Spell-Out vs Transfer: Evidence from agreement Ivona Kučerová (McMaster University)

I provide novel empirical evidence that the distinction between grammatical and semantic agreement can be used as a diagnostics for the theoretically postulated distinction between Spell-Out and Transfer (Chomsky 2008, 2013). I use the term grammatical agreement (GRAM) as a shortcut for morphological realization that is faithful to ϕ -feature valuation within narrow syntax, including failed agree (Preminger 2009), and semantic agreement (SEM) for morphological realization that is faithful to the intended semantic denotation but does not necessarily isomorphically realize ϕ -feature bundles present in narrow syntax (e.g., feminine gender on anaphors referring to grammatically neuter nouns, as in German Mädchen 'girl'; Wurmbrand 2016). I define Spell-out as a point in the derivation when narrow-syntax operations must be complete. I.e., all active features must be matched within an Agree link but not necessarily valued (Chomsky 2000, Adger 2003, Pesetsky and Torrego 2007). Transfer corresponds to the point in the derivation when a phase has been minimally searched by CI, and in turn has been labeled. I argue that a phase can be sent to morphology either (i) immediately after Spell-out, or (ii) after Transfer. In (i) morphological realization reflects only ϕ -features present in narrow syntax (\sim GRAM); in (ii) morphology reflects the CI-labeled structure which may be semantically enriched (\sim SEM). Empirical support for the proposal comes from nominal agreement in Standard Italian, and conjunct agreement in Italian and Czech.

Case I: Standard Italian uses nominal inflection to adjust names of traditionally male professions to their current female uses. Interestingly, speaker's inflectional strategies differ, and in turn, nouns like *chirurg*'surgeon' are attested in three distinct agreement patterns: (i) the noun itself, DP-internal (determiners and adjectives) and DP-external (predicates) agreement is morphologically feminine (F), (ii) only DP-internal and DP-external agreement is F:

- (1) 'the male/female surgeon is gone'
 - a. il.M chirurg-o.M è andat-o.M vs la.F chirurg-a.F è andat-a.F
 - b. il.M chirurgo è andat-o.M vs la. F chirurgo è andat-a. F
 - c. il.M chirurgo è andat-o.M vs il.M chirurgo è andat-a. F

I follow Kučerová (2015) in that the vocalic ending on the noun reflects gender valuation only in (i); in (ii) and (iii) it is a gender-independent class marker. In turn, pattern (i) and (ii) show a homogeneous agreement pattern, while pattern (iii) is heterogeneous. Here I concentrate on (ii) vs (iii) as the noun in (i) has a different internal structure (Kučerová 2015). I argue that the difference between (ii) and (iii) corresponds to the two distinct derivational paths proposed here: in both cases, F agreement on participle reflects SEM; the DP-internal agreement varies because the DP in (ii) has been sent to morphology before Transfer (~GRAM). but in (iii) after Transfer (\sim GRAM). Technically, I model D as a bunch of unvalued ϕ -features. Since the minimal nominal structure ($\sim nP$) is compatible with either gender, neither the lexical representation of the noun itself, nor n brings in a valued gender feature. The unvalued gender feature on D probes the unvalued feature on n; both features are matched but there is no valuation in narrow syntax. Since only the semantic component has a direct access to the (natural) gender of the referent, the gender feature can be valued only when the DP is minimally searched by CI (@Transfer). Crucially, features in the DP label are valued by CI only if they were not valued from narrow syntax. (a) if the DP undergoes Transfer before it is sent to morphology, the unvalued gender feature on D has already been valued as F, and both the DP-internal and DP-external agreement reflects the CI valuation [pattern (ii)]; (b) if the DP is sent to morphology before Transfer, there is no valued gender feature in the structure. Morphology resorts to failed agree as last resort and unvalued features within DP are morphologically realized as morphological default (Italian = masculine; Thornton 2001). I argue that a DP must be labeled to become a goal. Consequently, later syntactic operations require the DP to be Transferred: at that point the label of the DP is valued as feminine and all external agreement is based on this valued feature [pattern (iii)].

