

## (Non)-pied-piping adjectival wh-comparatives in Spanish

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**1. Issue and goals.** The differential in adjectival wh-comparatives can take three different lexical forms in current Spanish: *cuánto* ‘how much’, *qué tanto* ‘what so’ and *cómo de* ‘how of’, their use being subject to dialectal and/or idiolectal variation: *qué tanto* is a form of American Spanish, and, at least in Peninsular Spanish, speakers vary in using *cuánto* or *cómo de* as their preferred (or only) option (on the origin and distribution of the American Spanish adjectival wh-form *qué tan(to)*, see Octavio de Toledo and Sánchez López 2009). All these wh-forms can move to the CP-domain on their own, giving rise to a non-pied-piping structure (1), and they can also pied-pipe the rest of the adjectival comparative construction (2):

- (1) a. *¿Cuánto/Qué tanto es Ana más alta que María?*  
how much/what so much is Ann more tall than Mary  
b. *¿Cómo es Ana de más alta que María?*  
how is Ann of more tall than Mary
- (2) a. *¿Cuánto/Qué tanto más alta que María es Ana?*  
how much/what so much more tall than Mary is Ann  
b. *¿Cómo de más alta que María es Ana?*  
how of more tall than Mary is Ann

The pattern in (1)-(2), which, to our knowledge, has not been addressed so far, also obtains in other Romance languages, like Italian or Catalan, as well as in cases of focus movement of the differential in the adjectival comparative construction. In this talk, we will present an analysis of (non)-pied-piping adjectival wh-comparatives in Spanish, building on the idea in Heck (2008, 2009) that optional pied-piping does not exist.

**2. Assumptions.** Our proposal will be based on two main assumptions. We will first assume, following Heck (2008, 2009), that pied-piping cannot be optional. Heck claims that pied-piping is a last resort operation, so that pied-piping is only possible if forced. This is explicitly phrased in what he calls the Repair Generalization in (3) (Heck 2008: 117; Heck 2009: 92):

- (3) Pied-piping of  $\beta$  by  $\alpha$  is possible only if movement of  $\alpha$  from  $\beta$  is blocked.

Under this condition, pied-piping and stranding cannot coexist, since “only if stranding is not available can pied piping become an option” (Heck 2009: 95). In Heck’s view, cases of optional pied-piping are thus always apparent, and can have a different source in each case.

In our proposal, we will also adopt the analysis of adjectival comparatives in Svenonius and Kennedy (2006), by which the differential is merged in the specifier position of a Degree Phrase in the extended projection of the adjective:

- (4) [<sub>DegP</sub> [<sub>QP</sub> un metro/mucho] [<sub>Deg'</sub> [<sub>Deg</sub> Ø] [<sub>QP</sub> más alta que María]]]


**3. The proposal.** Within this framework, we will propose that wh-clauses like the ones in (1) and (2) have their origin in two different structures. We will argue, in particular, that the non-pied-piping structure in Spanish wh-clauses with adjectival comparatives in (1) directly obtains from the structure in (4). In this structure, the differential wh-expression is merged as a maximal projection in [<sub>Spec</sub>, <sub>DegP</sub>], and raises alone to the CP-domain, stranding all the other elements in the comparative construction:

- (5) [<sub>DegP</sub> [<sub>QP</sub> cuánto] [<sub>Deg'</sub> [<sub>Deg</sub> Ø] [<sub>QP</sub> más alta que María]]]

As for the pied-piping structure in (2), we will claim that it results from the label-change mechanism Hornstein and Uriagereka (2002) call “reprojection”, whereby the head of a YP in [<sub>Spec</sub>, <sub>XP</sub>] is turned into the head of the whole phrase, and the XP is now its specifier:

- (6) [<sub>XP</sub> [<sub>YP</sub>] [<sub>X'</sub> [<sub>X</sub>]]] → [<sub>YP</sub> [<sub>Y'</sub> [<sub>Y</sub>] [<sub>XP</sub>]]]

As shown in (7), after reprojection, the head of the QP in [Spec, DegP] in (5) heads the construction, and the DegP becomes its specifier. In the reprojected structure in (7), the wh-expression has the categorical status of an intermediate (X') projection and, given the condition that intermediate projections are not subject to movement operations (Chomsky 1995: 396), it obligatorily pied-pipes the DegP in [Spec, QP]:

(7)  $[_{QP} [_{Q'} \text{cuánto}] [_{\text{DegP}} \text{más alta que María}]]$   


Hornstein and Uriagereka (2002) point out that for reprojection to take place, it must have an interpretive effect. To complete our analysis, we will argue, at this respect, that reprojection in adjectival wh-comparatives in Spanish has the interpretive effect of making the whole comparative phrase become the sentential focus: in the non-pied-piping structure in (1), only the differential is asked for (i.e. it is the sentential focus), and the fact that Ann is taller than Mary is presupposed, whereas, in the pied-piping structure in (2), the whole comparative phrase is focused, and it is not presupposed that Ann is taller than Mary. That this is the case is illustrated by the contrast in examples like the ones in (8) and (9):

(8) A: *¿Cuánto más alta que María es Ana?*  
 how much more tall than Mary is Ann  
 B: *Nada. Son exactamente iguales.*  
 nothing are.3PL exactly the same

(9) A: *¿Cuánto es Ana más alta que María?*  
 how much is Ann more tall than Mary  
 B: *#Nada. Son exactamente iguales.*  
 nothing are.3PL exactly the same

The answer (B) to the questions in (8) and (9), stating that there is no difference in height between the two individuals at hand, is appropriate in (8), and odd in (9), because only in the first case it is not presupposed that Ann is taller than Mary.

**4. Extensions and implications.** In our talk, we will further show that a proposal on pied-piping and non-pied-piping adjectival wh-comparatives like the one above also applies to (non)-pied-piping structures in nominal and adverbial wh-comparatives in Spanish:

(10) a. *¿Cuántos/Qué tantos libros leyó Pedro más que Juan?*  
 how many/what so many books read Peter more than John  
 b. *¿Cuántos/Qué tantos libros más que Juan leyó Pedro?*  
 how many/what so many books more than John read Peter

(11) a. *¿Cuánto/Qué tanto corre más este coche?*  
 how much/what so much runs more this car  
 b. *¿Cuánto/Qué tanto más corre este coche?*  
 how much/what so much more runs this car

Our analysis of (non)-discontinuous wh-comparatives in Spanish thus supports Heck (2008, 2009)'s idea that alleged cases of optional pied-piping are always apparent.

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