The Licensing of Pronominal Features in WCO and OPC

I argue that *Weak Crossover* (WCO) and *Overt Pronoun Constraint* (OPC) (1) effects show up systematically only with non-specific *wh*-phrases. To account for this contrast, I sketch an analysis based on the following condition for binding: features on bound pronouns must be licensed under C-command by features of their binders, therefore binders must be endowed (at least) with all the features of the pronouns they bind.

The role of specificity – Lasnik and Stowell (1991), in their paper on *Weakest Crossover*, introduced the issue of the different kinds of operators in WCO and in OPC configurations (Lasnik and Stowell 1991: app. B). On the basis of a series of specificity tests, I show that *wh*-antecedents, quantificational in the sense of these authors, induce WCO effects only if they are non-specific (Enç 1991) ((2-a) vs. (2-b)). Moreover, using carefully selected examples from Italian, I show that OPC effects do not arise with specific *wh*-operators. While a null *pro* can be bound by both a non-specific (3-a) and a specific (3-b) antecedent, the overt pronoun *lui* can actually be bound by a specific (4-a) *wh*-operator, though not by a non-specific one (4-b). Thus the OPC (1) is not refined enough.

LF chains and feature non-distinctness – Rizzi (2001) proposes an account of the asymmetries between D-linked and non D-linked *wh*-elements with respect to weak island sensitivity. Consider the configurations in (5) and (6) where traces, expressed within angle brackets, are unpronounced copies of their antecedents. Non D-linked *wh*-elements must reconstruct at LF in their argument position and only the operator can stay in the left periphery at LF. So the operator is separated from its restriction, which is interpreted in its argumental position, and the final configuration is an unrestricted quantification (5). On the other hand the restriction of D-linked *wh*-elements can stay in the left periphery at LF licensed as a Topic (6). Rizzi assumes that DPs can enter into a long distance binding relation not subject to *Relativized Minimality*. Crucially long distance binding obtains under a condition of feature non-distinctness between binder and bindee. Therefore long distance binding is restricted to specific DPs, endowed with the necessary features in the left periphery at LF.

Antecedent features and pronoun features – Developing this suggestion, I propose that features on bound pronouns must be licensed under C-command by features of their binders, so binders must be endowed (at least) with all the features of the pronouns they bind. To implement this condition in the cases at issue here, I assume that different antecedents and pronouns have different feature sets. Proposals along these lines have been independently advanced in recent research. Concerning antecedents, Starke (2001) proposes that specific *wh*-elements can be extracted from weak islands because they have a richer featural make-up as compared to non-specific ones. As for pronouns, the idea that they differ in structural and in featural richness is advanced by Déchaine and Wiltschko (2002) a.o. For the time being, I do not commit myself to a specific featural make-up of the elements involved in the binding relation, and I adopt two abstract nominal (non-operator) features, α and β. Non-specific elements are endowed only with α, sitting on a silent nominal nutshell, instead specific ones have both; crucially only this richer restriction can stay in the left periphery at LF (cf. (5) and (6)). Concerning pronouns, I assume that null *pro* (contra Alonso-Ovalle and D'Introno's (2001) 'zero pronouns' analysis of OPC) and the possessive pronoun have the feature α, instead tonic pronouns are endowed with both α and β.

Bound pronouns licensing – On the basis of these assumptions, WCO configurations can be represented as in (7). In the non-specific chain (7-a) only the bare operator is in the left periphery, while the α feature is interpreted in the trace (A) position. So the bare operator cannot establish a binding relation with the pronoun endowed with α. As for specific chains (7-b), a full DP, with both α and β, is present in the left periphery. These features license those on the pronoun, which can therefore be syntactically bound by the DP operator. Crucially, binding in specific chains takes place directly from the $\bar{A}$ position and the argumental position is irrelevant (contra Büring 2004 a.o.). Consider now the OPC structures: (8) involves a null *pro* while in (9) a tonic *lui* is present. In (8-a) and (9-a), a non-specific operator, with α, is merged in argument position so it can bind only *pro* (8-a) but not *lui* (9-a). Instead, in specific chains the operator is restricted and endowed with both α and β features in its A and $\bar{A}$ position, and for this reason can bind both *pro* (8-b) and *lui* (9-b). Summarizing, these abstract configurations highlight the parallelism between WCO and OPC. In both cases, the wider binding possibilities of specific operators can be reduced to their lexical restriction which (a) is richer in featural make-up, and (b) is allowed to stay in the left peripheral position.

