

## Raising and hyper-raising across experiencer in Brazilian Portuguese: a vP phase evidence

Carolina Petersen (University of Maryland)

**Aim:** Looking at Brazilian Portuguese's pattern of (hyper-) raising an embedded subject over an experiencer DP, I'll focus on the asymmetry seen with respect to finite versus and nonfinite complement clauses when the embedded subject moves to the matrix Spec-TP and crosses over the experiencer WH-trace. Based on phasehood (Chomsky 2001), I'll show a step-by-step derivation of the finite and infinitive clauses can explain why infinitive subjects, but not finite ones, can raise over an experiencer-WH trace. This shows evidence in favor of successive cyclic movement through vP strong phase edge (Legate 2003 and Sauerland 2003).

**Theoretical Background:** Null subjects in indicative clauses in Brazilian Portuguese (BP) display all the diagnostics of obligatorily controlled PRO. Based on Hornstein (2001), Ferreira (2000, 2009) and Rodrigues (2004) analyze BP's null subjects as traces (deleted copies) of A-movement. Assuming Chomsky's (2000, 2001) Agree-based framework, Ferreira (2000, 2009) proposes finite Ts in BP are ambiguous. It can have either a complete or incomplete set of  $\phi$ -features (cf. Nunes 2008). BP came to license not only finite control, but also hyper-raising constructions (in the sentence of Ura, 1994). With this in mind, we can directly compare raising and hyper-raising in experiencer intervention context.

**Analysis:** BP's infinitive and indicative complement of raising verbs behave alike when the dative PP prevents the embedded subject from undergoing Move to matrix [Spec, TP], as we see in (1a)&(2a). By contrast, when the dative PP is extracted out of VP via cliticization, the blocking effect is no longer found, as in (1b) and (2b) (similar to Italian and French).

- (1) a. \*Os alunos parecem ao professor estar cansados  
*seems [to the professor]<sub>EXPRC</sub> the students to be tired*  
'The students seem to the professor to be tired.'
- b. Os alunos me parecem estar cansados.  
*The students to.me<sub>CLITIC</sub> seem to be tired*  
'The students seem to me to be tired.'
- (2) b. \*Os alunos parecem ao professor que estão cansados.  
*the students seem.PL [to the professor]<sub>EXPRC</sub> that are tired*  
'The students seem to me to be tired.'
- b. Os alunos me parecem que estão cansados.  
*the students to.me<sub>CLITIC</sub> seem.PL that are tired*  
'The students seem to me to be tired.'

Those complements behave differently when the intervener is the experiencer WH-trace. Raising the embedded subject out of infinitival complements is acceptable (cf. (3a)). In contrast, hyper-raising of a subject of an embedded finite clause is not (cf. (3b)).

- (3) a. A quem Pedro parece ser uma boa pessoa?  
*to whom Peter seems to be a nice person*  
'To whom does Peter seem to be a nice person?'
- b. \*/??A quem Pedro parece que é uma boa pessoa?  
*to whom Peter seems that is a nice person*  
'To whom does Peter seem to be a nice person?'

I argue that despite the surface similarities, the derivations of (3a) and (3b) are quite distinct. Building on Chomsky's (2001) PIC phasehood notion, the embedded C of infinitive clauses does not constitute a strong phase, while the finite embedded C in (3b) does. The embedded subject of

the infinitive clause can thus move directly from embedded Spec-TP to the matrix Spec-TP without having to stop in any intermediate landing site on its way there. On the other hand, the embedded subject of the finite clause does have to stop at embedded Spec-CP and matrix spec-vP to be able to reach [Spec,TP] where it checks EPP, Agrees and is Case marked by a  $\phi$ -complete T. As the experience-WH phrase also has to stop at the matrix Spec-vP to move out to Spec-CP position, the movement of the subject to this intermediate position is blocked, causing an intervention effect observed by the marginality of (2). This analysis shows evidence that spec-vP of raising verbs is an obligatory landing site for movement out of phase domains (Centeno&Vicente 2008). In BP this position can only be filled by one element.

**Consequences:** Independent evidence supports this analysis. If the intervention effect above is due not to a particular WH-experiencer construction, then any WH-element that undergoes cyclic movement should be expected to stop in phase edges of embedded C and matrix v and block the hyper-raising. That prediction is borne out (cf. (4a)). As predicted by our analysis, (4a)'s raising parallel sentence is well-formed (4b), for the embedded C is a weak phase head and allows for Spec-TP to Spec-TP movement of the subject to conform to PIC:

- (4) a. \*/??A quem Pedro parece que vai nos apresentar amanhã?  
*to whom Peter seems that will us introduce tomorrow*  
 'Who does it seem that Peter will introduce us to tomorrow?'  
 b. A quem parece que Pedro vai nos apresentar amanhã?  
*to whom seems that Peter will introduce us the new girlfriend of.his tomorrow*  
 'Who does it seem that Peter will introduce us to tomorrow?'

Second, we look at WH-questions of other simple finite embedded complement clauses in BP. It is possible to attest similar effects in finite control complements, considering the assumption outlined here to explain how the hyper-raising blocking effect is caused by the WH-extraction, However we show below that those sentences are acceptable (Ferreira 2000, 2009).

- (5) A quem Pedro disse que vai nos apresentar amanhã?  
*to whom Peter said that will us introduce tomorrow*  
 'Who did Peter say that he is going to introduce us to tomorrow?'

Although these fact seem to be evidence against the account proposed here, I will show that once we investigate the derivational steps of the movement of the embedded subjects of (4a) and (5) all their way to matrix Spec-TP in respectively hyper-raising and finite control, we are able to explain this contrast. The crucial difference is that *Pedro* in (5) receives the external argument theta role of the matrix verb *dizer* ('say') in vP before it enters into Agree relations moves to Spec-TP to be Case marked. Therefore (5) doesn't involve successive cyclic movement through phase edges, as (4b) does.

To conclude, I propose an analysis for an asymmetry between raising/hyper-raising in BP that shows evidence for successive cyclic movement via vP-edge in the computational system. Moreover, it can also account for independent finite control and hyper-raising distinctions in this language.

**Selected References:** CHOMSKY, N. 2001. Derivation by Phase. In M. Kenstowicz (ed.), Ken Hale: *A Life in Language*. Cambridge, MA: MIT Press. FERREIRA, M., 2009. Null subjects and finite control in Brazilian Portuguese. In *Minimalist Essays on Brazilian Portuguese Syntax* (J. Nunes, editor). Amsterdam: John Benjamins. HORNSTEIN, N., 2001. *Move! A Minimalist Theory of Construal*. Blackwell Publishers Inc. LEGATE, J. 2003. Some Interface Properties of the Phase. *LI* 34: 506-16. NUNES, J., 2008. Inherent Case as a Licensing Condition for A-movement: The Case of Hyper-raising Constructions in Brazilian Portuguese. *Journal of Portuguese Linguistics*, 7, 2:83-108. SAUERLAND, U. 2003. Intermediate adjunction with A-movement. *LI* 34:308-314.