Prediction: The dual agreement pattern arises as an interaction of two properties: masculine as a morphological reflex of failed agree & lack of valued gender feature on the DP in narrow syntax. The prediction is that feminine nouns denoting a male referent cannot exhibit the dual agreement pattern as F cannot result

from default agree: there must be a valued gender feature in narrow syntax. It follows that feminine nouns must agree in F in local syntactic environment. This prediction is borne out. Grammatically feminine nouns like *guida* 'guide' or *guardia* 'guard' obligatorily trigger feminine agreement on predicates (GRAM in (2)), irrespective of the gender of their referent (Ferrari-Bridgers 2007):

(2) La brava guida si e'persa nel bosco the good guide. F her/him lost. F in the woods 'The guide lost his/her way in the forest.'

Case II: Another place where we can identify the correlation between Transfer and SEM is agreement with coordinated DPs. Since conjunction forms a plurality (Munn 1993, Bošković 2009, Bhatt and Walkow 2013), which is a process that requires access to the semantic component, at least the number feature in the ConjP label is based on values provided by CI, i.e., after the ConjP has undergone Transfer.

Prediction I: Since ConjP is CI-labeled as plural only after it has undergone Transfer, only elements probing after Transfer reflect SEM, i.e., plurality. Consequently, elements merged within the COORD, i.e., adjectival adjuncts and determiners, may agree only with one conjunct, never with both. This prediction is borne out, e.g., in Czech: adjectival adjuncts must agree with the closest adjunct, (3-a). Furthermore, determiners that semantically require plurality such as *oba* 'both' cannot be merged within ConjP, (3-b).

- (3) a. *mladí/ mladý muž a žena young.M.PL/ young.M.SG man.M.SG and woman.F.SG 'a young man and a young woman' or 'a young man and a woman'
 - b. *oba/ *obě kočka a kotě both.M/ both.F/N.PL cat.F.SG and kitten.N.SG Intended: 'both cat and kitten'

Prediction II: For ConjP to be labeled, the individual conjuncts must have already been labeled. We have seen in (2) that if the grammatical gender of a Italian noun does not match its natural gender, predicate must agree with the grammatical gender. If, however, such a noun is embedded in ConjP, its SEM value should become accessible in a local agreement configuration. As (4) (from Ferrari-Bridgers 2007) demonstrates, the grammatically feminine noun like *guardia* indeed contributes F toward the plural agreement on the predicate only if it denotes a female. If it denotes a male, the agreement is masculine, i.e., SEM:

- (4) a. La guardia e sua sorella sono andate al cinema sta sera the guard. F and self sister have gone. F.PL to-the movies this evening 'The guard and her sister went to the movies tonight.'
 - b. La guardia e sua sorella son andati al cinema sta stera the guard. F and self sister have gone. M.PL to-the movies this evening 'The guard and his sister went to the movies tonight.'

Prediction III: If a syntactic probe targets ConjP after Transfer, SEM (pl) should be obligatory. This prediction is borne out in Czech. Czech allows first-conjunct agreement with ConjP in a postverbal position but it requires SEM with ConjP in a preverbal position, (5). This agreement asymmetry follows from the proposed model: postverbal ConjP may be in situ but preverbal ConjP (Spec,TP) must have been labeled. Furthermore, first-conjuct agreement should be ungrammatical if postverbal ConjP must have undergone Transfer: If ConjP is the head of an internally headed relative clause, it indeed triggers obligatory SEM, (6).

- (5) (Přišel/přišli) Petr a Marie (*přišel/přišli). came.M.SG/came.PL Petr.M and Marie.M came.M.SG/came.PL 'Peter and Mary arrived.'
- (6) *Přišel/ přišli chlapec a dívka, co je pozvala Marie. came.M.SG/ came.PL boy.M and girl.M what them invited Marie 'A boy and a girl that were invited by Marie arrived.'

Conclusion: The data provides evidence that the GRAM vs SEM distinction follows from the Spell-Out/Transfer distinction. No recourse to (un)interpretable features as, e.g., in Smith (2015), is needed.