Focusing in on Wh-Words, Focus, and Focus Movement

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1. The Prettiest Pictures are Perennially Punctured with Problems

(1) Main Goal of This Talk:

To poke some holes in a highly attractive and still rather popular picture regarding the relationship between wh-words, focus, and focus movement / 'focusing constructions'

(2) Wh-Words, Focus, and Focus Movement

a. Part 1: (Beck 2006, Cable 2010, inter multa alia)
When functioning as interrogative operators in wh-questions, wh-words are obligatorily 'focused'.

(i) [What]_F did Dave buy? Focus/Rheme/Comment Presupposition/Theme/Topic

b. Part 2: (Croft 1990, inter multa alia)

This necessary focus accounts (with auxiliary assumptions) for why – across languages – it's so often the case that wh-words in wh-questions may/must:

- (i) Undergo 'focus movement' to left peripheral 'focus positions'
 - 1. Hungarian Wh-Question:

Kit mutattot be Marinak? who.ACC introduced PRT Mary.DAT Who did he introduce to Mary.

2. Hungarian Focus Movement:

 Pétert
 mutatta
 be
 Marinak.

 Peter.ACC
 introduced
 PRT
 Mary.DAT

 It was Peter that he introduced to Mary.

- (ii) Appear in 'focusing constructions,' such as clefts
 - 1. <u>Dholuo Wh-Question</u> **Ng'a** ma Achieng' oneno? **who** C Achieng' saw *Who did Achieng see?*
 - 2. <u>Dholuo Cleft:</u> **Pamba** e ma Achieng' oneno. **Pamba** be C Achieng' saw It was Pamba that Achieng saw.

(3) Frequently Made Claim Regarding Languages Like Those in (2b)

"Yes, wh-words undergo movement in wh-questions, but it's *focus* movement. This language doesn't actually have (English-style) *wh*-movement..."

(4) Upshot of My Empirical Arguments

- There are languages (like the ones in (2b)) where (real, English-style) wh-movement has many surface morphosyntactic similarities with focus-movement / clefts...
- But, we can show that in these languages, the fronting of wh-words in wh-questions is not (synchronically) a sub-case of the focus-movement / cleft construction...
- Therefore, we should be very careful when claiming that displacement of whwords in wh-questions isn't wh-movement (and is simply for reasons of 'focus')

(5) Important Note:

My criticisms of the picture in (2) do **not** generalize to *all* theories that view whmovement as prosodically driven (*e.g.* Richards 2010, 2016).

(6) Outline of the Talk

- a. First, I present challenges for the view that wh-words in wh-questions are obligatorily 'focused'
- Secondly, I present challenges for the view that such (alleged) focus is what's responsible for the displacement of wh-words in wh-questions

2. Wh-Words, Focus, and F-Marking

Note:

When I say 'wh-word', I will mean only those wh-words functioning as operators in wh-questions (*i.e.*, not ones functioning as indefinites, nor as operators in correlatives, *etc.*)

2.1 On the Meaning of the Term 'Focus'

- The term 'focus' is used differently by different authors and different research traditions...
- Consequently, we have to ask how the term 'focus' is to be understood in (2a,b)

(7) First Option: 'Focus' = New Information / Non-Presupposed Content

This is the sense of 'focus' assumed in much of the typological / descriptive / functionalist literature...

- It's long been observed that a wh-question presupposes that there is a true answer
- Consequently, in a wh-question, all the material other than the wh-word is presupposed / old information / discourse given
- Thus, it's claimed that in a wh-question, the wh-word is the 'focus / rheme / comment' while the rest of the question is the 'presupposition / theme / topic'

a [What]_F did Dave buy? Focus/Rheme/Comment Presupposition/Theme/Topic

(8) Problem for Using this Sense of 'Focus' in (2)

While wh-words may well be 'focused' in the sense of (7), this sense of 'focus' is not generally what constructions like those in (2b) are sensitive to.

- a. New Information Need Not be Preverbal in Hungarian (Horvath 2007)
 - (i) Ouestion: Where can I find out about the train schedule?

Answer: Megtudhatod (például) [az interneten]
you.can.find.out for.example the internet.on
You can find out about it, for example, on the internet.

