procedure is (QR, Cooper-storage, probe-goal agreement), the net effect is that they can in principle take scope outside their minimal domain.
- However, all of this can only be said about SVO-syntax. Due to the lack of T, SpecTP and consequentially EPP-checking, SOV-systems do not show such subject/non-subject asymmetries.
- In SOV-syntax, operators are always on the left side of the verb (and therefore on the left side of the features associated with the verb). This is likely to induce scope freezing at the point where an argument with operator status is merged.
- The result of this is that subjects as well as non-subjects are frozen in place, i.e. there is no scoping into a higher clause (and there is perhaps in general less scope ambiguity than in SVO).

References


Büring, Daniel & Hartmann, Katharina (2001), The syntax and semantics of focus-sensitive particles in German. *Natural Language and Linguistic Theory* 19, 229-281.


-- & Ur Shlonsky (2005), Strategies of Subject Extraction. Ms. University of Siena & University of Geneva

Rooth, Mats (1985), *Association with Focus*. PhD diss. University of Massachusetts, Amherst, MA.

Appendix

Bayer & Grosu (1999) show that in French and Romanian constructions with prenominal agreeing seul- and singur- (‘alone’) these lexical elements attain their function as operators in the sense of an eliminative particle (‘only’) only if they appear in pre-verbal position. If placed in post-verbal position, these elements lead to a crash.

(i) a. **Seul-e la reine peut encore nous aider**

> ‘Only the queen can still help us’

b. **Singur-ă regin -ă ne mai poate ajuta**

> ‘Only the queen can still help us’

(ii) a. **Le palais ou reside (*seule*) la reine ...**

> ‘the palace where (*only) the queen resides ...’

b. **Palatul in care locuieste (*singură*) regină ...**

> ‘the palace where (*only) the queen resides ...’

This asymmetry is special evidence for SpecTP as a privileged position with respect to operator status. According to the present account, seule/singură turn from a lexical adjective into an eliminative operator by virtue of passing though an operator position on the way to SpecTP.