

## ON THE STRUCTURE OF TP COORDINATION: DEDUCING THE CSC AND FURTHER UNIFYING ATB AND PARASITIC GAP CONSTRUCTIONS

In this talk I present evidence that in TP coordination, the second conjunct is adjoined to the  $\nu$ P. I then argue that the Coordinate Structure Constraint (CSC) is epiphenomenal, and can be deduced from the Condition on Extraction Domains (CED). This analysis will also formally unify Across-the-Board (ATB) and Parasitic Gap (PG) constructions.

**1. Lowering the adjunction site of the second conjunct.** I adopt here the basic idea of Munn's (1993) analysis of coordination, under which the second conjunct is adjoined to the first one. However, in the case of TP coordination, I propose that the second conjunct is a  $\nu$ P adjunct, like an adverbial clause. Evidence for this modified analysis concerns Condition C effects; as can be seen in (1), the subject of the first conjunct *c*-commands into the second conjoined TP, just like the subject of a main clause *c*-commands into the adverbial clause (2).

**2. Deducing the CSC.** One important consequence of this analysis is that extraction from the second conjunct, an adjunct, is then independently ruled out by the CED. As for extraction from the first conjunct, I argue that it can also be blocked without resorting to the CSC.

In this respect, Hornstein & Nunes (2002) argue that ATB constructions, unlike PG ones, obey a Parallelism requirement, illustrated in the examples in (3). If this is true, it could be argued that the grammar does not in fact block extraction out of the first conjunct; the first conjunct, unlike the second one, *is not an island*. The ungrammaticality comes from a representation in which an element has been extracted from the first conjunct but whose corresponding element in the second conjunct has *not* been extracted.

There is actually evidence that this parallelism requirement in ATB constructions goes beyond extracted elements. As can be seen in the Galician data in (4) (similar effects can be observed in other Romance languages), (4a) and (4b), in which the relative order of verb and subject is the same in the first and second conjuncts after the ATB extraction, are grammatical, while (4c) and (4d), in which that relative order has *not* been preserved, are degraded.

**3. Exploring the unification of ATB and PG constructions.** Another important consequence of the adjunction analysis of coordination that I propose here is that ATB and PG constructions have identical syntactic structure before extraction applies. This means that a unified analysis of the two kinds of constructions not only is possible but unavoidable. There are at least two analyses that try to unify both constructions; the Sideward Movement analysis (Nunes 2004) and the null operator movement analysis (Chomsky 1986; Munn 1993). I argue here that the Sideward Movement analysis is to be preferred since it accounts for the absence of Weak Cross Over (WCO) effects in the second conjunct (or adverbial clause) illustrated in (5), assuming that WCO is a constraint *on the movement operation*.

Under a Sideward Movement analysis, *who* in (5a-b) is copied from its base position and re-merged with the lexical verb of the main clause *before* the adjunct is attached. Crucially, this "sideward movement" of *who* does not "cross a co-indexed pronoun" in the sense of Postal (1971), since this movement is to a still unrelated syntactic object. This relative timing of Copy+Merge and adjunct attachment is also what allows extraction out of a soon-to-be adjunct island without violating the CED, as Nunes proposes.

This absence of WCO effects cannot be easily accounted for under a null operator movement analysis, under which we would have to stipulate that *only* a null operator does not induce WCO effects, without independent motivation. In addition, while Lasnik & Stowell (1991) have shown that null operators in certain constructions do not induce WCO, the effects are also absent with overt phrases (when the construction allows them), as in Relative clauses (6).

## Examples

- (1) a. \*He<sub>i</sub> bought the book and John<sub>i</sub> liked it.  
b. His<sub>i</sub> best friend bought the book and John<sub>i</sub> liked it.
- (2) a. \*He<sub>i</sub> bought the book because John<sub>i</sub> liked it.  
b. His<sub>i</sub> best friend bought the book because John<sub>i</sub> liked it.
- (3) a. [Which paper]<sub>i</sub> did you read e<sub>i</sub> and Mary recommend e<sub>i</sub>/\*[this book]?  
b. [Which paper]<sub>i</sub> did you read e<sub>i</sub> after Mary recommended e<sub>i</sub>/[this book]?
- (4) a. ¿A quen puido invitar Xan e chamar Xosé?  
A whom could invite Xan and call Xosé  
b. ¿A quen puido Xan invitar e Xosé chamar?  
c. ?\*¿A quen puido invitar Xan e Xosé chamar?  
d. ?\*¿A quen puido Xan invitar e chamar Xosé?  
'Who could Xan invite and Xosé call?'
- (5) a. Who<sub>i</sub> did Mary invite e<sub>i</sub> [and [his<sub>i</sub> best friend] see e<sub>i</sub>]?  
b. Who<sub>i</sub> did you stay with e<sub>i</sub> [before [his<sub>i</sub> wife] had spoken to e<sub>i</sub>]?  
(Lasnik & Stowell 1991)
- (6) This was [the employee]<sub>i</sub> who<sub>i</sub> his<sub>i</sub> boss couldn't stand e<sub>i</sub>

## References

- Chomsky, N. 1986. *Barriers*. Cambridge, MA: MIT Press.
- Citko, B. 2005. On the Nature of Merge: External Merge, Internal Merge, and Parallel Merge. *Linguistic Inquiry* 36:475-496.
- Hornstein, N. & J. Nunes. 2002. On Asymmetries between Parasitic Gap and Across-the-Board Constructions. *Syntax* 5,1:26-54.
- Lasnik, H. & T. Stowell. 1991. Weakest crossover. *Linguistic Inquiry* 22:687-720.
- Munn, A. 1993. *Topics in the Syntax and Semantics of Coordinate Structures*. Doctoral dissertation. University of Maryland, College Park.
- Nunes, J. 2004. *Linearization of Chains and Sideward Movement*. Cambridge, MA: MIT Press.
- Postal, P. 1971. *Cross-over phenomena*. New York: Holt, Rinehart, and Winston.
- Sag, I., G. Gazdar, T. Wasow & S. Weisler. 1985. Coordination and how to distinguish categories. *Natural Language and Linguistic Theory* 3:117-171.