The inferences of accusative and genitive in acc/gen alternation in Bosnian-Croatian-Serbian

In many Slavic languages, both accusative (**acc**) and genitive (**gen**) case can be used for objects of transitive verbs (acc/gen alternation). Previously, it has been proposed that while **acc** is associated with the definite interpretation of the discourse referent (DR), **gen** conveys the indefinite interpretation (e.g., Kagan, 2010; Khrizman, 2014). Our novel data coming from authors' original fieldwork on Bosnian-Croation-Serbian (BCS) show that **gen/acc** in BCS relates to the specification of the amount of the DR: while **acc** conveys the interpretation that the amount of the DR is familiar, **gen** is used for unfamiliar amount, independent of the familiarity of the DR. Our data corroborate to an analysis of the inferences of **gen/acc** as scalar implicatures, contributing to the debate on the semantics of case alternation across languages.

Background: The **gen/acc** alternation is possible in BCS with the so-called intensional gen, gen of negation and partitive gen that we focus on in this paper. Moreover, the alternation is restricted to plural count nouns and mass nouns. In previous literature on other Slavic languages, **acc** was argued to convey the definite interpretation of the DR (Kagan, 2010; Khrizman, 2014). This observation was captured by assuming that while **acc** nouns are of type e and hence referential and/or specific, **gen** nouns are of type $\langle e, t\rangle$ and hence non-referential and unspecified (e.g. Borschev et al. 2008). By contrast, we show that **gen/acc** alternation in BCS is not governed by the definiteness of the DR, but rather by the familiarity of the amount of the DR, the observation that to the best of our knowledge was not made before.

Novel data from BCS: The choice of the case in **gen/acc** alternation in BCS is related neither to the uniqueness nor to the familiarity of the DR, the latter shown in (1).

(1) CONTEXT: Beginning of the conversation:
Kupio sam haljine/haljina.
1SG.BOUGHT AUX dresses$_{acc}$/dresses$_{gen}$
'I bought dresses.'

Instead, the data show that while **acc** conveys the interpretation that the amount of the DR was familiar to the speaker and the hearer, **gen** conveys the information that the amount was unfamiliar, as shown in (2)–(5). When the amount of the DR is familiar (same number of items were tried on and bought), the **acc** case is preferred, see (2). However, when five dresses were tried on but only two were bought, **gen** is preferred, see (3). Crucially, the (un)familiarity triggered by **gen/acc** relates to the amount of the DR, not to DR itself: while in (4) the amount of the DR—but not the DR—is familiar, **acc** is still preferred. By contrast, in (5) both the amount of DR as well as the DR itself are unfamiliar and **gen** is preferred, as summarized in the table below.

(2) CONTEXT: Maria and Boban went to Mango. They really liked **two dresses** that Maria tried on but they didn't buy them. On the following day Boban decided to make Maria a surprise so he went to Mango but unfortunately the two dresses she tried on were sold out so he decided to buy **two other dresses**, she didn't try on. When he came back home he told Maria:
Kupio sam haljine/#haljina.
1SG.bought AUX dresses$_{Acc}$/dresses$_{Gen}$
'I bought dresses.'

(3) CONTEXT: The same as before but: Maria tried **five dresses**, Boban bought only **two**.
Kupio sam #haljine/ haljina.
1SG.bought AUX dresses$_{Acc}$/ dresses$_{Gen}$
'I bought dresses.'

(4) CONTEXT: The same as before but: Maria tried **two dresses**, Boban bought **two blouses** instead.
Kupio sam bluze/#bluza.
1SG.bought AUX blouses$_{Acc}$/blouses$_{Gen}$
'I bought blouses.'

(5) CONTEXT: The same as before but: Maria tried **two dresses**, Boban bought **four blouses** instead.
Kupio sam #bluze/bluza.
1SG.bought AUX blouses$_{Acc}$/blouses$_{Gen}$
'I bought blouses.'

To sum up, while **acc** gives rise to the inference that the amount of the DR is familiar, **gen** triggers the interpretation that the amount is unfamiliar. Importantly, both inferences are cancelable, as shown in (6), and

Maria tried	Boban bought	Acc	Gen
2 dresses	2 diff. dresses	✓	×
5 dresses	2 dresses	×	✓
2 dresses	2 blouses	✓	×
2 dresses	4 blouses	×	✓

they do not arise in downward entailing environments, as in (7). That is, (7) either with **acc** or **gen** doesn't mean that Boban didn't buy the (un)familiar amount of dresses but rather that he didn't buy any dresses at all. This corroborates to the analysis of the inferences of **acc/gen** as implicatures.

