

## Acquisition of Backward Anaphora of European Portuguese by Chinese Learners

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The Position of Antecedent Hypothesis (PAH) of Carminati 2002 defends that the antecedent of a null subject is preferentially in the SpecIP position, while that of an overt subject in other positions, see European Portuguese (EP) as example (see 1). It has been largely reported (e.g. Rothman 2007; Madeira et al 2012) that second language (L2) learners of the Romance null subject languages tend to accept the co-reference reading between the overt pronoun and the matrix subject in forward anaphora, an interpretation less favored by the native speakers, which is explained by the Interface Hypothesis of Sorace & Filiaci 2006, which predicts that properties on the interface between syntax and discourse-pragmatics are difficult for the L2 learners to acquire, see example of Madeira et al 2012 for EP (see 2). This study will focus on the acquisition of the interpretation of overt pronouns in EP by Chinese L2 learners, in the condition of backward anaphora, where there is a change in the processing order between the embedded pronoun and its antecedent, which may cause a different interpretation from that found with forward anaphora. This study will test how Chinese learners, who speak a discourse null subject language, interpret the overt pronoun in the left dislocated temporal adverbial adjunct (see 3), considering two processing strategies. The strategy 1 is based on Kazanina et al 2007, which considered that there is a filler-gap relation between the left dislocated pronoun and its potential antecedents. As a result, the parser attempts to find an antecedent as quickly as possible, which predicts that even an overt pronoun should choose the matrix subject as its antecedent, contrarily to what is predicted by PAH. The strategy 2, which favors the PAH, is inspired by the Hypothesis of Advantage of First-mention of Gernsbacher & Hargreaves 1988, according to which the pronoun in the left dislocated subordinate clause, which is the first entity to be processed, should be considered as the most salient. In that case, the pronoun should gain more accessibility, according to the Theory of Accessibility of Ariel 1990, 2001. Therefore, it should not be recovered as co-referent to the matrix subject DP, which is more informative. Both strategies may be adopted according to previous studies. Serratrice 2007 showed that the native speakers of Italian preferred an antecedent in the discourse context for the embedded overt pronoun, rather than the subject of the matrix clause (see 4), which corresponds to strategy 2, while the L2 learners chose the matrix subject as the antecedent, which favors strategy 1. Canceiro 2014 showed that, for the native speakers of EP, both the matrix subject and an antecedent in the context are accepted in the case of backward anaphora (see 5), which corresponds to both of the strategies. An off-line task of preference judgment was applied to a group of advanced Chinese learners of EP, as well as a control group of native speakers of EP, to investigate which strategy is adopted by the learners (see 6). The preliminary results show that the Chinese learners predominantly prefer the matrix subject as the antecedent of the left dislocated embedded pronoun, which appears to be consistent with the strategy 1. However, in the control group, there is an acceptance rate of this interpretation of only around 50%, as the native speakers also accept an entity in the context as the antecedent of the pronoun. As a result, there is still

a difference between the learners and the native speakers. It is predictable that both of the strategies function with the native speakers of EP, while only the strategy 1 functions with the Chinese learners. The result of this study may prove that certain processing strategies (strategy 1) are acquirable for the L2 learners, while others (strategy 2) are missing. An on-line task of eye-tracking will be followed to compare with the results of the off-line task.

### Examples:

- (1) *O João<sub>1</sub> viu o Pedro<sub>2</sub> quando [-]<sub>1</sub> / ele<sub>2</sub> entrou no cinema.*  
 the John saw the Peter when he entered in+the cinema  
 ‘John saw Peter when (he) entered the cinema.’ (adapted from Costa et al 1998)
- (2) *A Inês vive com a Ana desde que ela se divorciou.*  
 the Inês lives with the Ana since she divorced  
 ‘Inês lives with Ana since she got divorced.’ (adapted from Madeira et al 2012)  
 (Native speakers: *ela* ‘she’= Inês; Chinese L2 learners of EP: *ela* ‘she’= Inês or Ana)
- (3) *Quando ele voltou a casa, o João abraçou o Rui.*  
 when he returned to home the John hugged the Rui  
 ‘When he returned home, John hugged Rui.’
- (4) *Mentre lui<sub>3</sub> versa il vino nel bicchiere, il cliente<sub>1</sub> paga il conto al cameriere<sub>2</sub>.*  
 while he pours the wine in+the glass the client pays the bill to+the waiter  
 ‘While he pours wine in the glass, the client pays the bill to the waiter.’ (Serratrice 2007)
- (5) *Uma vez que ele<sub>1</sub> sai tarde, o filho da Maria<sub>1/2</sub> chega sempre atrasado.*  
 since he leaves late the son of+the Mary arrives always late  
 ‘Since he leaves late, the son of Mary always arrives late.’ (Canceiro 2014)
- (6) *Quando ela começou as férias, a Rita visitou a Sara.*  
 ‘When she started the holidays, Rita visited Sara.’  
*Quem é que começou as férias?* ‘Who started the holidays?’  
 A. a Rita B. a Sara C. uma outra pessoa ‘another person’

### Selected Bibliographic References

- Ariel, M. 2001. Accessibility theory: an overview. Sanders, T., J. Schilperoord & W. (eds.). *Text representation: linguistic and psycholinguistic aspects*. Amsterdam: John Benjamins.
- Canceiro, N. 2014. Sujeitos omitidos em frases coordenadas canónicas finitas e subordinadas adverbiais integradas e não integradas. *Textos Seleccionados, XXIX Encontro Nacional da Associação Portuguesa de Linguística*, Porto, APL 2014, pp. 145-159.
- Carminati, M. N. 2002. *The processing of Italian subject pronouns*. PhD dissertation, University of Massachusetts at Amherst, Amherst (Ma): GLSA Publications.
- Gernsbacher, M., & Hargreaves, D. 1988. Accessing sentence participants: The advantage of first mention. *Journal of Memory and Language*, 27, pp. 699-717.
- Kazanina, N., Lau, E., Lieberman, M., Yoshida, M. & Phillips, C. 2007. The effect of syntactic constraints on the processing of backwards anaphora. *Journal of Memory and Language*, v56, n3, 384-409.
- Madeira, A., M. F. Xavier & M. L. Crispim 2012. Uso e interpretação de sujeitos pronominais em português L2. A. Costa, C. Flores & N. Alexandre (orgs.) *Textos Seleccionados do XXVII Encontro da Associação Portuguesa de Linguística*. Lisboa:

Associação Portuguesa de Linguística, pp. 376-397.

Serratrice, L. 2007. Cross-linguistic influence in the interpretation of anaphoric and cataphoric pronouns in English–Italian bilingual children. *Bilingualism: Language and Cognition*, 10 (3), 2007, pp. 225–238, Cambridge University Press.

Sorace, A. & F. Filiaci 2006. Anaphora resolution in near-native speakers of Italian. *Second Language Research* 22:3, pp. 339–368.