Sum and group formation in the event domain: when D selects Asp

1. Introduction. In this presentation we address the expression of event plurality in the *nominal* and *verbal* supine in Romanian, in connection with definiteness. One of the well-known generalizations stated by Grimshaw 1990 about (complex) event nominals is that they only appear with the definite determiner. Here, we connect this property to other properties in the Romanian supine event nominal, by comparing the kind of plurality involved in the *nominal* supine and the one involved in the *verbal* supine. We show that the obligatory D in the *nominal* supine selects a verbal internal structure that involves the presence of an Asp layer *and* the presence of a plural operator at the level of V; the two layers are responsible for the possibility of group denotation, a reading that does not arise in the *verbal* supine whose interpretation is similar, we will argue, to that of a bare plural.

Semantic plurality has been shown to be triggered, in the *nominal* supine, by the presence of a *pluractional operator* (PO, Lasersohn 1995) in its semantics (cf. Iordăchioaia & Soare [IS] 2008). IS 2010 provide a two-layered analysis for PO in the supine by showing that the effects of the PO are present at both the V- and the (outer) Aspect-level: it pluralizes the basic event under V by the presence of a plural operator, but also contributes a FREQ operator under Aspect. Here, we want to give more insights about similar operators in the *verbal* supine (i.e., the D-less supine appearing in e.g. aspectual verbal periphrases). Following Laca's (2006) approach to Spanish, we show here that the behavior of the nominal and the verbal supine provides the grounds for a distinction between groups and sums in the event domain. We further investigate the type and the number of operators involved in sum and group formation in nominal and verbal contexts, by making use of nominal/verbal parallelisms (e.g. scope interaction with indefinites and cardinals). We establish that the nominal supine can denote **both sums and groups**, and it must contain more than a bare plural-like operator, while the so-called *verbal* supine appearing in the verbal periphrases at study denotes **a bare plural of events** (it can only denote a sum). We relate this to the presence of D in the nominalization and its absence in the verbal supine.

2. **PO in the nominal supine.** Previous semantic literature assumes that pluractional operators (POs) trigger event plurality at the $V°$-level (Lasersohn-1995, Van Geenhoven-2004, Laca-2006 etc), while Iordachioaia & Soare (IS-2008) provide a syntactic account in which the PO in the Romanian nominal supine is an operator triggering unboundedness under Aspect°. Evidence for a PO in the Romanian nominal supine is provided e.g. by the *lack of multiplicity effects with singular indefinites* (one journalist is killed several times):

(1) **ucisul**   de jurnalisti/jurnalistilor/**#unui jurnalist**   de către mafia
      kill.Sup.the of journalists/journalists.the.Gen/a.Gen journalist by   mafia

IS-2010 reconcile the two approaches by showing that the PO in the Romanian supine has influence at both levels. *Dependent 'câte'-indefinites* allow the supine events to distribute over different journalists; they must co-vary with another variable which receives at least two different assignments (i.e. is plural, Farkas-2002).

(2) ucisul **câte** unui jurnalist

In (3), the incompatibility with bare plurals shows that this variable must also be bound by an operator; the compatibility with *câte*-indefinites indicates that the supine is not only a bare plural, but has an additional operator:

(3) Ion dă   **florile/fiecare floare/*flori**   **câte** unei fete.
      John gives flowers.the/every flower/flowers C   a.Dat girl.Dat

Bare habituals and the PO *tot* exhibit similar effects with singular indefinites and *câte*-indefinites ((4)-(5)). Following Ferreira's (2005) insight that bare habituals quantify over plural events and only an additional distributive operator (provided by e.g. a *when*-clause) allows the singular events to distribute over singular indefinites ((4)vs.(6)), IS 2010 explain the contrast between (1) and (2), given that *câte* introduces distributivity via its co-variation requirement.

(4) Ion (tot)   citeşte **o carte**.   (5)   Ion (tot) citeşte **câte o carte**.
      John (all-adverbial) reads   a book   'John keeps reading/reads a book now and then.'
      #habitual

(6) **Când călătoreşte**, Ion   citeşte **o carte**.
      when he.travels   John reads   a book
      √habitual

The nominal supine is thus analysed as involving two semantic components: a plural event operator **Pl** at $V°$ and an aspectual operator **Op** that binds the plural event variable at Aspect° (the placement under Aspect° is motivated by comparison with the adverbial clitic *tot*, Alboiu-2002). Unlike lexical verbs, which select either singular or plural events (Landman-1996, Kratzer-2005 etc), the supine V-**Pl** selects only plural events, thus giving rise to the peculiar interaction with singular indefinites.

