Deriving selective opacity in adjuncts

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Overview: Adjuncts have long been regarded as islands for many structural dependencies (Ross, 1967; Cattell, 1976, a.o.). However, syntactic opacity across adjuncts is not absolute but *selective*. While most adjuncts are opaque for movement, some are not (Truswell, 2011). Analogously, certain operations, like obligatory control (OC) of PRO into adjuncts (1) are licit, while others, like matrix ϕ-agreement with a DP within an adjunct, are not.

(1)   Maria$_i$ went home [without PRO$_{\{i,*j\}}$ talking to Jill].

Prior theories have treated such patterns as exceptions to the global opacity of adjuncts and resorted to deriving them via stipulative operations. Here, we propose to derive selective opacity in two ways. 1. We return to the fundamental asymmetry between complements and adjuncts, viz. that complements are selected by their host but adjuncts select their host (following Zeijlstra, To Appear) — and propose a modified version of the Agree mechanism underlying syntactic dependencies that is sensitive to this, and 2. We show that Agree is a necessary but not sufficient condition for movement. This correctly predicts that movement may be illicit where Agree is licit; conversely, if movement is licit, Agree must be licit as well.

Prior theories of selective opacity (adjunct OC): Taking adjunct OC as a case-study, Hornstein (2001); Drummond and Hornstein (2014, etc) propose within the MTC that this is derived by sideward A-movement of the controller out of the adjunct into the host clause. For Landau (2000, 2013), adjunct OC is derived via predication instead of the Agree mechanism in complement OC, while Landau (2015) proposes that *all* OC is derived predicatively or logophorically. Fischer (To Appear) adopts a hybrid movement + Agree approach that overgenerates OC into finite clauses and does not explain why adjuncts are transparent for Agree but not movement. The fundamental struggle where these theories fall short is in striking the right balance: adjunct OC should be derived in parallel to complement OC, and furthermore be assimilated to a family of licit *upward* dependencies out of adjuncts, without predicting that adjuncts will be transparent to *downward* dependencies like complements are.

Proposal. Selectional asymmetries: Following Zeijlstra (To Appear) adjuncts *c-select* their hosts, yielding e.g. the categorial restrictions they place, while complements are c-selected *by their hosts*. Additionally, we follow Kratzer (2006, To Appear); Moulton (2009) who argue that propositions place *compatibility restrictions* (i.e. a kind of s-selection) on their hosts from below, via the complementizer (see also Grimshaw, 2017). Independent arguments for this come from Safir (2018) based on English inherent subjunctives, English & Lubukusu"directive shift" and Lubukusu "actual clauses", showing that complement clauses actually involve restrictions placed in *both* directions. Thus, complements are c-selected downward by their host but s-select the host upward, while adjuncts both c-select and s-select their host upward. Our proposal is now simply that Agree is sensitive to this selectional asymmetry. This reaps rich dividends.

Modified Agree: *A can probe B if the two are local, one c-commands the other, and it is possible to get from A to B via minimal steps, each of which reflects extended projection, or selection in the direction of probing.* This immediately derives a certain type of selective opacity for adjuncts. *Upward probing* out of an adjunct is licit: a probe inside the adjunct may see a c-commanding goal in the host clause it has selected. Assuming that OC is built via upward probing by a PRO for a c-commanding antecedent (Landau, 2000, McFadden and Sundaresan, 2018 a.m.o.), this straightforwardly derives the possibility of OC out of adjuncts, as in (1). However, *downward probing* into adjuncts is ruled out: a probe in the host clause cannot "see" into the adjunct, because the adjunct is neither selected by anything in the host nor part of its extended projection. This explains why, even though downward probing into a complement is licit — e.g. matrix T long-distance ϕ-agreeing with a DP in a complement clause (Bhatt, 2005,

on Hindi/Urdu) — analogous ϕ-agreement probing into adjuncts seems unattested. Upward probing out of a complement clause (e.g. complement OC) is also licit, since the C head of the complement s-selects its host. This yields the desired result that complements are *non-selectively transparent* (under locality).

