## ANTI-CATAPHORA EFFECTS, AGREE AND PHASES

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This presentation focuses on cataphoric relations in English and Slavic (Polish) and Chomsky's (1981) Condition C violation as in (1-2). These examples show that backward pronominalisation (BP) is banned when the pronoun c-commands its antecedent but in English it is allowed when the pronoun is contained within a DP that c-commands the name, as in (3).

- (1) \*He<sub>i</sub> believes that John<sub>i</sub> is clever.
- (2) \*On<sub>i</sub> wie, że Jan<sub>i</sub> jest zdolny. he knows that John is gifted
- (3) [DP hisi latest movie] really disappointed Kusturicai.

In contrast, Slavic (Polish) shows Anti-Cataphora Effects (ACE), stronger than BP, where c-command by the pronoun is less obvious (Despić 2013, 2015, Nikolaeva 2014):

- (4) \*[njegov<sub>i</sub> najnovij<sub>i</sub> film] je zaista razočarao Kusturicu<sub>i.</sub> (SC) his latest movie is really disappointed Kusturica
- (5) \*[jego<sub>i</sub> najnowszy film] rozczarował Kieślowskiego<sub>i.</sub> (Pol) his latest movie is really disappointed Kieślowski

In this talk we aim to address the following questions: **(A)** Does Condition C subsume the ACE? **(B)** Current theory of syntax relies on two basic structural relations driving morpho-syntacic operations: Agree and Move. Which of these two relations licenses the ACE? **[Ad. A]** Willim (1989) and Witkoś (2008), relying on their introspection, express doubts as to whether the ACE is reducible to Condition C, as its intensity depends on a number of factors such as: the depth of embedding of the pronoun, **(6)**, and the intervening possessor, **(7)**, while Condition C is more robust:

- (6) (?)[przyjazd [jego<sub>1</sub> rodziców]] zupełnie Janka<sub>1</sub> zaskoczył. his<sub>1</sub> parents' arrival surprised John<sub>1</sub> completely
- (7) ?[jej<sub>2</sub> historie [o nim<sub>1</sub>]] wzburzyły Piotra<sub>1</sub>. her stories<sub>NOM</sub> about him<sub>LOC</sub> exasperated Peter<sub>ACC</sub> 'Her stories about him exasperated Peter.'

Yet, an empirical study reported in Gogloza and Łęska (2017) examined the effect of embedding of the possessive pronoun and showed no amelioration of Condition C (8). So there is considerable speaker variation as to what extent embedding ameliorates the ACE.

- \*[asystentka [jego<sub>1</sub> stylistki]]/\*jego<sub>1</sub> stylistka pokazała projektantowi<sub>1</sub> modelkę. assistant<sub>NOM</sub> his stylist<sub>GEN</sub> /his stylist<sub>NOM</sub> showed designer<sub>DAT</sub> model<sub>ACC</sub>
- [Ad.B] Despić (2013, 2015) and Bošković (2005, 2012), relying on corresponding data from Russian (R) and Serbo-Croatian (SC), argue that the unacceptable status of (4-5) stems from Condition C. They claim that in contrast to English, Slavic possessives are placed in an adjunct position from which they c-command outside their DP/NP.
- (9) **English**: [DP his [D O [NP movieN]]] (10) **Slavic**: [NP his [NP movieN]] Nikolaeva (2014) and LaTerza (2016) argue that the pronominal possessive originally occupies

Nikolaeva (2014) and LaTerza (2016) argue that the pronominal possessive originally occupies the same position as in English (so the specifier in (9)) and then it covertly moves out of the DP/NP and forms a specifier of V/v/T. From this position it c-commands arguments and adverbials placed in lower positions and causes Condition C effects in (4-5). The covert Pronominal Raising, shown in (11=5), is an equivalent to overt Left Branch Extraction, LBE, which Slavic (NP-, but not DP-) languages allow (12):

- (11) [TP his1 [T' [NP his1 latest movie] T [vP disappointed Kieślowski1]]]
- (12) czyją Maria znalazła wczoraj [<del>czyją</del> książkę] (Pol) whose Maria found yesterday book

