## A copy-based approach to *either* in *either...or*... sentences

Danfeng Wu (MIT)

**1. Introduction.** I propose a syntax for the paired disjunction coordinator *either...or* that suggests a broader generalization about the syntax of focus-sensitive operators. In particular, I will show that *either* appears in two positions with distinct syntactic properties, and that the higher of these positions is created by movement. *Either*'s base position is embedded in *or*P and c-commands focus. It then moves to Spec, *or*P in response to a probe on the disjunction head. This proposal is reminiscent of Cable's (2007) analysis of questions, where a Q particle is base-generated local to and c-commands the focused *wh*-phrase before moving to Spec, CP. It likewise recalls Hirsch's (2017) proposal that *only* has two occurrences as well, and the observation that the low pre-DP *only* loses its wide scope when embedded in an island ('She is required to learn the language that only John speaks.' vs. 'She is required to learn only Spanish'), once again suggesting movement. Given the striking similarity among *either*, Q and *only*, I suggest this syntactic structure may be general for all focus-sensitive operators: that all focus-sensitive operators are base-generated local to the focus before moving up for syntactic and semantic reasons.

**Proposal.** Either originates inside orP, c-commanding the first contrastive focus. Then it is internally merged as the sister of orP. Either copy of *either* may be pronounced. At the same time, gapping may occur in the second disjunct, giving rise to the illusion that *either* is higher than the left periphery of orP.

(1) Either<sub>i</sub> [ $_{orP}$  [ $_{A}$  ...  $t_{i}$  ...] or [ $_{B}$  ...]]

**2. Why not only ellipsis?** With data from verb particle constructions, Schwarz (1999) and Han and Romero (2004) argue that *either* is always adjacent to *or*P. When it appears higher, ellipsis has taken place in the second disjunct. I call it **high** *either*, and their approach the **ellipsis-only approach**.

(2) John will **either** eat rice or <del>eat</del> beans.

(3) Either John will eat rice or he will eat beans.

*Problem 1: scope.* This analysis fails to account for the following facts observed by Larson (1985): (4) has all the three readings below it. But among them (5) only has reading 2, and (6) only reading 3.

(4) Sherlock pretended to be looking for either a burglar or a thief. (all three readings) Reading 1: Sherlock pretended to be looking for someone who is either a burglar or a thief.
Reading 2: Sherlock pretended to be doing one of two things: either look for a burglar or look for a thief.
Reading 3: Either one of two things happened: Sherlock pretended to be looking for a burglar, or he pretended to be looking for a thief.

(5) Sherlock pretended to <b>either</b> be looking for a burglar or a thief.	(reading 2 only)
(6) Sherlock <b>either</b> pretended to be looking for a burglar or a thief.	(reading 3 only)

According to the ellipsis-only approach, there is gapping in the second disjunct in (5) and (6). Once gapping is undone, (5) and (6) correctly give rise to the readings they correspond to, namely (7) and (8).

(7) Sherlock pretended to **either** be looking for a burglar or be looking for a thief.

(8) Sherlock either pretended to be looking for a burglar or pretended to be looking for a thief.

But this approach can't explain why (4) has readings 2 and 3. If gapping only happens when *either* appears higher than *or*P's edge, there should be no ellipsis in (4) because *either* is adjacent to *or*P there.

**Problem 2: low either.** Not only can *either* appear higher than *or*P, but it can also appear low, embedded in the disjunction, as Larson (1985) and den Dikken (2006) have observed. I call this **low** *either*. In the following example *either* can appear in one of the bracketed positions:

(9) Sherlock <**either**> pretended to <**either**> be looking for <**either**> a burglar or he pretended to be looking for a thief.

The ellipsis-only approach cannot account for low either because there is simply nothing to elide here.

Furthermore, low *either*'s occurrence is restricted. Disjunction introduces at least a pair of elements that contrast with each other (underlined). Low *either* crucially must c-command the first contrasted element.