Move vs. Agree: What about adjunct opacity with respect to movement? Given the idea that movement is parasitic on Agree (Chomsky, 2001) and is also upward, we might worry that the current model would overgenerate movement out of adjuncts. This is not the case, for two reasons. I. Movement out of some adjuncts is actually possible (Truswell, 2011), as in (2)-(3).

(2) What$_1$ did Maria$_j$ drive Jill crazy [PRO$_j$ whistling t$_1$]?
(3) Who$_1$ did Maria$_j$ go home [PRO$_j$ without talking to t$_1$]?

Truswell argues that such movement requires a tight eventive relationship (Single Event Condition, or SEC) between the launching and landing sites. When the SEC is not satisfied, movement out of adjuncts is ruled out, yielding familiar adjunct island effects (cf. (4)):

(4) * What$_1$ did Maria$_j$ work [(while) PRO$_j$ whistling t$_1$]?
(5)   Maria$_j$ worked [(while) PRO$_{\{i,*j\}}$ whistling *Fiddler on the Roof*].

II. Note then that adjunct OC is possible, not only into the adjuncts that allow movement, like (2)-(3), but interestingly also into those that don't, like (5). We take the discrepancy between (4) & (5) to show that adjunct OC, unlike movement, is simply not subject to the SEC. Thus, while Agree may be a necessary condition for movement, it is not a sufficient one.

Predictions: A. If a particular adjunct is transparent for movement, it should also be transparent for (upward) Agree (e.g. OC). This is borne out. Consider (6a), going back to Chomsky (1986).

(6) a. They$_i$ were too angry [PRO$_{i/j}$ to hold the meeting].
       ✓ OC: The people who are to hold the meeting are too angry to do so.
       ✓ NOC: Some group A is too angry for some other group B to hold a meeting.
   b. Which meeting$_k$ were they$_i$ too angry [PRO$_{i/*j}$ to hold t$_k$]? ✓ OC, ✗ NOC

(6a) is ambiguous between OC and NOC. Strikingly, moving the embedded object into the matrix as in (6b) disambiguates, forcing OC. We can assume, essentially following Chomsky (1986), that the two readings of (6a) correspond to two underlying structures, and in only one of them is the adjunct clause transparent to movement. Given our analysis, this transparency to movement entails transparency for Agree, hence OC. Thus, if — as its name suggests — OC is obligatory for a given PRO when its structural conditions are met (McFadden and Sundaresan, 2018, a.m.o.), we explain why OC is forced in (6b). **B.** OC should not be unique but just one of a family of dependencies possible out of adjuncts. This also seems correct. Other examples including long-distance anaphora across temporal and causal adjuncts (in e.g. Tamil, cf. Sundaresan, 2012), polarity item licensing into adjuncts (Zeijlstra, 2017) and complementizer agreement/switch-reference-marking in adjunct clauses (Clem, To Appear, in Amahuaca) crucially all involve probing from the adjunct into the host.

Further extensions: The c-/s-selection asymmetry could futher condition the nature of probing. Potential confirmation: all probes with *interpretive* deficiencies (with [unvalued, interpretable] features in the sense of Pesetsky and Torrego, 2007) — polarity items, anaphora, control — seem to be upward, plausibly related to the idea that s-selection is always upward. Conversely, interpretively inert PF operations (e.g. Lowering, Local Dislocation) are invariably downward.

Selected references • Clem (to app.) Cyclic expansion in Agree: maximal projections as probes. In *Proceedings of NELS 49.* • Fischer (to app.) Locality, control, and non-adjoined islands. *Glossa* • Grimshaw (2017) Force compatibility explains "selection" patterns exhibited by say-verbs. SelectionFest, Berlin • McFadden & Sundaresan (2018) Reducing pro and PRO to a single source. *The Linguistic Review* 35:463-518. • Safir (2018) Actual clauses in Lubukusu and what they mean for a symmetric theory of clausal complementation. Rutgers • Zeijlstra (to app.) Labeling, selection, and feature checking. In *Agreement in Minimalism*. LangSci Press.