- Some New Information Cannot be Clefted in Dholuo
 - (i) Ouestion: Who broke a dish?

Answer:

- Pamba onego san, to Ochieng' mbende.
 Pamba broke dish and Ochieng too.
 Pamba broke a dish, and Ochieng too.
- * Pamba e ma onego san, to Ochieng' mbende.
 Pamba be C broke dish and Ochieng too
 (cf. *It's Pamba who broke a dish, and Ochieng too)

Therefore, the fact that wh-words are part of the 'rheme / comment' of a sentence is *not* sufficient to explain their appearance in most (all?) focus-movement / focusing constructions.

(9) Another Option: 'Focus' = F-Marked

Following *e.g.* Beck (2006), some authors have proposed that wh-words obligatorily bear 'F-marking', an abstract syntactic feature that has phonological and semantic effects...

a. <u>Phonological Effect:</u> F-marked phrases are associated with pitch-accents

$$\begin{array}{ccc} & X \\ X & X \\ \text{Mary only gave } \textbf{[Bill]}_{\textbf{F}} \text{ a book} \end{array}$$

b. Semantic Effect:

F-marked phrases have a special (focus-)semantic value, one that allows them to semantically 'associate' with focus sensitive operators (e.g. 'only', 'even')

$$[[\ Mary\ \underline{only}\ gave\ \textbf{[Bill]}_F\ a\ book\]]\ = T \qquad \textit{iff} \qquad (roughly\ speaking)$$

Mary gave **Bill** a book, and $\forall x$, if $x \neq Bill$, then

it's false that Mary gave x a book.

According to this proposal, their obligatory F-marking allows wh-words to semantically 'associate' with a focus-sensitive interrogative operator.

c. The Proposed Syntax/Semantics of Wh-Questions:

$$\left[\left[\begin{array}{c} \underline{Q} \left[\left[\mathbf{what}\right]_{\mathbf{F}} \text{ did Dave buy }\right]\end{array}\right]\right] = \left\{p : \exists x . p = \left[\lambda w : \text{Dave bought } x \text{ in } w\right]\right\}$$

As we'll see, there remain problems applying this sense of the term 'focus' to the claims in (2b). But, before we get to those, we'll explore a few other problems for the claim in (9)...

2.2 The Problem of Pitch Accents in Embedded Questions

(10) Wh-Words in Matrix Questions Do Seem to Bear Pitch Accents

(11) Problem: Wh-Words in Embedded Questions are Typically Unstressed

X X

a. I wonder what Mary bought

X

X

Bill asked when Dave left for New York

(12) Problematic Implications of the View in (9)

a. Possibility 1:

Wh-words in embedded questions are *not* F-marked, and so the compositional semantics of embedded wh-questions is radically different from matrix ones.

Possibility 2:

Wh-words in embedded questions *are* F-marked, but for some reason their F-marking does not get associated with a pitch-accent.

2.3 The Problem of Wh-Words Associating with Overt Focus-Sensitive Operators

(13) Focusing Embedded Wh-Words

- Although wh-words in embedded questions need not bear a pitch accent (11), they can be associated with pitch accents...
- ... and when they do, they seem to be able to associate with focus-sensitive operators in the matrix clause (Kratzer p.c. 2007, Slade 2010, Li & Law 2016)
- a. Dave only asked **WHEN** John sang (not *where* he sang)
- b. Dave even asked **WHO** John brought (not just *what* he brought)

(14) The Problem

- Under existing theories of focus-association, an F-marked phrase cannot associate with two operators simultaneously...
- Therefore, the picture in (9c) would preclude a wh-word from semantically associating with a second focus-sensitive operator in the main clause...
- Again, to preserve the view in (9), we would have to assume that embedded whquestions have a very different compositional semantics from matrix ones

3. Focus Movement, Clefts, and F-Marking

(15) Key Ouestion: F-Marking and Focus Constructions

- Even if we maintain the view in (9) that wh-words in wh-questions are obligatorily F-marked...
- The view in (2) would imply that this F-marking is what's responsible for the displacement of wh-words in languages like Dholuo and Hungarian...
- But is F-marking (alone) what licenses the movement / constructions in (2b)?

