

## Doubly-Filled Comps Are Not Doubly-Filled Comps

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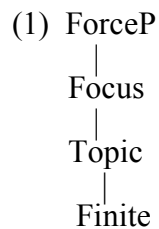
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In this paper, I will provide evidence from sluicing for Rizzi's (1997) decomposition of the unitary node *C* into what he refers to as "the Comp System", in which *C* is actually a cover term for four separate projections, Force, Topic, Focus, and Finite, as in (1):



Along the way, I will argue, based on work by Wang (2006) on Chinese, that *wh*-phrases themselves occur in [Spec, FocP], and that sluicing is really TopP deletion (i.e., deletion of the complement of Foc<sup>0</sup>). It will be shown that this analysis provides a natural account of why, in so-called "doubly-filled Comp" languages such as Norwegian, Bellinzonese, and Belfast English, the overt complementizer cannot be stranded in sluicing.

We shall take as our point of departure the discussion in Lasnik (1999).

### I. The PF- Deletion Account of Sluicing and PF-Crash

Lasnik considers the following type of sluice:

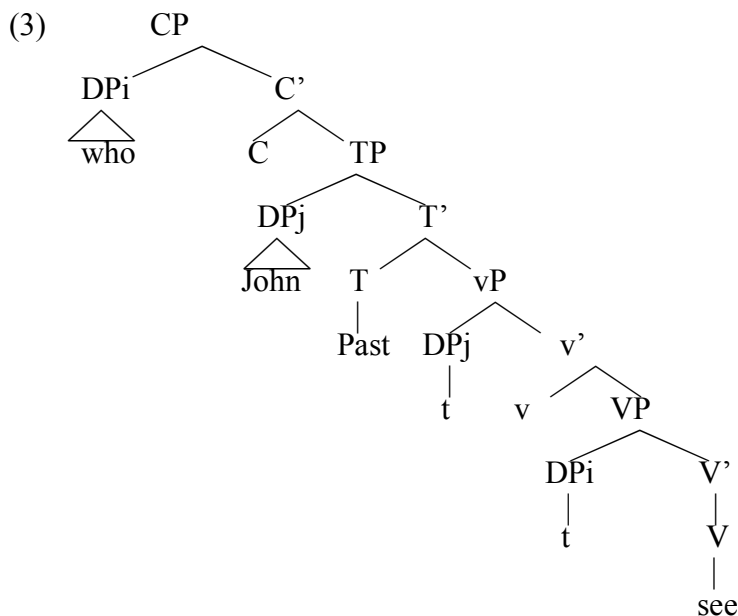
(1) a. Speaker A: John saw somebody.

b. Speaker B: Who?

Speaker B's utterance is obviously a shortened version of (2):

(2) Who did John see?

The structure of Speaker B's utterance in (1) is (3) for Lasnik:



Lasnik assumes sluicing to be TP-deletion. Assuming inversion to be T-to-C movement, as is standard, the crucial question is why inversion does not apply if sluicing occurs, so that Speaker B's utterance would be, instead of (1)(b), (1)(b')

(1) (b)' \*Who did \_\_\_?

Minimalism takes movement to be driven by the need to check strong features (Chomsky (1995)), and Lasnik takes the strong feature in this case to reside in the interrogative T, and the presence of strong features at PF will cause the derivation to crash at that level. Taking sluicing to occur at PF, deletion of the TP that contains the

T with the unchecked strong feature will allow the structure to escape violation of the Principle of Full Interpretation (Chomsky (1986, 1995a).

There are a couple of questions about this analysis that Lasnik does not consider. First, where does T-to-C movement occur within the derivation? If it occurs in the overt syntax, before the derivation splits into LF and PF, and if movement is literally Attract (Chomsky (1995b)), the T should be forced to move in the overt syntax. Sluicing is assumed to occur at PF, after overt syntactic operations have occurred. Secondly, assuming that there is a satisfactory answer to the first question, there is still no answer to the question of why T-to-C movement is incompatible with sluicing, so that (1)(b)' is ungrammatical.

Subsequent to Lasnik (1999), Boeckx and Stepanovic (2001) have argued that head movement occurs at PF, and so if head movement, which includes T-to-C movement, and sluicing both occur within the same wing of the grammar, one could simply apply sluicing before T-to-C movement.

