LING 611 April 2009

More MP Ch. 4 quotes and notes

Feature types cont'd.

(1)"The intrinsic-optional distinction plays virtually no role here, but there is a much more important distinction that has so far been overlooked. Evidently, certain features of FF(LI) enter into interpretation at LF while others are uninterpretable and must be eliminated for convergence. We therefore have a crucial distinction ±interpretable. Among the Interpretable features are categorial features and the ϕ-features of nominals." p.277

(2)"Interpretability at LF relates only loosely to the intrinsic-optional distinction. Thus, the optional feature [± plural] of nouns is Interpretable, hence not eliminated at LF. The Case features of V and T are intrinsic but -Interpretable, hence eliminated at LF (assuming that they are distinguished from the semantic properties that they closely reflect). It follows that these features of the head must be checked, or the derivation crashes. The Interpretable features, then, are categorial features generally and ϕ-features of nouns. Others are -Interpretable." p.278

(3)"Interpretability does relate closely to the formal asymmetry of the checking relation, which holds between a feature F of the checking domain of the target K and a sublabel F' of K. F' is always - Interpretable: strength of a feature, affixal features, the Case-assigning feature of T and V, ϕ-features of verb and adjective. The target has Interpretable features, such as its categorial features, but these never enter into checking relations. F in the checking domain, however, can be an Interpretable feature, including categorial and ϕ-features."

Checking

(4)"(49) a. Features visible at LF are accessible to the computation C,,, throughout, whether checked or not.
b. Features invisible at LF are inaccessible to C_{HL} once checked.
Case (49a) holds without exception; (49b) only in part, in an interesting way." p.279

(5)"(52) a. A checked feature is deleted when possible.
b. Deleted α is erased when possible.
Erasure is a "stronger form" of deletion, eliminating the element entirely so that it is inaccessible to any operation, not just to interpretability at LF." p.280

<<Recoverability of deletion makes erasure of interpretable features impossible. But non-interpretable features are erasable, so must be erased immediately upon checking. Then under Last Resort, just below, we capture the fact that a nominal whose Case feature has been checked is ‘frozen’ in place for further A-movement.>>

(6)“(51) Last Resort
Move F raises F to target K only if F enters into a checking relation with a sublabel of K.” p.280

(7)“... the EPP is divorced from Case. Thus, we assume that all values of T induce the EPP in English, including infinitives, though only control infinitives assign (null) Case; raising infinitives do not...” p.282

(8)“why are the features of the target that enter into checking relations invariably -Interpretable? Suppose that a sublabel F' of the target category K is Interpretable. Suppose the feature F that is accessed by the operation OP and raised to the checking domain of F' is Interpretable, entering into a checking relation with F'. Both features are Interpretable, hence unchanged by the operation. The operation OP is "locally superfluous," not required by the features that enter into the checking relation that drives it. But OP might nonetheless contribute to convergence. For example, a free rider of FF[F] might enter into a checking relation with another sublabel of the target, one or the other being affected (erased or deleted); or OP might be a necessary step toward a later operation that does delete and perhaps erase -Interpretable features, allowing convergence. Such possibilities abound, considerably extending the class of possible derivations and thus making it harder to compute economy, perhaps also allowing derivations too freely (as might not be easy to determine). Preferably, OP should be excluded. It is, if F' is necessarily -Interpretable, hence always affected by the operation. If F raises to target K, then, the sublabel that is checked by F deletes and typically erases.
This property of feature checkers eliminates the possibility of "locally superfluous" movement operations. It reinforces the minimalist character of the computational system, permitting its operations to be formulated in a very elementary way without proliferation of unwanted derivations.” pp.282-3

(9)“Consider successive-cyclic raising as in (54).
(54) we are likely [t, to be asked [t, to [I, build airplanes]]]
Overt raising of we from t, to t2 accesses D to satisfy the EPP in the most deeply embedded clause, the only possibility since the raising infinitival does not assign Case. D is Interpretable, therefore unaffected by

checking. It is accessed again to raise we to t,, satisfying the EPP in the medial clause. Further raising from t, to the matrix subject can access any of the features that enter into a checking relation there.” p.283