(16) **Answer Defended Here:** NO! Focus-movement (clefting) in Hungarian (Dholuo) is not required (allowed) for *all* F-marked phrases.

The 'focusing constructions' in question carry an *exhaustivity entailment* that goes beyond a phrase's simply being F-marked.

(17) Subsequent Question:

Do wh-questions with displacement of the wh-word in these languages exhibit the exhaustivity entailment of the independent 'focusing construction'?

18) Answer Defended Here: Again, NO!

Despite their morphosyntactically *seeming* to contain an instance of focus movement / clefting, wh-questions in these language show no *semantic* trace of those constructions...

19) Major Conclusions

Absent some explanation for why the exhaustivity entailment of the 'focusing constructions' should disappear in questions, we must conclude that:

- a. Despite their morpho-syntactic similarities, wh-questions in these languages are *not* (synchronically) formed by means of focus movement / clefting
- o. The displacement of wh-words in wh-questions in these languages is not 'merely' an instance of these independent focusing constructions...
 - Therefore, the displacement is not simply for reasons of 'focus'...
 - Rather, it's a special operation that specifically targets wh-words...
 - Thus, it is true (English-style) wh-movement...

3.1 The Case of Hungarian

Note: The main empirical and analytic claims here are taken from Horvath (2007).

My only original contribution here is the argument concerning 'mention-some' questions.

(20) Obligatory Wh-Fronting in Hungarian Wh-Questions

- a. Hol vehetek újságot itt a környélken? where I.can.buy newspaper.ACC here the vicinity.on Where can I buy a newspaper around here?
- b. * Vehetek hol újságot itt a környélken?
 I.can.buy where newspaper.ACC here the vicinity.on

(21) Mere F-Marking Does Not Trigger Focus-Movement in Hungarian

Mari elkésett még [az esküvöjeröl]_F is.
Mary she.was.late yet the her.wedding.from also

Mary was even late to her own wedding. (Horvath 2007)

(22) Horvath 2007: Focus-Movement in Hungarian has an Exhaustivity Entailment

 Pétert
 mutatta
 be
 Marinak.

 Peter.ACC
 introduced
 PRT
 Mary.DAT

 It was Peter that he introduced to Mary.

 (Entails that he introduced nobody else to Mary)

(23) Key Question:

Can we test whether the fronting of a wh-word in a wh-question brings this same kind of exhaustivity entailment to the meaning of the wh-question?

(24) Background: Direct (Semantic) Answer to a Wh-Question

A direct (semantic) answer to a wh-question is (roughly speaking) a proposition formed from taking the question and replacing the wh-word with a referring expression of the same category.

- a. (i) Question: Who did Dave bring?
 - (ii) Direct (Semantic) Answers: Dave brought Bill, Dave brought Tom, ...

(25) Background: Exhaustive Answer to a Wh-Question

An exhaustive answer to a wh-question is (roughly speaking) a direct (semantic) answer that is true and also entails all the other true direct semantic answers.

- a. (i) Question: Who is a semanticist at UMass?
 - (ii) Exhaustive Answer: Seth, Angelika, Vincent, and Barbara are semanticists at UMass.

(26) Background: 'Mention Some' Questions

- Because of their lexical content, some questions cannot (practically speaking) receive exhaustive answers.
- Thus, a person asking such a question is understood to be seeking a non-exhaustive answer
- A question where the speaker desires a non-exhaustive answer is a mention some question.
- a. Which numbers are odd?
- b. Who is an actor from Canada?
- c. Where can I buy a newspaper in this city?
- d. Where can I learn about the train schedule?

(27) Key Consequence: Exhaustivity Entailments Clash With 'Mention Some'

- If the wh-word in a wh-question is in an 'exhaustive focus' position, then the true direct (semantic) answers to the question are all exhaustive answers.
- a. (i) Question: Who was it that Dave brought?
 - (ii) Direct (Semantic) Answers: It was **Bill** that Dave brought, It was **Tom** that Dave brought, ...
- Consequently, these questions can only be directly answered with exhaustive answers. And so, they cannot be felicitiously used as 'mention some' questions.
- b. (i) ?? Which numbers is it that are odd?
 - (ii) ?? Who is it that is an actor from Canada?
 - (iii) ?? Where is it that I can buy a newspaper in this city?
 - iv) ?? Where is it that I can learn about the train schedule?