## II. Languages With overt C

The second question is not as easily disposed of. Lobeck (1995) considers languages in which wh-movement occurs in embedded questions and in which the complementizer is overtly realized. She considers two cases, one from Bavarian German, based on Bayer (1984), and the other from Norwegian, discussed in Rizzi (1990). In Bavarian German, the  $\phi$ -features of the subject can be expressed as a suffix on the wh-phrase:

- (4) (Lobeck, p. 58, ex. (64)) Du woidd-st doch kumma, owa mia wissn ned  
 You wanted come, but we know not

waan-st (du) kumma woidd-st.

when-(2sg) (you) come wanted-(2sg).

You wanted to come, but we don't know when you wanted to come.

However, when sluicing occurs, the wh-phrase remnant in the sluiced TP cannot be suffixed with the sluiced TP's subject's  $\phi$ -features:

(5) (Lobeck, p. 59, (ex. (65)) Du woidd-st doch komma, owa mia wissn ned wann(\*-st) [e].

Lobeck's account of the obligatory absence of the suffixed  $\phi$ -features in Bavarian German sluicing relies on the  $\phi$ -features as being co-indexed with the T of the TP. If the TP is deleted by sluicing, there is nothing for the suffixed  $\phi$ -features, which Lobeck assumes to be in Comp (as do I).

Norwegian shows an invariant element *som* that appears when the subject is the wh-phrase in [Spec, CP]; it does not appear if any phrase other than the subject, such as the object, is questioned:

(6) (Lobeck, p. 59, ex. (67)) a. Vi vet [CP hvem som [t snakker med Marit]]

We know who that talks with Mary.

b. Vi vet [CP hvem (\*som) [TP Marit snakker med t]]

We know who that Mary talks with.

When a subject question undergoes sluicing in Norwegian, *som* cannot appear:

(7) (Lobeck, p. 60, ex. (68)) Vi vet at noen snakket med Marit, men vi vit ikke hvem (\*som) [e].

We know that someone talked with Mary, but we don't know who.

For the case in (6), Lobeck adopts Rizzi's account, in which *som* is a C that is co-indexed with both its spec, and T. Because it cannot bear two sets of  $\phi$ -features, it must be co-indexed with the same element with which T agrees, i.e. the subject. Again, if T is deleted, as part of the TP that is sluiced, *som* will not be able to discharge its agreement features.

The Norwegian and Bavarian cases that Lobeck discusses are interesting, and it seems plausible to locate the deviance in terms of deletion incorrectly bleeding checking relationships that must occur. However, the approach seems problematic in a number of respects.

First of all, let us consider how English T-to-C movement, illustrated above in (1)(b'), could be ruled out. One conceivable answer by Lobeck could lie in her view of ellipsis as being not deletion, but the null category being a base-generated pro-form. Merchant (2001), in particular, gives extensive argumentation against this view, based on correlations in sluicing with Case-assignment in the overt form of the indirect question of the questioned constituent, as well as with the ability of a preposition to be stranded in wh-movement. (see, in addition, Kennedy (2001) and Johnson (2001) for extensive discussion of the deletion versus null pro-form debate.)

Assuming that sluicing is TP deletion, what rules out T-to-C movement followed by deletion, as in (1)(b')? The agreement on T presumably is checked when the subject moves to [Spec, TP], before moving to C. Therefore, it is not obvious as to what the source of the problem is.

Furthermore, in Norwegian, Tarald Taraldsen informs me that the complementizer *som* is obligatory in the non-sluiced version, but cannot appear in

sluicing. If sluicing is TP-deletion, and *som* is in C in the structure [CP [XP +wh][C' [C som][ TP]]], it would be necessary to posit a separate deletion of *som*, parasitic on sluicing<sup>1</sup>.

It also seems that the presence of agreement features on the overt material in C is not a universal requirement for the presence of such overt material in indirect questions with overt wh-movement. For example, in Belfast English (see Henry (1995)) and Bellinzone (Andrea Cattaneo, personal communication), the complementizer is invariant, and (optionally) appears no matter what type of phrase is wh-fronted in indirect questions ((8) is Belfast English and (9) is Bellinzone):

(8) (a) They discussed a certain model, but they didn't know which model that they discussed.

