## On Top but not a Phase: Phasehood Inheritance and Variation in Sluicing Barbara Citko (University of Washington)

In this talk, I show that a lower head can be a phase head in spite of the presence of a higher head within the same extended projection, contra recent contextual approaches to phasehood that take the *highest* head to be the phase head (e.g. Bošković 2014, Wurmbrand 2013). This is due to *phasehood inheritance* (the reverse of phase extension of Den Dikken 2007 or phase sliding of Gallego 2010): a process by which a lower head can inherit phasehood (not just uninterpretable features) from a higher phase head. I build on Deal's (2016) recent proposal that TP becomes a phase when it is selected by a relative C. This is how she accounts for the lack of *that*-trace effects in relative clauses:

(1) a. Students **\*(that)** study syntax are smart. b. Who do you think **(\*that)** studies syntax? In Deal's account, if TP inside the relative clause is a phase, the checked uninterpretable features contained inside the TP are deleted; the [uT] feature on the subject in [Spec, TP] is not accessible to C, and the only way for the T feature on C to be checked is via T to C movement, which, following Pesetsky and Torrego 2001, she takes to be spelled out as *that*. I *first* extend Deal's proposal to sluicing. I assume that ellipsis is the pronunciation of the *spell-out domain* as null, which means that *only* complements of phase heads can be deleted (as in Gengel 2007, Wurmbrand 2013, Rouveret 2012, but contra Bošković 2014, who allows both phases and complements of phase heads to be deleted). Deal's proposal that TP is a phase in relative contexts can provide a simple account for the contrast in grammaticality between sluicing in questions and relative clauses: in (2a) the complement of a phase head is deleted (the complement of C), whereas in (2b) the entire phase (TP) is:

(2) a. Someone stole the car but they couldn't find out **who**.

b. \*Someone stole the car, but they couldn't find the person **who**. (Merchant 2001: 59) However, Van Craenenbroeck and Liptak (C&L) (2006, 2013) show that the ungrammaticality of sluicing in relative clauses is subject to crosslinguistic variation, and that in languages in which the Focus head licenses wh-movement, it also licenses sluicing. This raises two questions *for these languages*: (i) *if the Focus head licenses sluicing and wh-movement in both relative clauses and questions, is there any reason left to treat CP as a phase?*, and (ii) *is there any evidence that the relative (but not interrogative) TP is phase*? To address these questions, I focus on Polish, a language in which (like in Hungarian), the conditions on ellipsis in questions and relative clauses are the same. *First*, the focused (bolded) remnant can survive ellipsis in both questions and relatives (as noted by C&L 2006; see also Szczegielniak 2004 on ellipsis in Polish relatives clauses, and Grebenyova 2007 on sluicing in Slavic more generally):

- (3) a. Wiem, że ktoś studiuje składnię, ale nie wiem, kto (fonologię). WH-QUESTION know that someone studies syntax but not know who (phonology)
  'I know that someone studies syntax but I don't know who studies phonology.'
  - b. Znam kogoś, kto studiuje składnię, ale nie znam nikogo, kto \*(fonologię). REL CLAUSE know someone who studies syntax but not know anyone who (phonology)
    'I know someone who studies syntax but I don't know anyone who studies phonology.'

Example (3b) further shows that the presence of the remnant in relative clauses (unlike in questions) is obligatory. This follows from the fact that the relative pronoun occupies a higher position (as argued by Rizzi 1997 for Italian). Thus, what is elided in the ungrammatical version of (3b) is the complement of a higher head (C or Force head). If, however, Foc is a phase head, this ungrammaticality is due to the fact that the complement of the non-phase head (C head) has been deleted. *Second*, both questions and relative clauses allow the remnant to be a negative polarity item (4a-b) or a negative particle (5a-b). (4) a. Wiem, kto coś wygrał, ale nie wiem, kto **nic.** WH-QUESTION

know who something won but not know who anything 'I know who won something but I don't know who didn't win anything.'

b. Przyjmiemy studentów, którzy coś chcą studiować, a nie tych, co **nic**. **REL CLAUSE** accept students who something want study but not ones that anything

'We'll accept students that want to study something but not ones that don't want to study anything.'

- (5) a. Wiem, kto chce studiować, ale nie wiem, kto nie. I know who wants to study but not know who not
  - b. Znam kogoś, kto chce studiować, ale nie znam nikogo, kto nie. **REL CLAUSE** I know someone who wants to study but not know anyone who not

These examples also show that sluicing in Polish (unlike in English-type languages) allows polarity mismatches; in (4a) the antecedent is positive ('someone won something') but the sluiced TP has to be negative (otherwise the negpol wouldn't be licensed). This is related to negpols being possible as sentence fragments (see Giannakidou 2000, Błaszczak 2001, a.o.), and suggests that the Focus head has a polarity feature or the Polarity head itself licenses ellipsis (as in Laka 1990, Citko 2015 for Polish). This allows for the derivation of the sluice in which the uPol feature on Foc (or Pol head) is valued as negative via Agree with the lower Neg (6a). The high uPol feature now is negative and can license NPIs in its scope via Multiple Agree, as proposed by Zeijlstra 2004 for negative concord languages. Next, Foc attracts the wh-phrase and the NPI to its specifier, and the complement of Foc head deletes (6b).

[FOCP FOCuPol:neg, [E], EPP [TP WHO [NEGP NOTiPol:neg [VP ... WON ANYTHING uPol:neg ...]]]]] (6) a.

[FOCP WHO; [FOCP ANYTHING; [FOCUPOLINEG,[E],EPP [TP t; [NEGP NOTIPOLINEG [VP ... WON t;]]]]] b. I next turn to standard phasehood diagnostics to confirm that the Focus head is the phase head in Polish even when the C head is present. That [Spec, FocP] is the target of wh-movement is commonly assumed for Slavic languages of the Polish type. First, the moving wh-phrase can be pronounced in [Spec, FocP] following the overt complementizer (Lasnik & Saito 1984, Willim 1989, Wiland 2009, a.o.):

(7) a. Jan wie,  $\begin{bmatrix} CP & \mathbf{ze} \end{bmatrix}$ Maria zrobiła?]] b. ?\*Jan wie [<sub>CP</sub> **co** [<sub>C'</sub> **że** Maria zrobiła?]] Jan knows that what Maria did Jan knows what that Maria did Next, wh-words have to follow topics (Tajsner 2008, Wiland 2009):

(8) a.  $[_{TopP}$  Marka  $[_{Top'}$  to [ **gdzie** [ Anna  $[_{VP}$  spotkała  $t_{wh}$  ]]]]]?Marek.ACC TOP where Anna.NOM met

(Top WH) (\*WH Top)

WH-QUESTION

- b. \* **Gdzie** Marka to Anna spotkała? (Wiland 2009: 139)

And, finally, complex wh-phrases can be split with the nominal stranded in [Spec, FocP]: (9) a. Ile Jan wie, [CP że [FoCP artykułów Maria napisała]]? b.?\*Ile Jan wie artykułów że Maria napisała?

how.many Jan knows that articles Maria wrote how many Jan knows articles that Maria wrote To conclude, this talk contributes to the research on crosslinguistic variation in phasehood and contextual approaches to phasehood in two ways: first, by showing that in languages in which Foc head licenses sluicing, there is no reason to treat a relative TP as a phase, or CP as a phase in general, as the conditions on ellipsis and licensing of NPIs are the same in questions and relative clauses, and second, by showing that a lower head can be a phase head in the presence of a higher head within the same extended projection (due to phasehood inheritance).

## **Selected References:**

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