(10) Sherlock <either> <u>found <\*either > the <\*either > burglar <\*either> or <\*either> he <u>got fired</u>.</u>

Following Hendriks' (2001, 2003) view that these contrasted elements are focused, this suggests that low *either* patterns like a focus-sensitive operator in having to c-command focus.

**3.** Solution. From the data on low *either*, I conclude that *either* can occur in two different positions, either embedded in orP(9), or adjacent to it (5)-(6). At the same time, gapping may take place in the second disjunct, creating the illusion that *either* seems higher than it actually is. *Either*'s base position has to c-command focus, whereas its high position marks the edge of orP.

*Copies in a movement chain.* The following facts suggest that *either*'s two positions are in fact created by movement: *either* cannot be separated from the disjunction phrase by negation or a complex NP boundary, as den Dikken (2006) has noted. Specifically, high *either* may not occur above negation or a complex NP boundary (11)-(12), whereas low *either* may not occur below them (13)-(14).

(11) \*Sherlock either didn't look for a burglar or a thief.

(12) \*Sherlock revised either his decision to cook rice or beans.

(13) \*Sherlock didn't either look for a burglar or he didn't look for a thief.

(14) \*Sherlock revised his decision to either cook rice or he revised his decision to cook beans.

Assuming *either* is not nominal, if it moves, negation and complex NP would be islands to its movement, as Larson (1985) noted. This suggests it has moved from the position of low *either* to the position of high *either*, which is why high *either* may not occur above islands, and low *either* may not occur below them.

Then high and low *eithers* are copies of the same element, and either copy may be pronounced. In other words, when low *either* surfaces, it undergoes covert movement.

*Low either and multiple scopes.* The reason why (4) has three readings is that its *either* can be parsed as a low copy embedded in *or*P. If *either* in (4) is an instance of low *either*, just by hearing it we do not know where it covertly moves to, i.e. where the high copy is. If the high copy is between *pretended* and *looking for* (15), it will give rise to reading 2. If it is above *pretended* (16), it will give rise to reading 3.

(15) Sherlock pretended to  $[_{orP}$  be looking for **either** a burglar or be looking for a thief].

(16) Sherlock [orP pretended to be looking for either a burglar or pretended to be looking for a thief].

**4. One more issue.** So far nothing prevents *either* in (5) from being a low copy, however. It could be embedded in *or*P followed by gapping in the second disjunct. This would incorrectly lead to reading 3:

(17) Sherlock pretended to **either** be looking for a burglar or he pretended to be looking for a thief.

I argue (17) is not a licit structure for gapping. I adopt Coppock (2001)'s ellipsis analysis, though other approaches to gapping such as Johnson's (2009) ATB movement account are compatible too.

First, take a legal gapping sentence (7) as an example. According to Coppock, in gapping, the overt phrase (*a thief*) survives gapping by moving out of the ellipsis site E before E is elided. In order to license ellipsis, there has to be an antecedent phrase A that is parallel to E. So the corresponding DP (*a burgler*) moves out of the antecedent phrase A as well, and A and E are parallel:

(18) Sherlock pretended to either [A be looking for  $t_i$ ] [a burglar]<sub>i</sub> or [E be looking for  $t_j$ ] [a thief]<sub>j</sub>.

Consider the illegal sentence (17). After *a burglar* and *a thief* move out, E and A are not parallel because A contains *either* and E doesn't (following a syntactic notion of parallelism), so ellipsis is not licensed.

(19) [A Sherlock pretended to either be looking for  $t_i$ ] [a burglar]<sub>i</sub> or [E he pretended to be looking for  $t_j$ ] [a thief]<sub>j</sub>.

This does not mean that all low *either* sentences are incompatible with gapping though. Consider the low *either* sentence in (4) that does allow gapping and gives rise to reading 3. In the following structure, low *either* can "piggy-back" on the DP's movement and escape the antecedent A. Now A and E are parallel.

(20) [A Sherlock pretended to be looking for  $t_i$ ] [either a burglar]<sub>i</sub> or [E he pretended to be looking for  $t_j$ ] [a thief]<sub>j</sub>.