(28) The Prediction: Wh-Fronting and 'Mention Some' Questions in Hungarian

- If wh-fronting in Hungarian is an instance of the language's focus movement, then such fronted wh-words occupy 'exhaustive focus' positions (like English clefts)
- Consequently, given (27), it should not be possible to felicitously ask a 'mention some' question in Hungarian using a wh-fronting structure.

(29) The Facts: Wh-Fronting with 'Mention Some' Questions in Hungarian

It is possible (indeed, still necessary) for 'mention some' questions in Hungarian to contain fronted wh-words.

- a. **Hol** tudhatnám meg a vonatok menetrendjét? **where** I.can.know PRT the train schedule.ACC Where can I learn about the train schedule? (Horvath 2007)
- b. (i) **Hol** vehetek újságot itt a környélken? **where** I.can.buy newspaper.ACC here the vicinity.on
 Where can I buy a newspaper around here?
 - (ii) *Vehetek hol újságot itt a környélken? I.can.buy where newspaper.ACC here the vicinity.on
- c. **Melyik számok** páratlanok? **which numbers** odd.PL Which numbers are odd?

(30) Conclusions

- Given the facts in (29), it seems that fronted wh-words in Hungarian wh-questions do not occupy an 'exhaustive focus' position.
- Therefore, Hungarian wh-questions do not have the semantics we'd expect if the displacement of wh-words were truly an instance of the language's 'focus movement'
- Therefore, the fronting of wh-words in Hungarian wh-questions is not driven by 'focus'...
 - Instead, it simply seems to be a formal requirement of the wh-word specifically...
 - o Thus, it is true wh-movement...

3.2 The Case of Dholuo

Note: The main empirical and analytic claims here are taken from Cable (2012).

(31) The Three Ways of Forming Wh-Questions in Dholuo

- a. <u>In-Situ:</u> Achieng' oneno **ng'a?**Achieng saw **who**Who did Achieng see?
- o. <u>(Full) Cleft:</u> En **ng'a** ma Achieng' oneno? be **who** C Achieng' saw Who is it that Achieng' saw?
- c. Movement / Reduced Cleft:

 Ng'a ma Achieng' oneno?

 who C Achieng' saw

 Who did Achieng see?

(32) A Very Compelling Analysis

- · Dholuo is basically a wh-in-situ language.
- · However, like all NPs, wh-words can be clefted.
- For some reason, when wh-words are clefted, the copula can optionally be dropped.

(33) Initial Problem for the 'Compelling Analysis'

Why should the omission of a copula in a cleft be restricted to just the wh-words?

- a. * Pamba ma Achieng' oneno.
 - Pamba C Achieng' saw (cf. (31c))

(34) Main Problem for the 'Compelling Analysis'

- The 'reduced cleft' (wh-movement) structure in (31c) has a different meaning from the 'full cleft' structure in (31b).
- The semantic difference between these two suggests that the 'full cleft' question in (31b) does truly contain an instance of the language's independent cleft construction
- It also suggests that the 'reduced cleft' question in (31c) does not...
 - Thus, synchronically, the structure in (31c) is not created by clefting...
 - o Rather, it's a special displacement operation specifically tied to wh-words...
 - o So it's true wh-fronting...

(35) Dholuo Clefts Carry an Exhaustivity Entailment

Like focus-movement in Hungarian (22), clefting of an NP in Dholuo entails that the referent of the NP is the *only* entity that satisfies the 'cleft remnant'.

a. Question: Who broke a dish?

b. Answer:

- (i) Pamba onego san, to Ochieng' mbende. Pamba broke dish and Ochieng too Pamba broke a dish, and Ochieng too.
- (ii) * Pamba e ma onego san, to Ochieng' mbende. ¹ Pamba be C broke dish and Ochieng too (cf. *It's Pamba who broke a dish, and Ochieng too.)