Both the covert movement and the base adjunction approach have their pros and cons. The former accounts for the cases of pronoun embedding and ACE, as in (8). Yet it faces three challenges: (a) defining the type of position the possessive moves to (A-position?); (b) constraining a successive cyclic movement of the possessive from one DP to the next (if ex. 8 is accepted); (c) explaining covert Pronominal Raising out of PPs in (7), as overt P-stranding is prohibited in Slavic (Polish). On the other hand, the non-movement option faces the problems of explaining how an embedded possessive can extend its c-command domain beyond the 'container NP' without movement (if ex. 7 is rejected) and how to move the pronoun out of PP in (7). We develop an alternative proposal involving (a) a more relaxed notion of command and (b) a relaxed notion of phase interference with non-movement relations (Agree). Bruening (2014) modifies the classic definition of c-command into 'precede and phase-command':

- (13) a. X phase-commands Y iff there is no ZP, ZP a phasal node, such that ZP dominates X but it does not dominate Y. Phasal nodes: CP, vP, NP (but not PP).
- We take the ACE to stem from Condition C, so defined in Bruening (2014: 372):
- (14) **Condition** C (Minimise Restrictors): A definite description of the form *the A* may not refer to a discourse referent in active set C if A could be dropped without affecting either (i) the denotation of the description or (ii) its various pragmatic effects.

Bruening (2014) follows Schlenker (2005) and assumes that Condition C is derivable from Gricean maxim of minimalisation, specifying that a definite description the *the A* (a name) is deviant if A could be dropped (replaced with a pronoun) without affecting (i-ii) above. Bruening assumes a model of discourse in which D is the complete set of referents and C is the active set (a subset of D currently processed in narrow syntax):

- (15) (i) **Discourse set** C consists of referents represented by NPs in the sentence currently being processed. (ii) **Processing Principle**: Move discourse referent R denoted by NP N out of active set C and into set D at the right edge of a phasal node that dominates N. In (16), both *she* and *the teacher* are in the same active set C, where Condition C applies. *The teacher* is in the active set C because the parser has not moved past the right edge (bracket) of its DP phase. In (17) the possessive *her* is embedded in the DP phase. Once the parser passes its right edge (bracket) *her* is removed from the active set C to the general set D on the strength of (15ii) and it cannot cause any harm to *the teacher*, despite their coindexation:
- (16) \*She<sub>1</sub> doesn't like [the teacher<sub>1</sub>'s students].
- (17) [her assistant] doesn't like the teacher's students.

Bruening's notion of phase command and his definition of Condition C account for core cases of the ACE in (4-5) above. Assuming that possessive pronouns are adjuncts and the definition of phase command in (13) we see that NP is not the first phase node dominating the pronominal possessor; CP is the next phase node that dominates the possessor and delimits its c-domain. Furthermore, Bošković (2007) shows that phases (PIC) constrain Move but they do not constrain Agree. For instance, in Chukchee the matrix v agrees with the object (for 3PL) in the embedded clause across two phases: CP and vP (Bošković 2007):

(18) ənən qəlyilu ləŋərkə-nin-et [iŋqun 0-rətəmŋəv-nen-at qora-t] he regret.3PL that 3SG-lost-3-PL reindeer-3PL 'He regrets that he lost the reindeers.'

This idea delivers three immediate bonuses: (a) in the case of the ACE, a non-movement relationship (phase command and Agree with the pronoun as a probe) could likewise (possibly multiply) cross the DP/NP phase boundary in (8). (b) the PP in (7) is not treated as a phase and the pronoun commands from within it. (c) It explains why DP-languages (Bulgarian, Macedonian) and NP-languages (Polish, Russian, SC) differ in movement-based phenomena (LBE) but look alike in the Agree-based ACE.

**Selected references**: Bošković, Ž. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59(1): 1–45. Bruening, B. 2014. Precede-and command revisited. *Language* 90 (2): 342-388. Despić, M. 2013. Binding and the structure of NP in Serbo-Croatian. *Linguistic Inquiry* 44(2). 239–270. LaTerza, I. 2016. Binding in English and South Slavic and the parametrized DP hypothesis. *Linguistic Inquiry* 47 (4): 741-753. Nikolaeva, L. 2014. The secret life of pronouns. Doctoral dissertation, MIT, Cambridge, MA.