(6) a. John je kupio haljine, ali ne znamo koliko.
'John bought dresses$_{acc}$ but we do not know how many.'
b. Boban je kupio haljina, zapravo kupio je one dvije haljine što smo vidjeli jučer.
'Boban bought dresses$_{gen}$, in fact he bought the two dresses we saw yesterday.'

(7) Boban nije kupio haljine$_{acc}$/haljina$_{Gen}$.
'Boban did not buy dresses.' $\rightsquigarrow$ *Boban didn't buy any dresses*

Analysis We propose that both **acc** and **gen** differ wrt the implicatures they trigger. **(i)** We assume a lexical entry for **gen** partitive as in (8a). Crucially it is underspecified wrt the amount of the DR. **(ii) Gen** competes with *toliko* ('so much/ many') which we propose is an anaphoric definite conveying the interpretation that the amount that is spoken about is familiar. It takes the NP and the pronominal index, analysed as a variable of type e. The assignment function maps the covert index to entities which matches the amount of the DR.

(8) a. $[\![\text{Gen}_{part}]\!] = \lambda P.\lambda x.\exists y[P(x) \wedge x \subseteq y]$ [based on Krifka 1992]
b. $[\![\text{dresses}_{gen}]\!]^g = \exists y.[\text{dresses}(x) \wedge \text{dresses} \subset y]$
$\approx$ there is y such that dresses are part of y

(9) a. $[\![\text{toliko}]\!]^g = \lambda P.\lambda y.\exists x[P(x) \wedge |x| = |y|]$
b. $[\![\text{toliko dresses}]\!]^g = \exists x[\text{dresses}(x) \wedge |\text{dresses(x)}| = |g(4)|]$
$\approx$ there is x such that x is dresses and their amount is the same as the amount of g(3)

(**iii**) Assuming the speaker is cooperative and as informative as she can be, by hearing *Boban bought dresses$_{Gen}$*, by Gricean reasoning the hearer would conclude that the speaker didn't use the stronger *Boban bought toliko dresses$_{gen}$* cause she was not in position to utter it and therefore is false. But then if it the sentence with *dresses$_{gen}$* is true and the sentence with *toliko dresses* is false the inference is that Boban bought an unfamiliar amount of dresses, as illustrated in (10):

(10) It is true that Boban bought (un)familiar amount of dresses and it is false that he bought the familiar amount of dresses
$\rightsquigarrow$ *Boban bought unfamiliar amount of dresses*

(iv) Acc, which is underspecified wrt the familiarity of the amount of DR, competes with the strengthened **gen** in (10), which conveys the meaning that the amount of DR is unfamiliar. Again, by Gricean reasoning, by hearing *Boban bought dresses$_{acc}$*, the hearer would conclude that the speaker didn't use the stronger *Boban bought dresses$_{gen}$* (with the genitive strengthened with its implicature in (10)) cause she was not in position to do it and thus must be false. Here again, if the sentence with **acc** is true and the sentence with the strengthened **gen** is false, the inference is that Boban bought the familiar amount of dresses, as illustrated in (11):

(11) It is true that Boban bought (un)familiar amount of dresses and it is false that he bought the unfamiliar amount of dresses
$\rightsquigarrow$ *Boban bought familiar amount of dresses.*

As the inferences of **acc** and **gen** are analyzed as implicatures, it is predicted that they are cancelable and do not arise in downward entailing contexts.

Summary and outlook The novel data from BCS show that while **acc** conveys the familiar amount interpretation, **gen** triggers the meaning that the amount of the DR is unfamiliar, pointing to the previously unattested variation in the **acc/gen** alternation in a cross-linguistic perspective. In the talk, we will also discuss the role of aspect in the **gen/acc** alternation and we will demonstrate how the analysis extends to mass nouns.

References: **Borschev, V. & Partee, B.** (2004). Genitives, Types and Sorts. In *Possessives and Beyond: Semantics and Syntax*, 29-43. **Borschev, V., Paducheva, E., Partee, B., Testelets, Y., Yanovich, I.** (2008), Russian Genitives, Non-referentiality, and the Property Type Hypothesis. In *FALS* 16, 48–67 **Filip, H.** (2001). The Semantics of Case in Russian Secondary Predication. *SALT XI*, 192-211. **Kagan, O.** (2010). Genitive Objects, Existence and Individuation. *Russ Linguist, 34*, 17-39. **Khrizman, K.** (2014). Genitive Case and Aspect in Russian. *FASL 22*, 418-438