

The role of proactive control during online adjective processing in Spanish L2

Rivera, M.¹², & Guijarro-Fuentes, P.¹²

¹Spanish, Modern and Classical Philology Department (University of the Balearic Islands).
²Instituto de investigación educativa e innovación, University of the Balearic Islands.

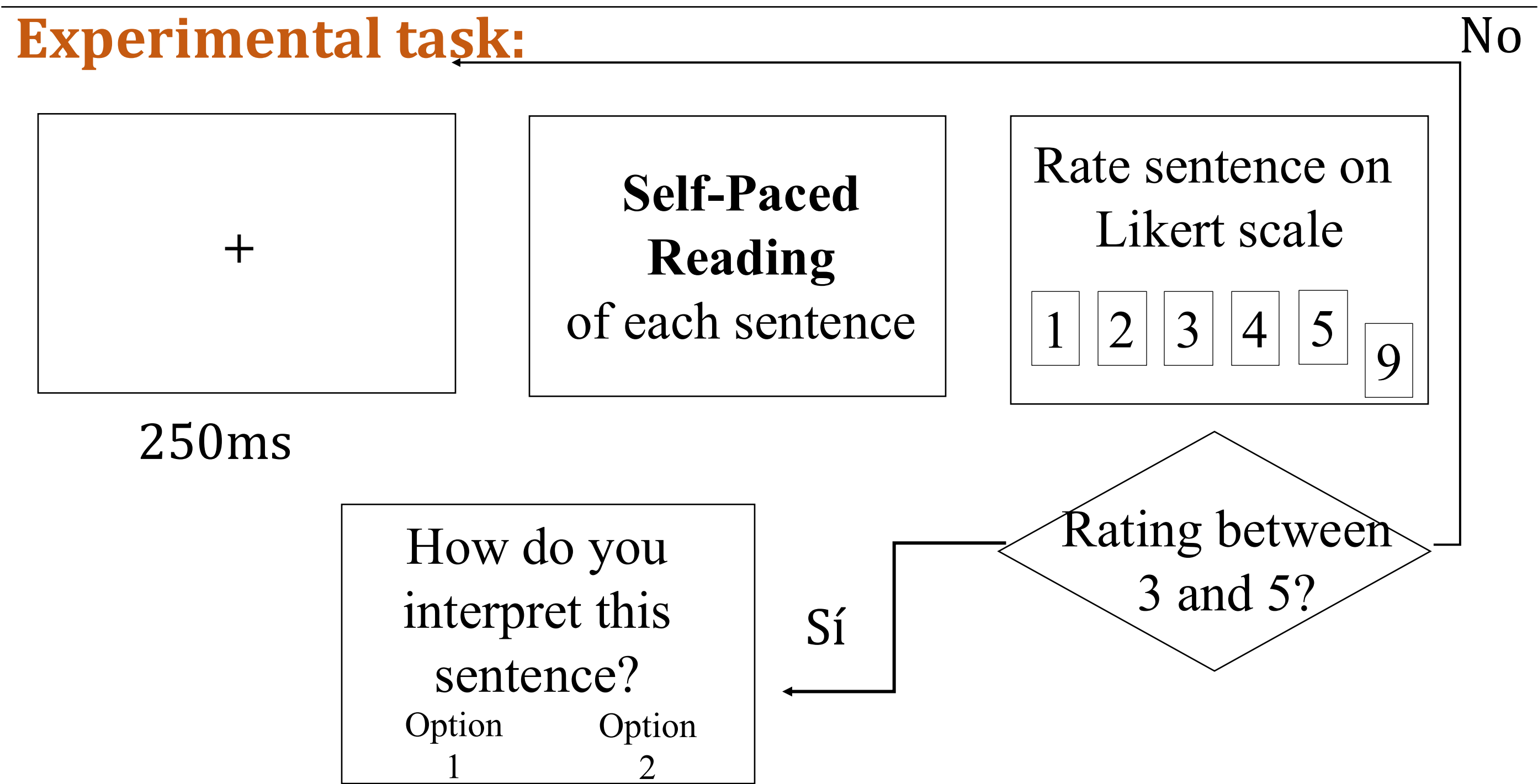
INTRODUCTION

This study examines the factors influencing the processing of features linked to **ADJECTIVE POSITION** in Spanish. Previous studies report that learners face **CHALLENGES** in learning the formal characteristics of adjectives until they attain an advanced level, especially when their **FIRST LANGUAGE** has a fixed adjective order (ENGLISH) as compared to those similar to Spanish (ITALIAN) (Guijarro-Fuentes et al., 2009). We expect differences in the pattern of reading between adjectives in the **PRENOMINAL** (marked) and **POSTNOMINAL** (unmarked) positions. We also expect to find **PROACTIVE CONTROL** to be a significant modulator of the reading effects, as more proactive control strategies predict shorter RTs when reading sentences in the prenominal position, as they are more challenging.

