On the morphosyntax of complementizer-trace effects

**Introduction** This talk presents a cross-linguistic typology, with the major focus on Scandinavian, and proposes a novel account of the well-known complementizer-trace (COMP-t) effect in the lower clause of long-distance A-bar dependencies (specifically relative clauses and wh-questions). The COMP-t effect, by which a finite declarative complementizer cannot be directly followed by a trace (Perlmutter 1971 a.o.), is illustrated in (1) for standard English and in (2) for Swedish.

(1) a. I know the man that you said *(that) t came here.
   b. *Jag känner mannen (som) du hoppas *(att) t kommer hit.

The COMP-t effect is certainly not a universal phenomenon. It can be absent, as illustrated for Icelandic in (3) (= equivalent of (1)/(2)).

(3) a. *Íg þekki maninn sem þú sagðir %ððððð kom hingað.
    I know man the sem you said that came here
   b. *Íg hata maninn sem þú sagðir %ððððð María ætlar að hitta t á morgun.
    I hate man the sem you said that Maria is going to meet tomorrow

**Analysis** As observed by Sigurðsson (2010, 2011) amongst others, Germanic verb inflection has no pronominal properties (vs. e.g. Romance) and subject extraction (or drop) is licensed configurationally. Building on his proposal, we assume that the interpretation of the subject reference is enforced by anchoring the subject person features to the discourse. FinP encodes the speech event coordinates (spatial/temporal coordinates and speech event participants, cf. Bianchi 2003), and we assume that anchoring of subject person features is realized by checking a [D(efiniteness)] feature on FinP (cf. Déchaîne & Tremblay 2010). In long A-bar dependencies, the features of the extracted subject need to be interpreted (i.e. discourse anchored) in the higher clause, because the reference of the extracted subject is determined by the scope of the movement deriving the A-bar dependency. This is evidenced by the distribution of the subordinating element sem that features in A-bar dependencies in languages like Norwegian and Swedish, cf. (2): the possibility of inserting sem is determined by its scope-marking function, as a result of which sem does not occur in the CP of the most deeply embedded clause (see Boef & Franco, in prep. for details).

**Main claim** We argue that insertion of a complementizer in the most deeply embedded clause of a long-distance A-bar dependency creates a separate clausal domain. The presence of the complementizer that induces the boundary requires that [D] be checked in the lower clause. Since the declarative complementizer, e.g. at/att/að, in Scandinavian has no d-morphology and as such is not specified for [D], it acts as an intervenen for the relation between the extraction site of the subject and its identification (i.e. discourse anchoring) in the CP of the higher clause. Thus, COMP-t effects are a sort of intervention effect.

Scandinavian employs one or more different strategies to circumvent this intervention effect: (i) deletion of the complementizer (e.g. Norwegian at, Swedish att) as was illustrated in (2a) for Swedish, and (ii) (null) expletive insertion (e.g. Icelandic expletive pro, Danish der). More specifically, Icelandic grammar has expletive pro-drop (Vikner 1995 a.o.), as a result of which it can insert null pro to recover the subject reference, as illustrated in (4); notice that also in Icelandic the declarative complementizer lacks d-morphology (að). The same function is performed by the expletive-like element der in Danish, as illustrated in (5a). Notice that only if at is inserted, is der is obligatory (5a), otherwise der can be dropped (5b).

(4) Ég bekki maninn sem þú sagðir %ððððð pro kom hingað.
    I know man the sem you said that pro came here
(5) a. *Hvem tror du, at **der** har gjort det?*  
   who think you that EXPL has done it  
   ‘Who do you think has done it?’

b. *Hvem tror du (**at**) ofte tager til Paris?*  
   who think you that **often** goes to Paris  
   ‘Who do you think **often** goes to Paris?’ [Lohndal 2007:51-52]

**Prediction**  
If *d*-morphology on a complementizer can indeed check [D], our analysis makes the following prediction: if a language has a complementizer with *d*-morphology then it does not exhibit a COMP-t effect. This prediction is borne out by languages like Dutch and German, and can be seen in (6) and (7) respectively.

(6) a. *Ik ken de man die **jij** hoopt *(dat) t* het gedaan heeft.*  
   I know the man REL.PR. you hope that it done has  
   (7) a. *Wer *meint Maria, *(dass) t* Peter **liebt?*  
   who.NOM thinks Mary that Peter loves  
   b. *Wen *meint Maria, *(dass) t* Peter **liebt?*  
   who.ACC thinks Mary that Peter loves

The prediction is not borne out by Standard English, which exhibits a COMP-t effect despite having a complementizer with *d*-morphology, cf. (1). We tentatively propose that the difference between English on the one hand and German and Dutch on the other hand, can be explained in terms of valued or unvalued morphology: the *d*-morphology on English *that* is unvalued and as such it cannot check [D].

**Typological extensions**  
In the remainder of our talk, we will show that our analysis of Germanic COMP-t effects successfully extends to non-Germanic languages, like subject pro-drop and non-pro-drop languages of the Romance type. Such languages are expected to show a COMP-t effect, given that their complementizers lack *d*-morphology. In pro-drop languages a null subject *pro* is always available, as a result of which the complementizer is followed by *pro* instead of by a trace, and the effect is never detected. This is illustrated for Italian in (8), cf. Icelandic in (4).

(8) *l’uomo che pro è venuto qui*  
   the man that *pro* is come here

In Romance non-pro-drop languages, instead of a null *pro*, we find an overt subject (clitic) pronoun (e.g. Northern Italian dialects) or an expletive (e.g. French, cf. Taraldsen 2001, Rizzi & Shlonsky 2007). Time permitting, we will further show how our analysis can be extended to capture *microvariation* regarding the COMP-t effect, with special attention to varieties of Norwegian (cf. data from ScanDiaSyn database and own fieldwork).