(b) They wanted to do something, but they weren't sure what for to do.

(9) # Al Gianni l ha legiü un certu libru, ma a sò mia quale libru che l ha legiü

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<sup>1</sup> It appears that Norwegian is alone in the four languages that I am considering here that show wh-movement followed by overt morphological material in C in non-sluced indirect questions (Bavarian German, Norwegian, Bellinzone, and Belfast English). Such material is evidently optional in Bavarian German, as well as Bellinzone (Andrea Cattaneo, personal communication) and Belfast English (Alison Henry, personal communication). Therefore, the absence of such material in sluicing will not be problematic for a TP-deletion of sluicing in the latter three languages, but Norwegian will still be problematic. Additionally, Belfast English and Bellinzone will pose other problems, as we shall see below.

the J. SCL\_IIIsg has read a certain book but SCl\_IIsg know not which book that SCL has read.

Crucially, the complementizer in (8) and (9) must delete in sluicing:

(10 (a) They discussed a certain model, but they didn't know which model (\*that) \_\_\_\_

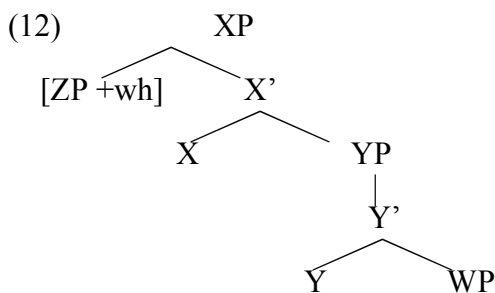
(b) They wanted to do something, but they weren't sure what (\*for) \_\_\_\_.

(11) # Al Gianni l ha legiü un certu libru, ma a sò mia quale libru (\*che) \_\_\_\_.

It seems, therefore, that the obligatory absence of the complementizer in sluicing is still mysterious under the view that sluicing is TP-deletion, with the complementizer being located as the C sister to T, and cannot be wholly explained by the presence of agreement effects in C in such cases<sup>2</sup>.

### III. On a More Positive Note

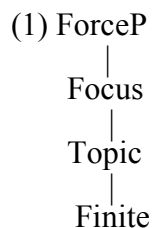
We can locate the problem more precisely. Assuming that only maximal projections can elide, we must take the complementizer in so-called “Doubly-Filled Comp” languages not to head the projection of which the wh-phrase is the specifier, but to head a lower projection that is itself the complement of the head whose projection the wh-phrase is. In other words, we need a structure as in (12):



<sup>2</sup> In other words, attributing the obligatory absence of the complementizer in sluicing to agreement effects seems to be an instance of the famous Armenian proverb attributed to Morris Halle: “In Armenia, the nightingale sings when the moon shines.

And when the moon doesn't shine?  
The nightingale sings anyway.”

With *Y* being the overt complementizer. A candidate for such a structure is Rizzi's "Left Periphery", in which there is not a single node that could be defined as the complementizer. Rather, there is a system of functional projections that jointly comprise what has previously been analyzed as a single CP projection. The system is as in (1), repeated here:



But now the question is, where does the complementizer reside in embedded questions, and where does the *wh*-phrase reside?

Baltin (2005), in examining Henry's (1995) data on Belfast English, suggests that the complementizer actually resides in *Fin*<sup>0</sup> in such constructions. For example, if one considers (13) and (14), the complementizers are clearly not marking force, since the clauses are both questions:

(13) (Henry's (35)) I don't know when that he's going.

(14) (Henry's (37)) I'm not sure what for to do.

To ensure that the *wh*-phrase is not in the Spec of the complementizer, we must place it, within Rizzi's system, in either [Spec, Force], [Spec, Focus], or [Spec, Topic].<sup>3</sup>

Of these three choices, Focus seems to be the most plausible on semantic/pragmatic grounds. Merchant (2001) discusses the evidence that *wh*-phrases in

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<sup>3</sup> Notice that Lasnik's (1999) argument for the PF-crash view of deletion of strong features, with sluicing viewed as PF-deletion, which was based on (1)(b), dissolves.

constituent questions are focused. Furthermore, Wang (2006) presents strong evidence that in Chinese, sluicing is actually overt focus movement followed by deletion.

