On valued uninterpretable features

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Chomsky (2001) argues that in addition to the semantically based interpretable/uninterpretable distinction, we need a valued/unvalued distinction, where some features are valued lexically and others receive value during the derivation. The adjective/participle gender, which can be fem/neut/masc, depends on the noun's gender in (1). The dependence on the syntactic context indicates adjectives/participles are lexically unvalued for gender, receiving gender value via agreement with a noun that has a valued gender (see Pesetsky & Torrego 2007). On the other hand, nouns *kola, auto*, and *automobil* have a fixed gender: *kola* is always fem, *auto* neut, and *automobil* masc. This indicates nominal gender is lexically valued; in contrast to adjectives/participles, nouns don't receive their gender value during the derivation, hence N's gender doesn't depend on the syntactic context. Chomsky also ties valuation and interpretability, arguing all and only uninterpretable features (uFs) are unvalued (2). Given Full Interpretation, uFs, which semantics cannot deal with, must be eliminated before reaching semantics. This is done through their deletion, a prerequisite for which is valuation (3). The goal of this paper is to provide additional evidence (see also Pesetsky & Torrego 2007) that (2) should be abandoned, also showing that allowing valued uFs increases empirical coverage and simplifies feature checking.

Since SC gender is grammatical, (1) provides evidence for the existence of valued uFs (contra Chomsky 2001): N's gender is valued and uninteptetable. Allowing valued uFs allows us to simplify feature checking. Since for Chomsky all uFs are unvalued, he disallows checking between two uFs. Checking is supposed to result in valuation of unvalued features. If both the probe's and the goals's feature is unvalued, their feature checking can't result in valuation. Chomsky is thus forced to tie checking of a goal's uF to checking of a different feature of its probe. Thus, since (4a-b) can't result in the checking of Y's K feature, Chomsky is forced to posit (4c), where uK is checked as a reflex of F checking. Reflex checking considerably complicates feature checking, proliferating features involved in checking (instead of simply having K checking, an additional feature F is posited for K feature checking). Allowing valued uFs enables us to simplify feature checking: (4a) is now allowed, if one K is valued. I will show gender checking in (5) works like this: both the gender probing head, responsible for participial gender, and the noun, have uGen, but only the former has unvalued Gen. Part then probes NP in (5), which values its Gen feature. There is no need for reflex checking.

Note now that since valued uFs can be deleted (so that they don't enter semantics) even without checking given (3), we predict that valued uFs do not need to be checked. (6) shows the prediction is borne out. The participle in (6) agrees in gender with the first conjunct, which means the second conjunct is not involved in gender feature checking. Its non-default gender feature then goes unchecked in (6) (default gender is masc).

Consider now Case, which is uninterpretable on both the traditional Case assigner (e.g. Tense) and the assignee (NP). Since Chomsky disallows Agree between two uFs, he can't have direct Case-checking between T and NP. Rather, he ties it to another feature: T's phi-features in (7) probe NP, and somehow as a reflex of this checking the NP's Case is checked. "Somehow" is quite mysterious since T doesn't even have a Case feature. The above system makes possible a more natural account that eliminates reflex checking since both T and NP have a Case feature. Since finite T always checks nominative, and NP's case depends on its context, T's Case is valued and NPs' unvalued (8). Case licensing in (8) proceeds without reflex checking. I also show we have here evidence for Bošković's (2007) moving-element driven system given that the trigger for feature checking is unvalued F (not simply uF), as Chomsky (2001) argues. In Chomsky's target-driven system, Agree still fails in (8) because T's Case cannot function as a probe, not being unvalued. In Bošković (2007), NP moves to SpecTP, probing T from there. Since NP's Case is unvalued it can function as a probe.

The above account makes a prediction. Since the traditional Case assigner's Case is valued, which means it can be deleted even without checking, it does not have to undergo checking. This is in contrast to NPs Case, which is unvalued, hence must be checked. This amounts to saying the traditional Case Filter (CF) holds (NPs must undergo Case checking), but the traditional Inverse Case Filter (ICF) doesn't hold (traditional Case assigners don't have to undergo Case checking). It is quite clear the CF holds empirically. As for the ICF, although many authors have argued that it holds (e.g. Bošković 2002, Epstein & Seely 2006) there is strong evidence against it. Thus, verbs that assign Case only optionally (see (9)) argue against the ICF. In many Slavic languages verbs that assign structural accusative fail to assign it when their object is a higher numeral NP (10). The same happens when a verb is negated (11). (10)-(11) then also argue against the ICF. The system with valued uFs thus not only simplifies Case checking by eliminating reflex checking but also correctly enforces the CF, but not ICF. I will also show how default Case can be handled within this system and examine additional consequences of allowing unvalued iFs, which Pesetsky & Torrego argue for.

(1) a.   Juče   su kupljena   zelena   kola.   (*kola* is a pluralia tantum)
           yesterday are bought.fem green.fem   car.fem
           'The green car was bought yesterday.'
    b.   Juče   je kupljeno   zeleno   auto.
           yesterday is bought.neut green.neut   car.neut
    c.   Juče   je kupljen   zeleni   automobil.
           yesterday is bought.masc green.masc car.masc   (Serbo-Croatian)

(2) A feature F is uninterpretable iff F is unvalued (Chomsky 2001)

(3) Only valued uninterpretable features can be deleted (Chomsky 2001)

(4) a.   X   Y
           *u*K   *u*K
(* for Chomsky: being unvalued, the *u*K of X cannot value the *u*K of Y)
    b.   X   Y
           *i*K   *u*K
 (* for Chomsky: interpretable features, which are always valued for Chomsky, cannot serve as probes; since there is no need for them to probe they are not allowed to do it. *u*K then remains unvalued.)
    c.   X   Y
           *u*F   *i*F
                  *u*K

(5) Juče   je kupljeno   auto
    yesterday   is bought.neut car.neut   (Serbo-Croatian)
     Part   NP
    (unvalued *u*Gender) (valued *u*Gender)

(6) Juče   su uništena   sva sela   i   sve   varošice.
     yesterday are destroyed.neut all   villages.neut and all   towns.fem
     'All villages and all towns were destroyed.'   (Serbo-Croatian)

(7)   T   NP
      *u*Phi   *i*Phi
                      *u*Case

(8)   T   NP
     (valued *u*Case)   (unvalued *u*Case)

(9)   a. John laughed.
         b. John laughed himself silly.
         c. Mary is dressing (herself).
         d. Peter is eating (apples).

(10)   a. On kupuje kola.   (Serbo-Croatian)
           he buys   car.acc
         b. On kupuje pet kola.   (*kola* gets genitive from the numeral)
           he   buys   five cars.gen

(11)   a. Janek czytał książkę.   (Polish)
           Janek read   books.acc
         b. Janek nie czytał książki.
           Janek neg read   books.gen

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