

Syntax of Obligatory Control: a refined analysis via Form-Copy

1. Three properties in Obligatory Control (OC): ①The embedded subject must take an antecedent as illustrated by (1a, b), and the antecedent must be local as by (1c). ②OC includes both Subject Control and Object Control, as well as the ditransitive Subject Control case as in (2). ③The embedded subject cannot be overt (also see Szabolcsi 2009). According to the Case Filter, the embedded subject in (3) should be phonologically realized given the presence of the Case-assigner *for*; however, the relevant sentences are ungrammatical. In addition, it has been cross-linguistically observed that the embedded null subject in OC can receive case-marking separately from the controller (Cecchetto and Oniga 2004 a.o.). To sum up, OC involves the dual effects of mandatory *de se* reading for interpretation and of phonological deletion for externalization, hinting for a syntactic approach under the Y-model of Syntax.

2. Base-generated lexical NPs as controller and controlee

Note that both Raising and OC take local antecedent as discussed. To unify them, Chomsky (2021) proposes that the controller and the controlee in (Obligatory) Control are base-generated lexical NPs, while the syntactic dependency between them is established independently by an operation for copy-formation, called “Form-Copy” (FC). (see (4-5) for Raising and Control).

Recall the three syntactic properties of OC. ①Assuming that FC being a syntactic operation should be subject to locality constraints, such as Phase Impenetrability Condition, the silent embedded subject must have a local antecedent. ②Under the FC analysis, both Subject Control and Object Control are expected, as FC does not concern whether the controller is a subject or an object. Hence, no intervention effect is observed in the *promise*-type Subject Control. ③The silence of the embedded subject can be partially explained as it is usually the higher copy that is externalized in English. However, the choice of the copies to be externalized in OC (the matrix subject or the embedded subject) can be subject to language variation. For example, Hungarian OC as in (6); the embedded subject (lower copy) can be externalized instead; in some Otomanguean languages, both copies can be externalized, as in (7).

3. Our refined analysis via Form-Copy

As for the “obligatoriness” in OC, there remain two crucial questions: (i) how is the controller (subject or object) selected? (ii) why the controller and the controlee must be assigned a copy-relation? Our refined analysis proposes that a syntactic feature inherent from the OC structure is responsible for the selection of the controller, by assuming (8).

With functional similarity to [EPP]/[EF], we assume that the feature [δ] originates at the phase-head v^* . Take [*John tried to leave*] as an example of Subject Control by a transitive control verb. The feature [δ] on v^* requires that its specifier, where a lexical NP *John*₁ is merged at this θ -position, is a copy, as illustrated in (9). Hence, FC applies to *John*₁ and *John*₂, checking [δ]. Concerning Obligatory Object Control such as [*John persuaded Mary to leave*] in (10), we assume that Feature Inheritance takes place and [δ] is transmitted from v^* to V (see Richard 2007 for Feature Inheritance from v^* to V).

The observation in acquisition of Control supports our claim on the placement of [δ]. The assumption that [δ] originates from v^* , giving rise to Subject Control, is compatible with the fact that children first understand and produce the (transitive) Control construction of [N-V-to-V] (Carol Chomsky 1969, Eisenberg & Cairns 1994). Then, children start acquiring ditransitive Object Control constructions of [N-V-N-to-V]. It has been observed that in ditransitive Control constructions, children characteristically interpret the matrix object as the controller,

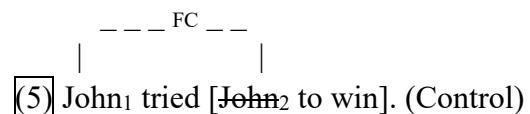
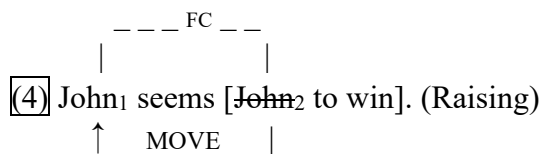
incorrectly assigning an object-oriented reading to the *promise*-type Control construction (see Chomsky; Hsu et al. 1985). In other words, at this stage, children overgeneralize the object-oriented interpretation to all the ditransitive Control construction of [N-V-N-to-V]; that is, under our analysis, children tend to overgeneralize the inheritance of [δ] from v^* to V. Then, at the third stage, children finally acquire the *promise*-type Subject Control, mastering the grammatical parameter of the optional Feature Inheritance from v^* to V.