Minimal Link Condition

(10)“Embedded or not, there are two wh-phrases that are candidates for raising to [Spec, Q'] to check the strong feature: *which book* and (*to*-)*whom*, yielding (79a) and (79b).
(79) a. (guess) [which book Q' [they remember [t' Q [to give t to whom1]]]]
b. (guess) [[to whom]$_2$ Q' [they remember [[which book]$_1$ Q [to give t_1 t_2]]]]
(79b) is a Wh-Island violation. It is barred straightforwardly by the natural condition that shorter moves are preferred to longer ones-in this case, by raising of which book to yield (79a). This operation is permissible, since the wh-feature of *which book* is Interpretable, hence accessible, and the raising operation places it in a checking relation with Q', erasing the strong feature of Q'. The option of forming (79a) bars the "longer move" required to form (79b). But (79a), though convergent, is deviant ...” p.295

(11)“... at a given stage of a derivation, a longer link from a to K cannot be formed if there is a shorter legitimate link from P to K.” p.295

(12)“It is not
that the island violation is deviant; rather, there is no such derivation, and the actual form derived by the MLC is deviant.” p.295
<<Exactly why it’s deviant is not entirely clear. This is a longstanding problem.>>

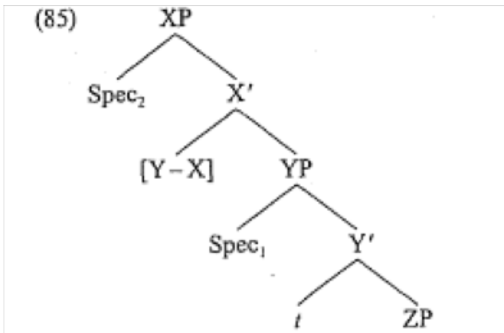
(13)“(80) seems [$_{IP}$ that it was told John [$_{CP}$ that IP]]
Raising of *John* to matrix subject position is a Relativized Minimality (ECP) violation, but it is barred by the "shorter move" option that raises *it* to this position. Raising of *it* is a legitimate operation: though its Case feature has been erased in IP, its D-feature and ϕ-features, though checked, remain accessible.” p.295
<<On the shorter move, the Case feature of matrix Tense is not checked.>>

Attract

(14)“The formulation of the MLC is more natural if we reinterpret the operation of movement as "attraction": instead of thinking of α as raising to target K, let us think of K as attracting the closest appropriate α. We define *Attract F* in terms of the condition (84), incorporating the MLC and Last Resort (understood as (51)).

(84) K *attracts* F if F is the closest feature that can enter into a checking relation with a sublabel of K.
If K attracts F, then α merges with K and enters its checking domain, where α is the minimal element including FF[F] that allows convergence: FF[F] alone if the operation is covert. The operation forms the chain (α, *t*).” p.297

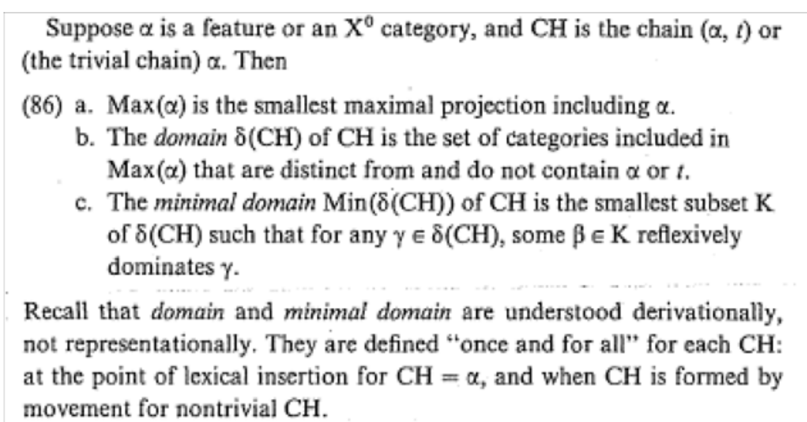
Equidistance
(15)



$Spec_1$ and $Spec_2$ are both in the minimal domain of the chain CH =
(Y, t) and are therefore eqtridistant from α = ZP or within ZP. Move can
therefore raise α to target either $Spec_1$ or $Spec_2$ which are equally close to α. Reformulating the notion of equidistance in terms of Attract, we say that $Spec_1$, being in the same minimal domain as $Spec_2$, does not prevent the category X' (= (X, (X, YP}]) from attracting α to $Spec_2$. p.298

(16)“another possibility is that α
attaches to the higher target X', skipping $Spec_1$, not by substitution as in (85) but by adjunction, either adjunction to X' or head adjunction to [Y-X].” p.298
(17)

p.299


Suppose α is a feature or an X^0 category, and CH is the chain (α, *t*) or (the trivial chain) α. Then

(86) a. Max(α) is the smallest maximal projection including α.
b. The *domain* δ(CH) of CH is the set of categories included in Max(α) that are distinct from and do not contain α or *t*.
c. The *minimal domain* Min(δ(CH)) of CH is the smallest subset K of δ(CH) such that for any γ ∈ δ(CH), some β ∈ K reflexively dominates γ.

