

### Topicalized PPs: Movement or External Merge?

**Synopsis:** We report the results of an online acceptability-judgement questionnaire testing the reconstruction properties of different types of Italian quantified PPs depending on whether these are clitic-resumed or not. We conclude that (i) whether the quantified PP is clitic-resumed or not has no statistically significant effect on whether this reconstructs or not for interpretation, contra Frascarelli (2004), and (ii) contra Cecchetto (2001), whether a fronted quantified expression may or not reconstruct for scope is dependent on the specific type of quantifier involved, not on whether the fronted expression is a DP or a PP.

**State-of-the-art:** The specific nature and derivation of fronted PPs is still a matter of discussion. Some authors maintain a fundamental dichotomy between clitic-resumed (CR) and non-clitic-resumed (non-CR) expressions. According to Frascarelli (2004) and Frascarelli & Hinterhölzl (2007), for instance, CR topics are base-generated whereas non-CR topics are internally merged. Others, like Cecchetto (1999, 2001), assume that while PPs are externally merged in the CP (and hence do not reconstruct for scope nor for binding), fronted DPs undergo movement (and thus reconstruct for both scope and binding); this is regardless of whether the fronted element is CRed or not. A third type of position is taken by Cruschina (2012), who suggests that fronted PPs and fronted DPs both undergo movement, regardless of whether CR is present or not. Cruschina also argues that the specific type of movement is dependent on the presence/absence of CR: whereas CRed fronting involves movement out of a complex constituent, stranding a coindexing clitic pronoun, fronting without CR entails the movement of a full constituent which leaves a trace behind.

**The experiment:** We ran an acceptability-judgment experiment to test the availability of inverse reading in Italian doubly-quantified sentences with dislocated PPs. Additionally, the experimental design tested the effects of the presence or absence of a resumptive clitic. Our specific goals were (i) to determine whether, overall, fronted PPs may reconstruct for scope, something which would suggest an underlying movement derivation rather than a base-generation one, (ii) to determine whether scope reconstruction is influenced by the presence or absence of a resumptive clitic, and (iii) to determine whether scope reconstruction is influenced by the specific type of QP which gets fronted to the CP. The experiment consisted of a forced-choice judgment task. Participants first read a short context used to set the scene (see 1a) followed by a doubly-quantified sentence (=the experimental sentence) and a continuation sentence. The quantified sentence was presented either *with* or *without* a resumptive clitic (1b – 1c). The continuation sentence (1d) was always coherent wrt. the experimental sentence *only* under an inverse reading interpretation of the latter. Participants were asked to evaluate the acceptability of the continuation sentence (marking the provided “YES” or “NO” boxes) given the experimental sentence (the doubly-quantified sentence) and the preceding context.

(1a) *Luigi is a lawyer from Milan. He is extremely organized, and as such, even though he has many clients, he doesn't need any help filing his documents.*

(1b) In un cassetto, Luigi **ci** ha riposto ogni documento.  
*In a drawer, Luigi (CL.LOC) has put every document.*

(1c) In un cassetto, Luigi  $\emptyset$  ha riposto ogni documento  
*In a drawer, Luigi  $\emptyset$  has put every document.*

(1d) *As a matter of fact, he placed the wills in the mahogany drawer, the purchase agreements in the ebony drawer, and the inheritance documents under his desk.*

The surface-scope interpretation of (1b-c) ( $= \exists < \forall$ ) entails there exists a single drawer in which Luigi has placed every document; this would render the experimental sentence incoherent with 1(d). On the other hand, an inverse-scope interpretation of (1b-c) ( $= \forall < \exists$ ) would result in a situation in which for every document there is a (different) drawer in which Luigi has stored his documents, making it coherent wrt to (1d). We tested 3 types of fronted quantifiers: two indefinites, *qualche N* (=some *N*) and *un N* (=a *N*), and a modified numeral, *almeno un N* (at least an *N*). The IP-internal quantifier was always the universal *ogni N* (each *N*), see (1b/c). We included both fronted PP adjuncts and fronted PP arguments.