(36) Key Prediction: 'Full Clefts', 'Reduced Clefts', and Mention Some Questions

Given the data and the reasoning in (24)-(27), the exhaustivity entailment in (35) would predict that true cleft questions in Dholuo cannot be used as 'mention some' questions.

Context

You are trying to design a menu for a child's party. You have no idea what food children like these days, and would like to get some suggestions from a friend.

b. <u>'Mention Some</u>' Questions

- (i) In-Situ: Nyithendo ohero chamo ang'o?
 children like eat what
 What do children like to eat?
- (ii) 'Reduced Cleft': Ang'o ma nyithendo ohero chamo?
 what C children like eat
 What do children like to eat?
- (iii) 'Full Cleft': * En ang'o ma nyithendo ohero chamo?

 Be what C children like eat

 (cf. ?? What is it that children like to eat?)

(37) Result: 'Reduced Cleft Questions' Don't Really Contain Clefts

- It's possible to use the 'reduced cleft' question to ask a 'mention some' question
- It's not possible to use the 'full cleft' question to ask a 'mention some' question
- Thus, it seems that the 'reduced cleft' question doesn't actually contain a cleft (while the 'full cleft' question does)
- And so the displacement of the wh-word in such structures cannot be attributed to 'clefting'... Instead, we must analyzing it as a case of wh-movement...

(38) Additional Evidence Regarding Clefts, 'Reduced Clefts', and Mention-Some

a. <u>Context:</u>

You are deciding whether to invite Ochieng' to your party. You don't know him very well, but your friend does. You'd like to know more about Ochieng', and so you want to ask your friend to tell you some things about him.

b. 'Mention Some' Questions:

- (i) In-Situ: Ing'eyo ang'o kuom Ochieng'? you.know what about Ochieng What do you know about Ochieng?
- (ii) 'Reduced Cleft': Ang'o ma ing'eyo kuom Ochieng'?
 what C you.know about Ochieng
 What do you know about Ochieng?
- iii) 'Full Cleft': * En ang'o ma ing'eyo kuom Ochieng'?
 be what C you.know about Ochieng
 (cf. ?? What is it that you know about Ochieng?) 2

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¹ There's a morphosyntactic difference between the copula in the declarative cleft in (35) and in the question cleft in (36). This is related to the (in)definiteness of the cleft focus, and so can be ignored for the present discussion.

² Importantly, one speaker also volunteered the judgment that the 'full cleft' question in (38b) would fit a context where we have been talking about Ochieng for a while, but the addressee has clearly been evasive in his description of Ochieng'. It seems that the addressee is hiding some important information about Ochieng, and the speaker wants to find out what that is. Note that in such a context, an English cleft question would also be acceptable (*What is it that you know about Ochieng?*).

4. Some Consequences for How We Describe and Analyze Wh-Questions

(39) What We've Seen

- a. Regarding Wh-Words and Focus:
 - · It's difficult to claim that wh-words are obligatorily F-marked.
 - It is possible to claim that they're 'focused' in the sense of not being presupposed (comment, rheme, new information)
 - However, the sorts of 'focusing constructions' that wh-words typically (seem to) participate in don't usually mark this kind of 'focus'
- b. Regarding Wh-Words and 'Focus Constructions'
 - We've seen two languages (Hungarian, Dholuo) where fronting of wh-words has many surface similarities with an independent 'focusing construction'
 - We've seen that in both these languages despite their surface similarities –
 the wh-fronting structure does not have the semantics expected from the
 'focusing construction'
 - And so wh-fronting in these languages is not (synchronically) derived from the focus construction after all...

(40) Message for the Theorist

- The relationship between wh-words, wh-questions, and focus is more indirect than
 the picture in (2)/(39) suggests.
- We should not be so quick to identify the feature responsible for displacement of wh-words (in a given language or across languages) as 'focus'

(41) Message for the Descriptivist / Documentarian

- Even if a language's wh-questions seem very similar to its focusing construction, they
 may not be (synchronically) derived from those focusing constructions.
- To really test whether displacement of wh-words is due to 'focus', it's key to check whether the question with displacement exhibits the semantics expected from the focus construction
 - o (...which, to my knowledge, is not typically done...)

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