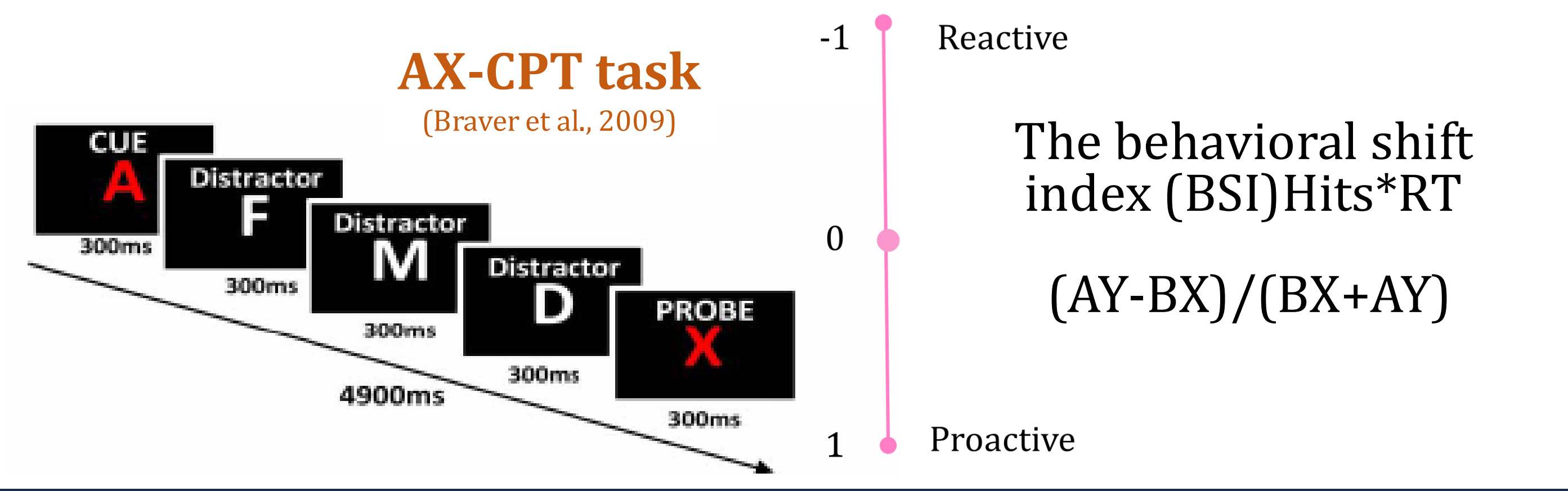
METHOD

Participants: 78 L2/Ln Spanish with L1 English (n=45) or Italian (n=33); 18-35 years old (M = 28.86; SD = 6.44)					
Spanish	Speak (yo)	Read (yo)	Write (yo)	Use of Spanish	DELE
L2 (n=53)	10.48(7.01)	11.93(6.03)	12.05(.53)	32,02%(ENG = 44.23 (5.93) IT = 45 (6)	
L3 (n=17)	14.77(7.44)	15.24(6.91)	15.65(6.95)	9,31% (19%) ENG = 36.25 (13.04) IT = 45.92 (6.37)	
L4 (n=8)	-	17.74(6.35)	20.5(5.36)	3,81% (11%) ENG = 41(9.89) IT = 45.3 (3.34)	

Materials	Prenominal	Postnominal
Adjective in variable position (k = 15)	Las valientes mujeres frenaron el ataque de ayer. <i>The brave women stopped the attack yesterday.</i>	Las mujeres valientes frenaron el ataque de ayer.
Adjective in fix position-grammatical (k = 15)	El presunto asesino fue capturado por la policía. <i>The alleged murderer was captured by the police.</i>	Las sanciones económicas afectaron al país. <i>The economic sanctions affected the country.</i>
Adjective in fix position-ungrammatical (k = 15)	*Las económicas sanciones afectaron al país.	*El asesino presunto fue capturado por la policía.