**Results:** 50 native speakers of Italian took part in the experiment which was administered online through SurveyMonkey; 12 participants were excluded because they failed to complete the task. As can be seen from the table to the right, the QP *qualche* (*some*) generally elicited positive answers (i.e. subjects could access the inverse reading) in both conditions, with a marginal preference for accessing the inverse reading under the cliticless condition. On the other hand, the other indefinite *un* (*a*) strongly elicited “NO” answers in both conditions: in this case, subjects couldn’t access the inverse reading. As far as *almeno un* is concerned, subjects had a harder time accessing the inverse reading than with *qualche*, both in the CR and the CRless condition; here again, we see a marginal preference for accessing the inverse reading under the cliticless condition. A  $\chi^2$ -test was performed to determine whether the differences between CR and cliticless conditions were statistically significant. For all three quantifiers, they were not (difference between *qualche* CR and *qualche* cliticless:  $\chi^2=1.062$ ,  $p=0.3$ ; *un* CR vs *un* cliticless:  $\chi^2=1.13$ ,  $p=0.29$ ; *almeno un* CR vs *almeno un* cliticless:  $\chi^2=0.75$ ,  $p=0.39$ ). On the other hand, the type of QP did affect the possibility of accessing the inverse reading: both the difference between *qualche* CR vs *Un* CR ( $\chi^2=20.35$ ,  $p=0.0001$ ) and that between *Almeno un* CR vs. *Un* CR ( $\chi^2=16.77$ ,  $p=0.00042$ ) were statistically significant. The difference between *qualche* CR and *almeno un* CR however was not ( $\chi^2=0.1214$ ,  $p=0.73$ ).

QP	YES	NO
<i>Qualche</i> (CR)	42,6%	57,4%
<i>Qualche</i> (cliticless)	51,5%	48,5%
<i>Un</i> (CR)	8,8%	91,2%
<i>Un</i> (cliticless)	14,7%	83,5%
<i>Almeno un</i> (CR)	39,7%	60,3%
<i>Almeno un</i> (cliticless)	47,1%	52,9%

**Discussion:** The data presented in the previous section shows that the presence versus absence of the clitic has no statistically significant effect on whether a fronted PP may reconstruct or not for scope. We can also conclude that, whereas there is no strong preference towards reconstructing or not reconstructing *qualche* and *almeno*, there is a strong preference towards *not* reconstructing *un*. Given these results, we argue that clitic resumption truly *is* optional with PPs, at least when it comes to reconstruction for scope. In this sense, our data go against Frascarelli (2004): even non-clitic-resumed PPs may reconstruct for scope, something which suggests an underlying movement derivation rather than a base-generation one. Our data also go against Cecchetto (2001): in general, fronted PPs do have the option of reconstructing for scope, something which again suggests a movement rather than a base-generation analysis of these elements. The claim made by Cecchetto (2001) that only fronted DPs are the result of movement thus appears untenable. If fronted PPs are the result of internal merge, why was an inverse-scope interpretation of structures containing the fronted indefinite *un N* (*a N*) rated so low? Note that this is an entirely expected result given the semantics of this specific type of quantifier. As extensively showed by several authors (Fodor & Sag 1982, Reinhart 1997, Kratzer 1998, Szabolcsi 2010 i.a.), indefinite QPs independently tend to take wide scope over other quantifiers. Moreover, it is possible, and in fact arguably more natural, to interpret the indefinite “a” as specific rather than generic. Under a specific, referential interpretation, “a” would no longer be a scope-bearing element. If there is indeed a tendency to interpret “a” as specific rather than generic, this, together with the tendency of indefinites to take wide scope, would explain why the inverse scope interpretation is more difficult to access in structures where *un N* has been fronted.

**References:** Belletti, A. (2005). Extended doubling and the VP periphery. *Probus*, 17(1), 1-35. Cecchetto, C. (1999). A comparative analysis of left and right dislocation in Romance. *Studia Linguistica*, 53(1), 40-67. Cecchetto, C. (2001). Syntactic or semantic reconstruction? Evidence from pseudoclefts and clitic left dislocation. *Semantic interfaces*, 90-144. Cinque, G. (1990). *Types of  $\bar{A}$ -dependencies*. MIT press. Cruschina, S. (2012). *Discourse-related features and functional projections*. Oxford University Press. Frascarelli, M. (2004). Dislocation clitic resumption and minimality: a comparative analysis of left and right topic constructions. *Romance Languages and Linguistic Theory 2002*: 256, 99. Frascarelli, M., & Hinterhölzl, R. (2007). Types of topics in German and Italian. *On information structure, meaning and form*, 87-116. Reinhart, T. (1997). Quantifier scope: How labor is divided between QR and choice functions. *Linguistics and philosophy*, 20(4), 335-397. Szabolcsi, A. (2010). *Quantification*. Cambridge University Press.