

Non-conservative construals with proportional quantifiers: Theoretical and experimental considerations

Berit Gehrke (Humboldt-Universität zu Berlin)

Radek Šimík (Charles University in Prague)

Marcin Wągiel (Masaryk University in Brno & University of Wrocław)

Recently, it has been observed that certain constructions with proportional quantifiers give rise to conservative readings (C) (1-a), whereas others give rise to non-conservative readings (NC) (1-b) (Ahn & Sauerland 2015, 2017, Pasternak & Sauerland 2022; henceforth, S&Co), challenging the Conservativity Universal (Barwise & Cooper 1981, Keenan & Stavi 1986).

- (1) a. MIT hired 30% of the women last year. C
 b. MIT hired 30% women_F last year. NC
 (~ 30% of the people that MIT hired were women.)

S&Co's analysis of the NC reading crucially builds on the claim that NC quantifiers are focus-sensitive (as indicated with *F*): 30% in (1-b) forms a constituent with a contextually determined element providing a set of focus alternatives and the NC reading arises as a result of an obligatory movement of that constituent to take clausal scope. The focus-sensitive account is empirically supported by the truth-conditional difference we get in examples like (2), when focus is on the noun (wider focus construal) or just on the modifier (narrow scope construal).

- (2) a. 30% [westfälische Studierende]_F arbeiten hier.
 30%.NOM Westphalian.NOM students.NOM work here
 '30% of the workers here are Westphalian students.'
 b. 30% [westfälische]_F Studierende arbeiten hier.
 30%.NOM Westphalian.NOM students.NOM work here
 '30% of the student workers here are Westphalian.'

An alternative account is proposed in Gehrke & Wągiel (2023) (henceforth G&W). Based on German and Slavic data, G&W argue that what plays a crucial role in distinguishing between the two readings is word order, with focus playing merely a derivative role. For instance, the preverbal position of the quantifier in (3-a) gives rise to the C reading, whereas the postverbal position of the quantifier in (3-b) gives rise to the NC reading.

- (3) a. Je zajímavé, že padesát procent žen pracuje ve společnosti Spedex.
 is interesting that fifty.NOM percent women.GEN works in company.LOC Spedex
 'It is interesting that 50% of the women work at the company Spedex.' C (Czech)
 b. Je zajímavé, že ve společnosti Spedex pracuje padesát procent žen.
 is interesting that in company.LOC Spedex works fifty.NOM percent women.GEN
 'It is interesting that there are 50% women working at the company Spedex.' NC (Czech)

Under G&W's account, NC readings involve semantic incorporation and, for intransitives, additionally an existential-like construction; the percentage expression operates on the VP and therefore has to stay within the VP. This account is empirically supported by the fact that the nominals in these cases have to be bare, there is a restriction to HAVE-predicates (transitives) and predicates that can appear in existential-like constructions (intransitives), and furthermore, the NC reading is not possible with subjects in languages which do not allow postverbal subjects, such as English (as already observed by S&Co. but left unaccounted for), whereas a change to an existential-like structure renders the NC reading available again (4).

- (4) a. *30% women work at this company.
b. There are 30% women working at this company.

In this talk, we present the results of three experiments we conducted on Czech to test different predictions that the two accounts make, using auditory stimuli in a sentence-picture matching paradigm. The first experiment deals with the role of word order, for which G&W predict that clause-initial quantifiers should rule out NC readings. The second experiment employed modified NPs (e.g. *French students, students from France*) and manipulated focus (on the N or the modifier) to test whether focus on a subpart of the NP affect the domain of NC quantification, as predicted by S&Co. The third experiment tests whether the NC reading is available in broad focus settings, for which S&Co predict that it is not whereas G%W do not make this prediction. If you are interested in the results of these experiments, come to our talk.

Selected references AHN & SAUERLAND (2015) The grammar of relative measurement. *SALT 25* • AHN & SAUERLAND (2017) Measure constructions with relative measures. *The Linguistic Review* • Gehrke & Wągiel (2023) On word order and non-conservative percentage quantification in Slavic and German *Glossa* • PASTERNAK & SAUERLAND (2022) German measurement structures. *The Journal of Comparative Germanic Linguistics*