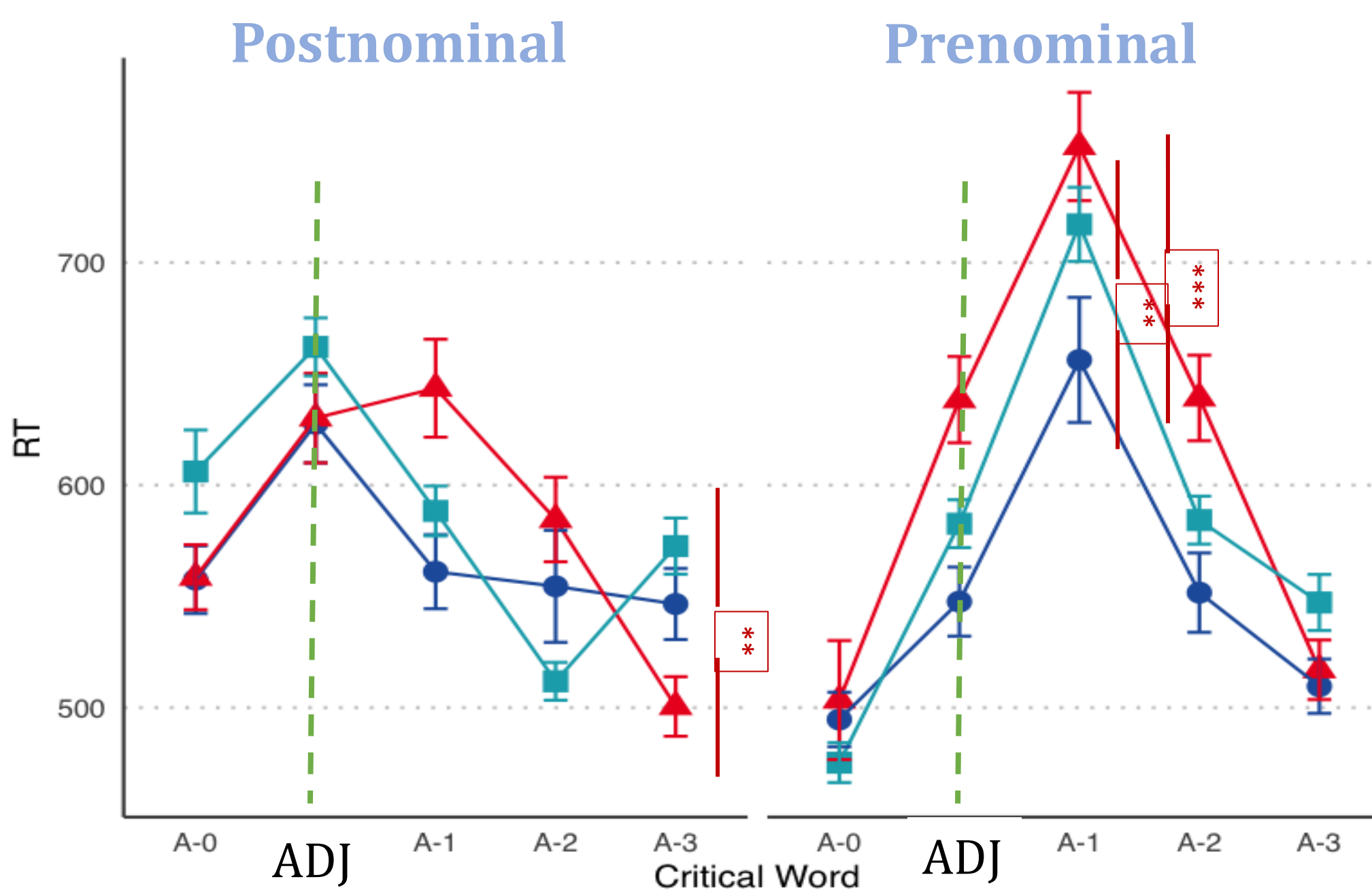


Individual differences measures

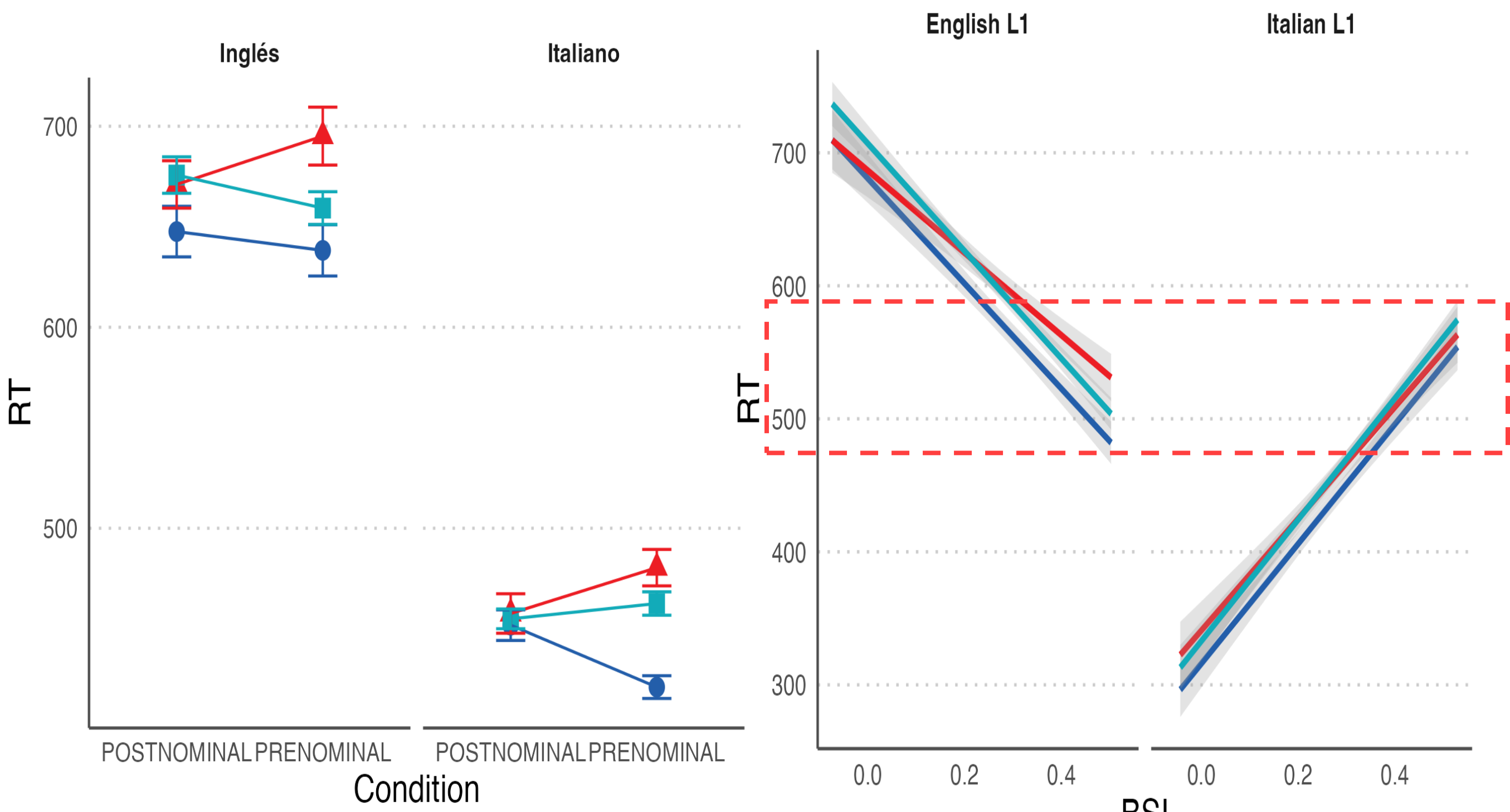


RESULTS

Self-paced Reading (results controlled by length of words)



Differences by group*Condition



DISCUSSION

- Our results show that sentences including adjectives in variable position are read equally to grammatical fixed-adjectives sentences, **ONLY FOR POSTNOMINAL SENTENCES**
- Sentences with variable adjectives are slower to read than grammatical fixed-adjectives sentences in A-1 **ONLY FOR PRENOMINAL SENTENCES**
- L1 English speakers take longer to read sentences in Spanish than L1 Italian speakers, and they are affected differently by **PROACTIVE CONTROL**

These results show differences in the **STRATEGIES** employed during L2 online processing (Bice & Zirnstein, 2024) based on the **NATURE OF THE L1**

References

Bice, K., & Zirnstein, M. (2024). Unraveling the Multilingual Mind: Exploring Individual Differences in Bilingual Language Learning and Regulation. *The American Journal of Psychology*, 137(2), 191-202. <https://doi.org/10.5406/19398298.137.2.10> Braver, T. S., Paxton, J. L., Locke, H. S., & Barch, D. M. (2009). Flexible neural mechanisms of cognitive control within human prefrontal cortex. *Proceedings of the National Academy of Sciences*, 106(18), 7351-7356. <https://doi.org/10.1073/pnas.0808187106>. Guijarro-Fuentes, P., Judy, T., & Rothman, J. (2009). On transfer, proficiency and cross-individual/aggregate SLA differences: Examining adjectival semantics in L2 Spanish. In A. Bennati (Ed.), *Issues in second language proficiency* (pp. 233-253). Continuum.