If sluicing is actually deletion of the complement of Focus, we can unite traditional sluicing cases with cases such as those in (15), which have at various times been referred to as truncated clefts:

- (15) John saw somebody in the garden; it was Mary (who  
John saw in the garden.)

#### IV. Interactions with a language in which the Focus head is overt

Perhaps the strongest evidence for this analysis of questions comes from Gungbe, a Gbe language. According to Enoch Aboh (personal communication: see Aboh (2004, 2005), the focus head in Gungbe is overt, as can be seen in (16):

- (16) 1. Un do na Assiba **do** moto ve lo **we** mi na xo  
<moto ve lo>

1sg tell Prep Asiba Comp car red Det FOC 1pl Fut buy

'I told Asiba that we will buy THE RED CAR'

The focus particle is *we*, and shows up in questions as well:

- (17) Un kanbio Asiba **do** ete **we** mi na xo

1sg ask Asiba Comp what FOC 1pl Fut buy

'I asked Asiba (that) what will we buy?'

The crucial example is one in which sluicing occurs, and the focus particle *we* must be retained, in contradistinction to the cases in Norwegian (6), Belfast English (10), and Bellinzonese (11).

#### V. Conclusion

In this squib, I have shown that Rizzi's (1997) more articulated system of functional projections provides a plausible and simple account of the universal restrictions on sluicing in languages that have so-called "Doubly-filled Comps", and that the term "Doubly-filled Comp" is an expository term that does not seem to have any theoretical content.

Another implication of this work is for the grammatical representation of focus. There are currently at least two approaches to the syntax of focus of which I am aware. One, embodied by Rizzi (1997) and adopted here, posits a functional head that is dedicated to focus, a Focus<sub>0</sub> with its associated projections; the other approach, embodied by Cinque (1993), Horvath (to appear), and others, takes focus to be derivative on factors such as stress or intonation, but not specifically represented in its own projection.

The approach taken here assumes, and I believe requires, a universal formulation of sluicing as deletion of the complement of a Focus head. Its universality would therefore require a Focus head in the languages, German and Hungarian, that Cinque and Horvath respectively, investigate. Further research is clearly needed to arrive at an integrated account of focus.

References:

0. 1. Aboh, Enoch 2004 The Morphosyntax of Complement-head Sequences: Clause Structure and Word Order Patterns in Kwa. Oxford University Press. New York.
2. Aboh, Enoch. 2005 Object Shift, Verb Movement and Verb Reduplication. In Cinque, G & Kayne, R eds., Handbook of Comparative Syntax. Oxford University Press. New York.

3. Baltin, Mark (2005), "Is Grammar Markovian?", invited forum lecture, Korean Association for the Study of English Language and Linguistics, Seoul, South Korea
4. Boeckx, Cedric, and Sandra Stepanovic (2001), "Head-ing Toward PF", Linguistic Inquiry, Vol. 32, pp. 345-355
5. Cinque, Guglielmo (1993), "A Null Theory of Phrase and Compound Stress", Linguistic Inquiry, Vol. 24, pp. 239-267
- 6.. Henry, Alison (1995), Belfast English and Standard English: Dialect Variation and Parameter Setting, Oxford University Press
- 7.. Horvath, Julia (to appear) "Separating "Focus Movement" From Focus", in Simin Karimi, Vida Samiian, and Wendy Wilkins, ed., *A Festschrift for Joseph Emonds*, Mouton de Gruyter
8. Lasnik, Howard (1999), "Three Accounts of Feature Strength", Linguistic Inquiry, Vol. 30, pp. 197-217
9. Lobeck, Ann (1995), Ellipsis, Oxford University Press
10. Merchant, Jason (2001). The Syntax of Silence, Oxford University Press
11. Rizzi, Luigi (1997), "The Fine Structure of the Left Periphery", in Liliane Haegeman, ed., Elements of Grammar, Kluwer, pp. 281-337
12. Wang, C.-A. (2006), "Sluicing, Focus, and Parallelism", unpublished paper, New York University