

This exploratory talk considers the proposal that

(1) The operation Agree is reducible to the shared prominent feature option of the PoP(+) labeling algorithm (LA).

Suppose there is no separate Agree operation. Rather Agree is reducible to PoP(+)'s independently motivated (by 3rd factor) LA (cf. Chomsky 2014, Chomsky 2015), which itself is essentially minimal search. Such a reduction of Agree would be part of the larger goal of maximizing the explanatory effects of simplest Merge, (see Epstein, Kitahara, Seely 2015, among others) combined with Bare Output Conditions and 3rd factor explanations. The ultimate (and perhaps unattainable?) goal is to posit internal to the NS as little as possible beyond simplest Merge, striving for (2):

(2) Simplest Merge + 3^{rd} factor + interfaces = I-Language.

PoP(+) argues that labels are not represented in the syntax (see also Collins (2002), Seely (2006)). The sole structure building operation, Merge, takes the simplest form: Merge(X, Y) -> {X, Y}. Merge puts two objects into a relation (into a set); there is no added (and complicating) 'projection' component of Merge whereby labels are created by the application of Merge and receive a dedicated representation in a Syntactic Object, SO (cf Seely (2006)). What becomes of labels and projection in PoP(+)? 'Labels' are the means of identifying a syntactic object for interpretation. But since interpretation takes place only at the interfaces, then labels are only required at the interfaces (and are not required internal to the narrow syntax); see Obata (2016) for recent discussion. PoP(+) proposes that what are referred to as 'labels' are essentially the result of minimal search: "The simplest assumption is that LA is just minimal search, presumably appropriating a third factor principle, as in Agree and other operations." (PoP, p. 43).

We suggest a similar line of argument for Agree. Agree is required only for the interface(s) (because unvalued features require values only at the interfaces); there is no NS internal representation of it. The conceptual ideal is this: what is traditionally called Agree is basically 3rd factor minimal computation; "Agree" essentially *is* the Shared Prominent Feature labeling option. We explore a number of ways of implementing a reduction of Agree to Labeling. The basic idea is that in a SO like (3)

$(3) \quad \{C,\,\{_2\,\{n,\,\ldots\},\,\{_1\,T,\,\ldots\,\}\}$

Minimal search finds X (= n) and Y (= T) of XP, YP, where X=valued phi and Y=unvalued phi. Relative to NS, Agree just is this minimal search. Just as a label is identified via minimal search, so is 'valuation.' So, at this point in the derivation, T's unvalued phi become valued and hence T can label. What is traditionally referred to as valuation is simply a reflex of identity under minimal search, itself an instantiation of the 3^{rd} factor principle of minimal computation. Ideally, nothing more is needed. Agree is reduced to PoP(+) labeling (itself reduced to 3^{rd} Factor Minimal search).

The talk will provide a detailed review of labels in syntactic theory and will then review the labeling algorithm of PoP(+). We then review the operation Agree as Probe-goal + Valuation. Next, we'll explore the possibility of collapsing Agree with Labeling: Agree just is the shared prominent feature option of LA, which means Agree is essentially minimal search (3rd factor). Finally, we'll consider challenges to the proposal including existential constructions.

