**A Left Branch Extraction Perspective on Bound Variables and Pronoun Insertion Strategy**

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Pronouns like *his* in (1) are well-known to be ambiguous between the bound and the referential readings. Not all languages pattern with English. As seen in its Serbo-Croat (SC) counterpart (2a), the 3PsSgMascPoss *njegov* (his) cannot get the bound-pronoun reading. This reading requires the possessive 'self' *svoj* (2b).

Trivially, whereas SC has two possessive pronouns, English has only one. This, however, does not seem to explain the pattern in (1) - (2). Romanian has the same inventory of formatives as SC (3PsSgMasc. *lui* in (3a) and the counterpart of the possessive 'self' *isi* in (3b)), but it patterns with SC only partially. Though Romanian *isi* gets the bound variable interpretation (3b) - which puts it *on a par* with SC (2b) - the 3PsSgMasc pronoun in (3a) is interpretatively ambiguous between the bound and referential readings, just like its English counterparts and quite unlike SC. The richer inventory of formatives, then, cannot explain why bound reading is illicit for SC *njegov*. The conclusion is that there is more to be said about the pattern in (1) - (2).

Taking Hornstein's (2001) account of (1a) as a starting point, I argue that the SC data in (2) can be explained and that the pattern can be accounted for. Under Hornstein's account, English must opt for the less economical derivation with bound pronoun because the movement derivation (4) is illicit, since English does not violate the Left Branch Condition (Ross 1967/1986). Namely, the movement derivation of (1a) first requires *everyone* to merge with *mother* (5a). The next step is the movement step; *everyone* is copied and merged with *love* yielding (5b). The derivation will not converge because this step is illicit due to the fact that English does not allow Left Branch Extraction – LBE (6). Hence, English must opt for the pronoun insertion strategy; it opts for the less economical, but convergent derivation.

Unlike English (1a), I argue that SC (2b) is a movement derivation. The steps of this derivation are given in (5), where the crucial difference between English and SC is in the fact that the second step of the derivation i.e. (5b) is not illicit since SC allows LBE (i.e. it is a L(eft) B(ranch) E(xtraction) language). Treating (2b) as a movement derivation requires modifications of Hornstein's account. Rather than thinking of all instances of bound-reading as a result of failed movement, the SC data forces one to think about the bound pronoun as a residue of movement i.e. as spelled out versions of traces (as suggested by Aoun 1982). In syntactic terms, this analysis correctly predicts that the distribution of NPs containing *svoj* and the local reflexive (anaphor) *sebe* is the same. Just like the reflexive *sebe*, the *svoj*-NP does not find itself in the subject position of a matrix clause. It always requires a c-commanding antecedent. This is not surprising; since Reinhart (1976), it is recognized that the structural configuration for the bound-variable anaphora is that of c-command, where $\beta$ can be construed as a variable bound by $\alpha$ iff $\alpha$ c-commands $\beta$. This analysis of (2b) also seems adequate in interpretative terms. Since this is a movement derivation, the bound-pronoun reading is expected. This prediction is borne out. Since SC is a Left-Branch Extraction language, it is not just the movement derivation is available, but the prediction is that the pronoun-insertion strategy is illicit. As a consequence, the bound-pronoun reading for *njegov* (1a) is predicted not to be available. Again, this prediction is borne out. In general, in a Left-Branch Extraction language like SC, one either gets an overt residue of movement (e.g. *svoj*) and obligatory a bound interpretation or a free pronoun (e.g. *njegov*) and a referential interpretation. This makes SC different from English, where the insertion of the pronoun will always give rise to a derivation that is interpretatively ambiguous.

The differences between English and SC are not only relevant for these two languages, but reveal a deeper pattern of crosslinguistic variation. Adding Dutch, German, Italian, Latin, and Spanish to the sample of languages under investigation, I conclude that there is a correlation in the way languages behave with respect to the pronoun insertion strategy, on the one hand, and LBE, on the other hand; languages that disallow LBE pattern with English, whereas those that allow LBE pattern with SC. I further argue that the split among languages in not 'random'. Rather, the findings give further support to the account of LBE-languages as determinerless (cf. Bošković 2005 and the references there). Last but not least, the data seem to justify an even stronger generalization whereby the availability of LBE is dependent on the presence of a DP-layer, and, hence, in principle, available even in languages with a category D, but restricted to those instance where the DP-layer is not

projected. Indeed, in those instances where English is argued to project only an NP (cf. (7a) and (8a)), rather than a DP (cf. (7b) and (8b)), it seems to behave quite like SC.

(1) **Everyone$_i$** loves **his$_{i/j}$** mother

(2) a. **Svako$_i$** voli **njegovu$_{*i/j}$** majku
b. **Svako$_i$** voli **svoju$_{i/*j}$** majku (Serbo-Croat)

(3) a. **Orice om$_i$** o iubeste pe mama **lui$_{i/j}$** (Romanian)
b. **Orice om$_i$ isi$_{i/*j}$** iubeste mama
'Everyone loves his mother'

(4) Everyone$_i$ loves [$t_i$ mother]

(5) a. loves [everyone's mother]
b. everyone loves [everyone's mother] (Hornstein 2001)

(6) *Whose$_i$ have you seen [$t_i$ play]?
(intended reading): Whose play have you seen?

(7) a. John went [home]/John likes cooking [at home] (John's home)
b. John went to [his home]/John likes cooking [at his home] (ambiguous)

(8) a. John says Peter likes cooking [at home] (only Peter's home)
b. John says Peter likes cooking [at his home] (either Peter's or John's home)

(Roeper and Pérez-Leroux 1997)

**References**


Aoun, J. 1982. On the Logical Nature of the Binding Principles: Quantifier Lowering, Double Raising of there and the Notion Empty Category. In J. Pustejovski and P. Sells (eds.) *Proceedings of NELS 12*: 16-35. Amherst: GLSA

Bošković, Ž. 2005.On The Locality of Left Branch Extraction and the Structure of NP. *Studia Linguistica 59* (1), 1-45.

Hornstein, N. 2001. *Move! A Minimalist Theory of Construal*. Oxford: Blackwell.

Reinhart, T. 1976. *The Syntactic Domain of Anaphora*. Ph.D. Dissertation. MIT.

Roeper, T. & A. Pérez-Leroux. 1997. The interpretation of bare nouns in semantics and syntax: inherent possessive, pied piping, and root infinitives. *MIT Occasional Papers in Linguistics* 12. MA: MIT Press.

Ross, J.R. 1967/1986. *Infinite Syntax*. Norwood: Ablex Publishing