

Qu-morpheme Agreement and Wh-question Interpretations

Jason Ginsburg
University of Aizu

The following multiple wh-questions allow a pair-list response.

- (1) Who read what? (Stroik 2009:66)
- (2) What did Pat give to whom? (Stroik 2009:66)
- (3) Who expects whom to win? (Stroik 2009:66)
- (4) Who wants Pat to read what? (Stroik 2009:74)
- (5) Who seems to whom to be smart?
- (6) Which book was written by which author?

For example, it is possible to respond to (1) with the following:

- (7) John read *Moby Dick*, Mary read *Crime and Punishment*,

However, the following multiple wh-questions, at least in certain dialects, allow only single-pair answers.

- (8) What did who see? (Stroik 2009:85)
- (9) Who believes that who left? (Stroik 2009:74)
- (10) Who believes that Chris read what? (Stroik 2009:74)

The single-pair response to (8) in (11a) is fine, but the pair-list response in (11b) is ill-formed.

- (11) (a) John saw a movie.
(b) *John saw a movie, Mary saw a play, and Fred saw a music show.

I demonstrate that the availability of a pair-list reading depends on whether or not a Qu-morpheme 'Qu' is able to form an Agree relation with two wh-phrases.

I propose that in (1-6) there is a Qu that forms an Agree relation with both wh-phrases, thereby making a pair-list interpretation possible, and in (8-10), Qu only Agrees with one wh-phrase, thereby making only a single-pair response possible. I follow Cable's (2010) view that in languages such as English, a wh-phrase is base generated within a QuP as the complement of Qu, and that Qu must establish a feature checking relation with C. Qu moves to C and brings its associated wh-phrase with it, thus resulting in wh-movement. I propose that in a multiple wh-question in English, there can only be one Qu which is base generated together with one of the wh-phrases, which is the wh-phrase that undergoes wh-movement. In addition, I propose that in some cases Qu Agrees with a single wh-phrase, in which case only a single-pair answer is permitted, and in some cases Qu Agrees with two wh-phrases, thereby permitting a pair-list response.

The base structure of (1-4) is shown in (12). The higher wh-phrase wh_1 is base generated as the complement of Qu, and Qu initially Agrees with wh_1 . The features of Qu percolate up to the QuP and probe for and Agree with the lower wh-phrase wh_2 . Agree is signified by the bracketed subscripts referring to the relevant wh-phrase.

(12) [_{v*P} [_{QuP} Qu_[F:1,2] wh₁] ... wh₂...]

In (5-6), the lower wh-phrase wh₁ is base generated as the complement of Qu and Qu agrees with it. This QuP moves to subject position, where Qu probes for and Agrees with wh₂.

(13) [_{TP} [_{QuP} Qu_[F:1,2] wh₁]... wh₂...~~[_{QuP} Qu_[F:1] wh₁]]~~

This Agreement of Qu with multiple wh-phrases in (12-13) gives both wh-phrases scope and enables a pair-list interpretation once the QuP finally moves to [Spec, CP], where it is licensed.

The lack of a pair-list interpretation for (8) is also accounted for. As shown in (14), the lower wh-phrase *what* is base generated as the complement of Qu. The QuP undergoes wh-movement to [Spec, CP] over the higher wh-phrase *who*. When it arrives in [Spec, CP], Qu undergoes a feature checking relation with C and becomes inactivated, a form of criterial freezing (Rizzi 2006). Since Qu becomes inactivated it cannot probe for and Agree with *who*. Thus, a pair-list interpretation is not allowed.

(14) [_{CP} [_{QuP} Qu_[F:1,2] what₁]... who₂...~~[_{QuP} Qu_[F:1] what₁]]~~

It may be the case that *who* moves through the v*P edge on its way to CP, in accord with Phase Theory (Chomsky 1999), but from this non-argument edge position it is unable to probe.

The lack of a pair-list interpretation in (9-10) also results from the inability of Qu to Agree with a second wh-phrase, as shown in (15). The higher wh-phrase wh₁ is base generated within a QuP, and Qu Agrees with wh₁. Qu continues to probe, but probing is blocked by the C of the embedded clause, thus making it impossible for Qu to Agree with wh₂. This blocking effect is attributed to the features of Qu and the features of C being of the same type, since Qu requires licensing by C.

(15) [_{v*P} [_{QuP} Qu_[F:1] wh₁]... [_{CP} [_Cthat] wh₂...]]

I demonstrate the details of how this Qu-agreement analysis accounts for the (non)availability of pair-list interpretations in a variety of multiple wh-questions.

References: [1] Chomsky, Noam. 1999. *Derivation by phase*. MITWPL 18. [2] Cable, Seth. 2010. Against the existence of pied-piping: Evidence from Tlingit. *Linguistic Inquiry* 41:563-594. [3] Rizzi, Luigi. 2006. On the form of chains: Criterial positions and ECP effects. In Lisa Cheng and Norbert Corver (eds.), *Wh-Movement: Moving on*. MIT Press, 97-134. [4] Stroik, Thomas S. 2009. *Locality in Minimalist syntax*. MIT Press.