Example and Figure:

- (1) a. John_i expects ___i to shave himself. b. *It was expected __ to shave himself.
c. *John_i thinks that it was expected ___i to shave himself.

- (2) John_i promised Mary_j [___{i/*j} to leave].

- (3) a. *John tried for him_i/himself_i to win. b. *I force John_i for him_i/himself_i to come.



- (6) Utál-ok [cask én dolgoz-ni]. (Szabolcsi 2009)

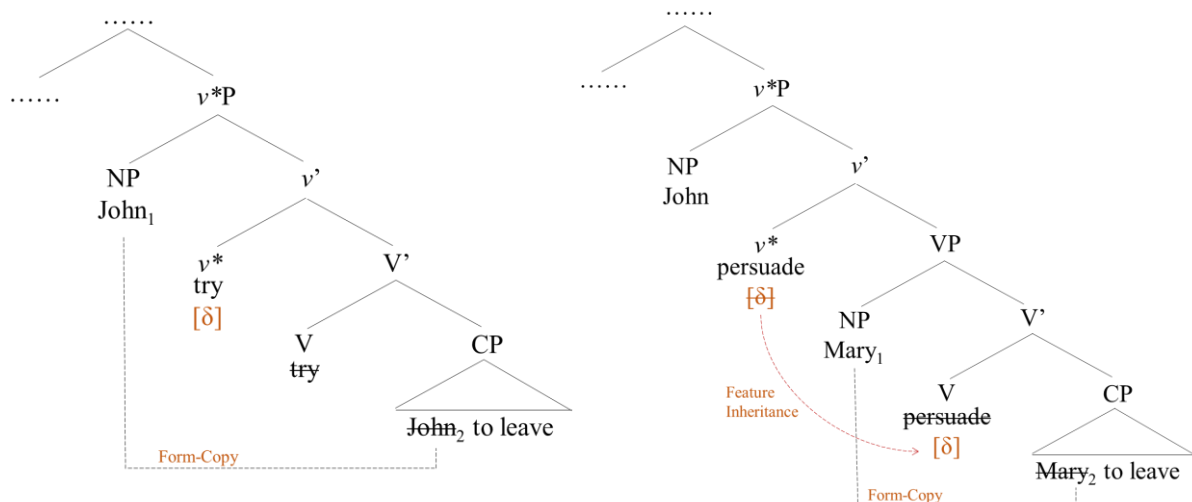
Hate-1SG only I work-INF (lit.) 'I hate it that only I work.'

- (7) a. B- yennlààa'z bxuuhahz_i [ny- ahcnèè bxuuhahz_i Gye'eihlly].
PERF- forget priest SUBJ- help priest Mike
'The priest forgot to help Mike.' (San Lucas Quievani' Zapotec; Lee 2003:99)

- b. Me rá Juán_i [ca- 'na' Juán_i]. (Copala Triqui; Broadwell 2019:2)
want PART Juan POT- come Juan
'Juan wants to come.'

- (8) Copy-formation via FC can be driven by a syntactic feature [δ] from the control verb. [δ] is satisfied when the specifier of the head carrying [δ] is a copy.

- (9) Obligatory Subject Control by *try* (10) Obligatory Object Control by *persuade*



Reference: 1.Broadwell, G. A. (2019). Documenting control and pseudo-control in Copala Triqui.2.Cecchetto, Carlo, and Renato Oniga. (2004). A challenge to null case theory. 3.Chomsky, Carol. (1969). The acquisition of syntax in children from 5 to 10. Cambridge, MA: MIT Press. 4.Chomsky, Noam. (2021). Minimalism: Where are we now, and where can we hope to go. 5.Culicover, Peter W., and Ray Jackendoff. (2006). Turn over control to the semantics. 6.Eisenberg, Sarita L., and Helen S. Cairns. (1994). The development of infinitives from three to five. 7.Hsu, Jennifer Ryan et al. (1985). The development of grammars underlying children's interpretation of complex sentences. 8.Lee, F. (2003). Anaphoric R-expressions as bound variables. 9.Richards, Marc D. (2007). On feature inheritance: An argument from the Phase Impenetrability Condition. 10.Szabolcsi, Anna. (2009). Overt Nominative Subjects in Infinitival Complements in Hungarian.