3. The supine in verbal periphrases. We further look at the verbal supine in aspectual periphrases. These

contexts also verify tests for pluractionality:

(7) a.   Mafia politică s-a   pus pe / s-a lasat de ucis   jurnalişti/*un jurnalist.
            mafia political Rf-has grabbed of / has quit kill.Sup journalists/a journalist
            'The political mafia started killing journalists.'
    b.   Mafia politică se tine de ucis   jurnalişti/*un jurnalist.
            mafia political Rf keeps of kill.Sup journalists/a journalist

But the verbal supine appears to have a different behaviour. In verbal contexts, the licensing of *câte* appears to vary with the type of the main verb. In particular, verbs that suggest the beginning of an activity license "cate", and verbs that suggest the ending do not: This indicates that the former class of verbs contribute an aspectual operator which licenses "cate" and is missing in the latter class of verbs:

(8)   A inceput sa scrie cate o poezie.   vs.   A terminat de scris (*cate) o poezie.
        Has started subj. write C a poem   has finished of write.Sup C a poem
(9)   S-a oprit din/intrerupt din/a terminat de scris   (*cate) o carte. - only bounded event
        Se-has stoped/interrupted from / has finished of write.Sup (câte) a book
(10)   S-a pus pe ucis #(cate) un jurnalist/*jurnalistul.
        S-a lasat de ucis jurnalisti/*cate un jurnalist/*un jurnalist:

The same contrast can be observed in verbal periphrases (9, 10) that obligatorily require a habitual intepretation for their object, i.e. a plurality of events. (10) indicates that the verbal supine does not carry an operator that could license "cate" unlike the nominal supine.

We conclude that the verbal supine is like a bare plural nominal without an aspectual operator.

 - the nominal supine has an operator and can be interpreted as both a sum and a group; in fact, it can also appear with these periphrases (11a), although these verbs only take bare plural N objects, not definite ones (11b):

(11)   a. s-a pus pe/s-a lasat   de ucisul jurnalistilor
        Rf-has grabbed / Rf-has quit of kill.Sup journalists.Gen
        b. s-a pus pe/ lasat de tigari /   *câteva tigari
        Rf-has grabbed/quit of cigarettes/ *several cigarettes

Marginally, these periphrases seem to allow weak non-cardinal quantifiers. In (12b), cate is licensed by the nominal supine, since the matrix verb cannot do this (cf. 12c)

(12)   a. s-a pus pe de ucisul cate unui journalist 'he has grabbed of kill.Sup C-a journalist'
        b. s-a lasat de ucisul cate unui journalist 'he has stopped of kill.Sup C-a journalist'
        c. ??s-a lasat de castigat cate un premiu 'he has stopped of win.Sup C-a prize

Conclusion

The projection of the aspectual operator that binds the plural event variable brought by the supine is possible in the event nominalization, which is derived by the projection of D on top of an AspP; in this case, the supine can either denote a sum or a group and is interpreted as a plural definite. This does not mean that D triggers group formation, but that D-nominalization in the absence of n allow the nominal to denote both sums and groups of events. In verbal contexts, this role is played by inchoative and continuative main verbs that may combine with the verbal supine, in this case a bare plural of events. If the line of analysis proposed in this presentation proves to be correct, we find a three-way correlation between, the 'argument-structure' property, the outer Aspect property (already documented in recent literature), and the 'definiteness' property. This awaits confirmation from comparison with other cases of nominalizations projecting outer Asp crosslinguistically, but seems to be correct at least for the English gerund that also cumulates the three properties.

Selected references: **Cornilescu**. 2001. Romanian nominalizations: Case and aspectual structure. *Journal of Linguistics*, 37:467–501. **Farkas**. **2002**. Extreme non-specificity in Romanian. In Beyssade et al., (eds.), Romance Languages and Linguistic Theory 2000, John Benjamins: 127-151. **Ferreira, M.** 2005. Bare habituals and plural definite descriptions. In: E. Maier, C. Bary & J. Huitink (eds.), *Proceedings of SuB9*: www.ru.nl/ncs/sub9. **IS. 2008**. Two kinds of event plurals: Evidence from Romanian nominalizations. In Bonami & Cabredo Hofherr (eds.), Empirical issues in syntax and semantics 7:193–216. **IS 2010.** Layers of Pluractionality in the Romanian Supine, RALFe1, Paris. **Laca. 2006**. Indefinites, quantifiers and pluractionals: What scope effects tell us about event pluralities. In Tasmowski & Vogeleer (eds.), Non-definiteness and plurality, John Benjamins.