## **Prosody-Governed Extraction Asymmetries in Italian**

Building on Reinhart (1995) and Cinque (1993,1999), I will present an as yet unstudied extraction pattern from Italian and argue that the factor governing it is prosodic in nature, and yet sensitive to the syntactic make-up of the constituents involved.

I will show that given two adjacent phrases 'A<sub>F</sub> B', with A<sub>F</sub> focused and B itself containing two adjacent items Y and Z, whether Z can be extracted on its own or only by pied-piping the entire phrase B depends on B's internal structure. For example, if Y is the specifier of B and independent from Z, then Z can extract on its own. But if Y is a lexical head that takes Z as its complement, then Z may only extract by pied-piping B. See for example (1) and (2) below. In (1), Y is the adverb *sempre* (always) and Z the PP *nei nostri inviti* (in our invitations); according to Cinque's 1999 assumptions on the position of lower adverbs, Y occurs as the specifier of an empty headed functional projection that also contains Z. In (2), instead, Y (the noun *arrivo*) is a lexical head that takes Z (the PP *di Marco*) as its complement. Movement of the entire phrase B containing Y and Z is possible with both structures – see the (a) sentences – but extraction of Z alone is only possible in (1) where Z is not the complement of Y, see the grammaticality contrast across the (b) sentences. (Main stress is shown in capitals.)

- a. Da allora Maria non spera [sempre [nei nostri inviti]]<sub>i</sub> mica PIÙ<sub>F</sub>t<sub>i</sub>.
  Since then Mary not hopes [always [in-the our invitations]] no longer 'Since then, Mary does no LONGER always hope for our invitations.'
  - b. Da allora Maria non spera [*nei nostri inviti*]<sub>i</sub> mica  $PI\dot{U}_F$  [*sempre*  $t_i$ ].
- (2) a. Ha filmato [*l'arrivo* [*di Marco*]]<sub>i</sub> la POLIZIA<sub>F</sub> t<sub>i</sub>. Has filmed [the arrival [of Mark]] the police 'The POLICE filmed Mark's arrival.'
  - b. \* Ha filmato [*di Marco*]<sub>i</sub> la POLIZIA<sub>F</sub> [*l'arrivo* t<sub>i</sub>].

This asymmetry, which will be supported by additional examples, requires an explanation. Yet, there is no obvious syntactic reason why Z may not extract under structure (2b), especially since the same structure does allow Z to wh-extract and focus-front, see (3) and (4).

(3)	[ <i>Di chi</i> ] <sub>i</sub> ha filmato [ <i>l'arrivo</i> t <sub>i</sub> ], la polizia Of whom has filmed the arrival, the police 'Whose arrival did the police film?'	Wh-extraction
(4)	[ <i>Di MARCO</i> ] <sub>F,i</sub> , la polizia ha filmato [ <i>l'arrivo</i> t <sub>i</sub> ]! Of Mark, the police filmed the arrival 'The police filmed the arrival of MARK!'	Focus fronting

There is, however, an important prosodic difference between the two structures. As argued in Truckenbrodt (1995, 1999), when Y is a specifier not containing Z, Y and Z project two phonological phrases (or '*pps*'), whereas when Y is a head taking Z as complement, Y and Z share the same *pp*. See (5) and (6), where *pps* are identified by round-brackets, *ip* is the intonational phrase containing them, and 'x' represents the local stress of each prosodic phrase.

(5) Y is the specifier of a null head 'ø':	$ \begin{array}{ccc} (x & \_ \\ (x) & (x) \\ A_F & [Y_{spec} \emptyset \end{array} $	× /11
(6) Y is a head taking Z as complement:	$ \begin{array}{c} ( \ x \\ ( \ x \ ) \ \ ( \\ A_F \ \ [ \ Y_{head} \end{array} $	· 1 1

I will claim that Z can extract under prosodic structure (5) but not (6) because only under (5) Z's extraction improves the prosodic alignment of main stress, which here always falls on the focused phrase  $A_F$ . Italian main stress must occur as close as possible to the right edge of the *ip* encompassing the sentence. In (5), main stress on  $A_F$  is two *pp*'s away from the right edge of *ip*. When Z moves above  $A_F$ , the *pp* that Z projected in its original position is removed, thus improving the alignment between stress and the *ip*'s right edge. Under structure (6), instead, moving Z has no positive effect on stress-alignment because the head Y must still project a *pp* even when Z is absent, thus still leaving the stress on  $A_F$  one *pp* away from the *ip*'s right edge. Since stress alignment is not improved, the cost of moving Z is unjustified and the resulting sentence ungrammatical. Finally, note that extracting the entire B-phrase that contains Y and Z is always possible, because it removes all *pp*s intervening between main stress and the right edge of *ip*, thus improving stress-alignment independently from B's internal structure.

In so far this analysis is correct, it further supports the relevance of prosody for an appropriate understanding of syntactic phenomena, as argued, amongst others, in Zubizarrreta (1998), Szendröi (2001), Büring (2001), Samek-Lodovici (2005), and Dehé (2005).

## **Selected references**

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