The "Value" of Phonological Underspecification in the Narrow Syntax
(keywords: minimalist syntax, unvalued features, Transfer, Case and agreement)

In this paper, we identify a paradox and various pervasive empirical problems confronting Chomsky's (2001, 2005, 2007) valuation analyses of uninterpretable features, and then propose an alternative reanalyzing the lexical status of so-called unvalued features.

Valuation Analyses: Chomsky (2001:5) proposed: "the uninterpretable features, and only these, enter the derivation without values, and are distinguished from interpretable features by virtue of this property." As he notes, this predicts that the crucial distinction between unvalued and valued features is lost at the moment such unvalued features go from unvalued to valued. One vitally important consequence of this valuation analysis is then the phase-based cyclic application of Transfer. That is, if unvalued features, once valued, are regarded like any other valued features, then they cannot be removed by Transfer. Chomsky (2005) thus argued that transferring features before valuation is too early (i.e. unvalued cause crash) and after, too late (i.e. after valuation, Transfer cannot remove valued features (e.g. phi-features on T), also leading to crash) (cf. Epstein and Seely 2002). The solution to this apparent paradox is that inside each phase, Transfer must remove unvalued features at the point of their valuation (assuming all phase internal operations can apply simultaneously). Given that Transfer applies to the phase-complement in each phase, Chomsky (2007) and Richards (2007) argue that every occurrence of a derivationally valued feature must remain inside its minimal phase-complement for convergence.

A Paradox and Pervasive Empirical Problems: Even such simple data as (1) and (2) (i.e. any declarative and any wh-question) pose a serious problem of under-generation for such valuation analyses. In (1), V(like) – which inherits phi-features from v – adjoins to v (a step required to form a linear VO order); hence, the valued phi-features on V(like) appear outside VP. In (2), NP(whom) moves to SPEC-v (a step required to form an operator-variable construction); hence, the valued Case on NP(whom) appears outside VP. Note, if Transfer applied to VP before such movement, then it could remove those newly valued features at the point of valuation, but in doing so, it would also necessarily force V(like) and NP(whom) to be pronounced inside VP, contrary to fact. As already noted, within such valuation analyses, Transfer after valuation induces crash. Thus, there are in fact no convergent derivations for data like (1) and (2).

An Alternative Analysis: Earlier, Chomsky (2000:118) assumed: the strong minimalist thesis (SMT) requires that "inclusiveness holds of narrow syntax, and each feature is interpreted at the level LF or associated with phonetic features by the phonological component." Recall under Chomsky's (2001:5) proposal, unvalued features are formal features lacking semantic values, i.e., they are not interpreted at LF. But if so, SMT then entails that such features must be "associated with phonetic features by the phonological component." This alternative analysis implies that in the lexicon, unvalued features are formal features lacking semantic values. Therefore, by SMT, they must be "associated with phonetic features by the phonological component." That is, the lexical status of unvalued features is formal and phonological, but not semantic, akin to a phonological feature like unvalued [+dental]. Valuation can be seen as a syntactic process of "helping" unvalued features to become phonologically fully legitimate e.g. [+dental] (i.e. transferable to the phonological component without inducing crashing there). Under this alternative analysis, therefore, Transfer can remove unvalued features (e.g. phi-features on T) at any derivational point after their valuation; these valued features are just like any other phonological features, and are recognized as such. This solves the before (too early), after (too late) paradox discussed above.

Further Empirically Welcome Results: Our analysis expands empirical coverage including other cases of derivationally valued features escaping the phase-complement such as (3), complementizer agreement phenomena in West Germanic languages like West Flemish (Carstens 2003, Haegeman 1992). Our analysis also raises a number of new fundamental questions such as: what (now) motivates feature-inheritance and cyclic Transfer if there is no need to transfer newly valued features at the exact point of their valuation? In the remainder of the paper, we suggest that cyclic Transfer is an optimal result of eliminating anomalous structures that we show are in fact generated under Chomsky's (2005, 2007) feature-inheritance analysis.
**Data**

(1) the vP phase for "they like him"

\[ _{vP} \text{they} [ v' \text{+like(valued phi)} [_{vP} \text{him(valued Case)} [ v' tV t_{him} ] ] ] ] \]

(2) the vP phase for "whom do they like?"

\[ _{vP} \text{whom(valued Case)} [ _{v}\text{they} [ v' \text{+like(valued phi)} [_{vP} t_{whom} [ v' tV t_{whom} ] ] ] ] ] \]

(3) a. Kpeinzen dan-k (ik) morgen goan
I-think that-I (I) tomorrow go
'I think that I'll go tomorrow.'

b. Kpeinzen da-j (gie) morgen goat
I-think that-you (you) tomorrow go
'I think that you'll go tomorrow.'

c. Kviden dan die boeken te diere zyn
I-find that-PL the book too expensive are
'I find those books too expensive.'

**Selected References**