Recall that *domain* and *minimal domain* are understood derivationally, not representationally. They are defined “once and for all” for each CH: at the point of lexical insertion for CH = α, and when CH is formed by movement for nontrivial CH.

(18)

The domain $\delta(\alpha)$ and the minimal domain $Min(\delta(\alpha))$ of α are as defined for $CH = \alpha$, t now being irrelevant.

Turning to "closeness," we are concerned with the maximal projection HP headed by H with γ adjoined to form H^{0max} (the zero-level projection of H), γ heading the chain $CH = (\gamma, t)$.

(87) β is *closer to* HP than α if β c-commands α and is not in the minimal domain of CH.

γ may be an X^0 category or a feature.

(19)"In effect, the minimal domain of CH determines a "neighborhood of H" that can be ignored when we ask whether a feature F is attracted by HP; β within the neighborhood of H is not closer to HP than α." p.298

<<Metaphorically, you don't ask how close you are to some neighborhood if you are actually **in** that neighborhood.>>

(20)"Note that the neighborhood is determined only by γ that is an immediate constituent of H^{0max}, not by a more deeply embedded sublabel; this is necessary, or virtually all categories will be equidistant with I at LF after V-raising." p.298

Minimal Link Condition again

(21)

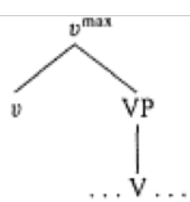
(110) *Minimal Link Condition*
K attracts α only if there is no β, β closer to K than α, such that K attracts β.

p.311

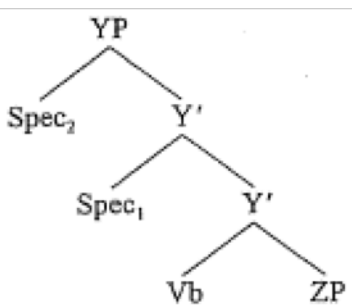
Structure without AGR

(22)

<<The basic idea is ultimately that AGR has no semantic import so shouldn't be in a structure at all.>>

(115)


p.315

(188)


(23)

(24) p.356

Vb is the verbal element (or its trace, if the complex has raised further to adjoin to T); Y′ and YP are projections of the light verb v to which V has adjoined to form Vb; ZP = [t_V Obj], t_V the trace of V; and $Spec_2$ is the target $\tau(v)$ created by the raising operation. $Spec_1$ is Subj, and it is only necessary that it be no closer to the target $Spec_2$ than α in ZP. For this purpose, it suffices to simplify (186), keeping just to the trivial chain CH = H(K) (the head of K) and its minimal domain. We therefore restate (186) as (189).

(189) γ and β are equidistant from α if γ and β are in the same minimal domain.

Hence, $\gamma = Spec_2$ and $\beta = Spec_1$ are equidistant from α = Obj in the illustrative example just discussed.

We now define "close" for Attract/Move in the obvious way: if β c-commands α and τ is the target of raising, then

(190) β is *closer to* K than α unless β is in the same minimal domain as (a) τ or (b) α.

(25)

We thus have two cases to consider. We ask (case (190a)) whether β and τ are equidistant from α, and (case (190b)) whether β and α are equidistant from τ. If either is true, then β does not bar raising of α to τ. In case (190a), β and τ are in the minimal domain of H(K); and in case (190b), β and α are in the minimal domain of h, for some head h. In case (190a), β is in the "neighborhood" of H(K) that is ignored, in the sense of earlier exposition.

(26)

we can drop the notion of equidistance entirely, simplifying (190) to the statement that β is *closer* to the target K than α if β c-commands α. It follows, then, that Obj can only raise to the inner Spec, $Spec_1$ of (188), to check the strength feature and undergo overt Case marking. If overt object raising takes place, then Subj will be merged in the outer Spec to receive the external θ-role provided by the configuration. With "closer than" restricted to c-command, only Subj in the outer Spec can be attracted by T (note that Subj always has features that will check sublabels of T). Therefore, Obj is frozen in place after overt object raising, and the conclusions reached above follow directly.[134]

On these assumptions, it follows that Subj always c-commands Obj within IP.

p.358