A morphosyntactic account of verbal number in Mupun

Nutshell Verbal number (Corbett 2000) may refer either to event number or to participant number. This category seems to involve selection, rather than agreement (Durie 1986). However, some mismatches between the number (#) on the verb and on its argument suggest an agreement relation between the two constituents. We propose a matching of feature relation between little v and a constituent bearing a number feature (DP: participant #, AdvP: event #). The analysis is couched in Minimalist Syntax and Distributed Morphology.

Data Mupun (Frajzyngier 1993) is a West Chadic language from Nigeria and have several morphological devices to express verbal number.

(1) a. ***cit*** beat.SG $\sim$ ***nas*** beat.PL
     b. *wu **nas** mo*   3SG.M hit.PST.PL 3PL.M   'He hit them.'
     c. **wu* **cit** mo*   3SG.M hit.PST.SG 3PL.M   '*He hit them.'
     d. *wu **cit** wur*   3SG.M hit.PST.SG 3SG.M   'He hit him.'
     e. *wu **nas** wur*   3SG.M hit.PST.PL 3SG.M   'He hit him many times.'

(1a) shows the two phonological exponents for the root $\sqrt{\text{HIT}}$, which differ for the values of the feature #. (1b-c) show that a plural feature on the internal argument requires a plural feature on the verb. (1d-e) exhibit a different pattern: a singular argument does not require a singular verb. Moreover, in (1e) there is no overt constituent bearing a plural # and the quantified items are events rather than participants.

Proposal We explain the ambiguity between event and participant number (1b-e) and the ungrammaticality of example (1d) by proposing a *matching of feature relation.* This operation is different from verb-object agreement, because (i) unergative verbs mark the number of the external argument (ex. *wu **su** seet* 'He ran (run.SG) away' $\sim$ *mo **sue** seet* 'They ran (run.PL) away') (ii) it derives the event number reading (1e) that cannot be explained as verb-object agreement.

We claim that little v bears an uninterpretable feature for number [u#], which can be satisfied by an interpretable feature [i#] that is present either on a DP or on an AdvP (this can be a covert constituent). Verbal number is reflected on little v, but is actually presented either on the DP (participant number) or on the AdvP (event number).

Analysis We assume the following lexical entries

(2) a. $\sqrt{\text{HIT}}$ $\leftrightarrow$ /nas/ / v[pl]
     b. $\sqrt{\text{HIT}}$ $\leftrightarrow$ /cit/ (elsewhere)
     c. [AdvP,pl] $\leftrightarrow$ $\emptyset$

In the derivation of (1b-c-d), little v checks its feature with the # on the DP$_{\text{obj}}$. If this is plural, little v acquires the plural feature and it is spelled out as /nas/. Note that we consider singular as the lack of number (in this case, the default /cit/ is inserted). For (1e), a covert AdvP is merged as an adjunct to the VP. Little v matches its feature with the number on this adverbial phrase and the exponent /nas/ is inserted.

Conclusion Our account can derive all the patterns that are problematic under different theories (cf. unergative verbs), can explain the ungrammaticality of some mismatches and unifies event number and participant number as ephiphenomena of different syntactic structures.