In conclusion, the sketched proposal opens a new perspective on WCO and OPC that can tie to Kratzer's (2009) hypothesis that ϕ-feature transmission is a necessary condition for (at least some instances of) syntactic binding.

Examples

(1) If an overt/null pronominal alternation is possible, an overt pronominal must not have a quantified antecedent

a. Nadie$_i$ cree que [él$_{*i/j}$ es inteligente]

b. Nadie$_i$ cree que [*pro*$_{i/j}$ es inteligente]

'Nobody believes that he$_{*i/j}$/pro$_{i/j}$ is intelligent' (cf. Montalbetti 1984)

(2) a. [Who the hell]$_i$ do (you say that) his$_{?*i/j}$ students admire t$_i$? *Non-specific*

b. [Which famous professor]$_i$ do (you say that) his$_{i/j}$ students admire t$_i$? *Specific*

(3) a. Chi$_i$ t$_i$ dice che *pro*$_{i/j}$ supererà la selezione? *Non-specific*

who$_i$ t$_i$ says that *pro*$_{i/j}$ will pass the selection

b. [Quale brillante studente]$_i$ t$_i$ dice che *pro*$_{i/j}$ supererà la selezione? *Specific*

[which brilliant student]$_i$ t$_i$ says that *pro*$_{i/j}$ will pass the selection

(4) a. Chi$_i$ t$_i$ dice che (nemmeno) lui$_{?*i/j}$ supererà la selezione? *Non-specific*

who$_i$ t$_i$ says that (not even) he$_{?*i/j}$ will pass the selection

b. [Quale brillante studente]$_i$ t$_i$ dice che (nemmeno) lui$_{i/j}$ supererà la selezione? *Specific*

[which brilliant student]$_i$ t$_i$ says that (not even) he$_{i/j}$ will pass the selection

(5) *Quanti soldi non sai come guadagnare <quanti soldi>?

'How much money don't you know how to earn?' *Non-specific*

LF: [$_{CP_1}$ Op <NP$_{[features]}$> [$_{CP_2}$ *Wh* [$_{IP}$ <Op> NP$_{[features]}$]]] (cf. Rizzi 2001: ex. 27-b)

(6) ?Quanti dei soldi che ti servono non sai come guadagnare <quanti dei soldi che ti servono>?

'How much of the money that you need don't you know how to earn?' *Specific*

LF: [$_{CP_1}$ Op NP$_{[features]}$ [$_{CP_2}$ *Wh* [$_{IP}$ <Op NP$_{[features]}$>]]] (cf. Rizzi 2001: ex. 27-c)

WCO configurations

(7) a. *[Op <(NP)$_{[\alpha]}$>] [*his*$_{[\alpha]}$ ...] [<Op> (NP)$_{[\alpha]}$] *Non-specific chain*

b. [Op NP$_{[\alpha,\ \beta]}$] [*his*$_{[\alpha]}$ ...] <[Op NP$_{[\alpha,\ \beta]}$]> *Specific chain*

OPC configurations

(8) a. [Op <(NP)$_{[\alpha]}$>] [<Op> (NP)$_{[\alpha]}$] *pro*$_{[\alpha]}$ *Non-specific chain*

b. [Op NP$_{[\alpha,\ \beta]}$] <[Op NP$_{[\alpha,\ \beta]}$]> *pro*$_{[\alpha]}$ *Specific chain*

(9) a. *[Op <(NP)$_{[\alpha]}$>] [<Op> (NP)$_{[\alpha]}$] *lui*$_{[\alpha,\ \beta]}$ *Non-specific chain*

b. [Op NP$_{[\alpha,\ \beta]}$] <[Op NP$_{[\alpha,\ \beta]}$]> *lui*$_{[\alpha,\ \beta]}$ *Specific chain*

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