

Cognate Processing and the Role of False Friends in L2 French Speakers

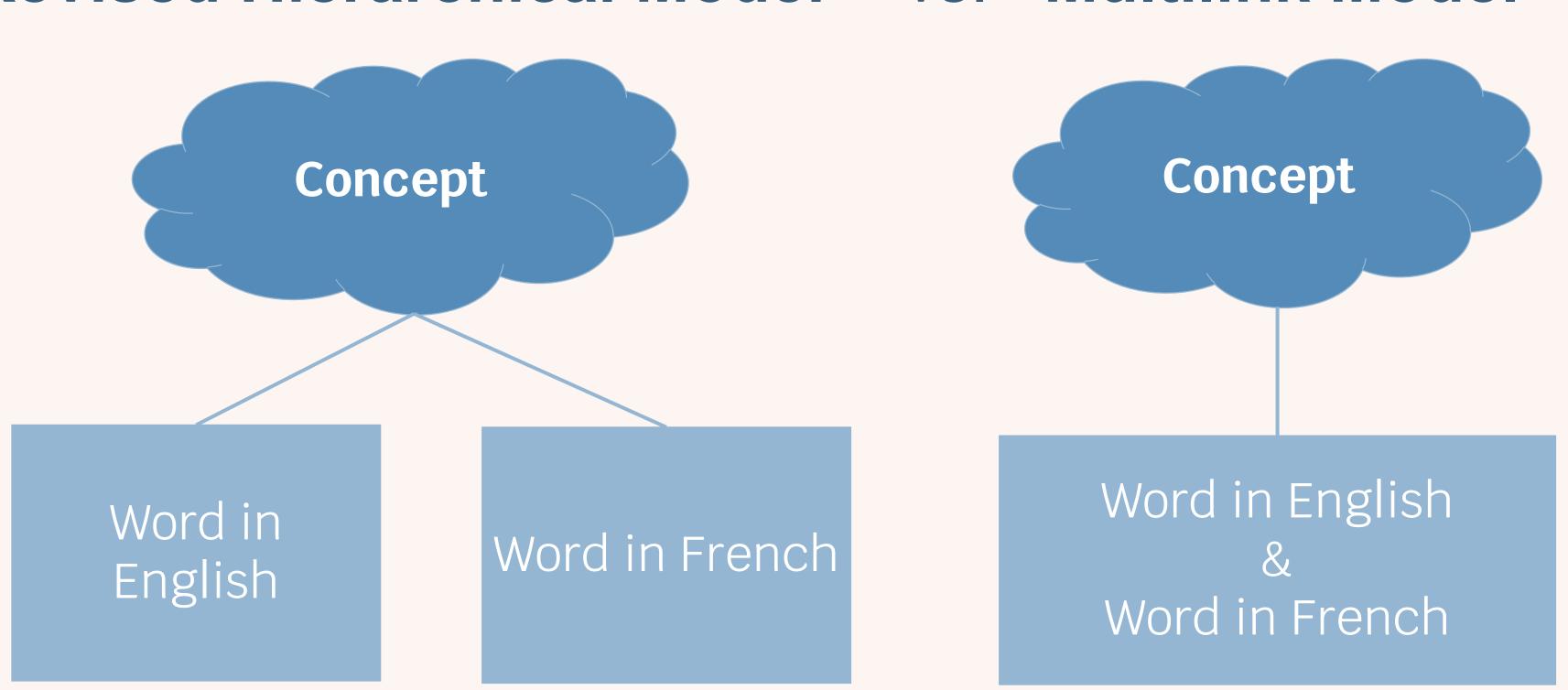
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Background on Bilingualism

Revised Hierarchical Model¹ vs. Multilink Model²



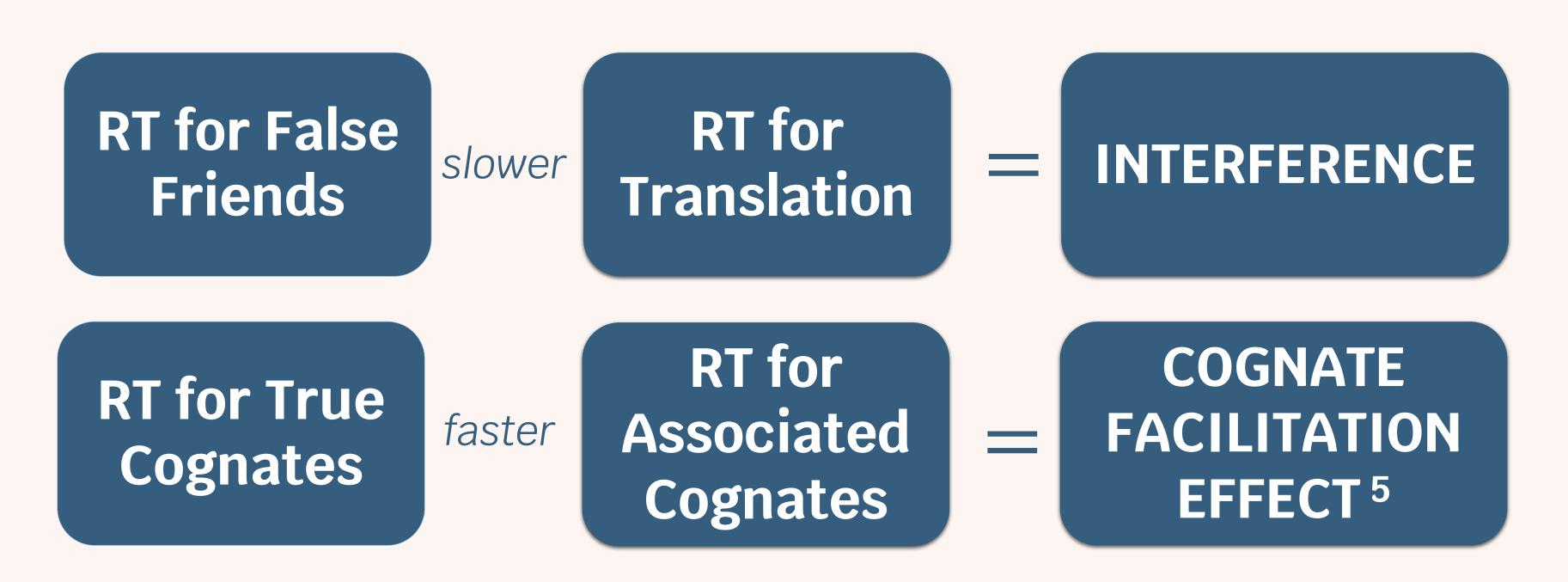
THE LEXICON: system in the mind that stores words³

- True Cognates: words that sound similar in two languages and have the same meanings⁴
- Associated Cognates: words that sound similar in two languages and but do have the same meaning⁵

English and French Examples

	FRENCH	ENGLISH	FALSE FRIEND
ASSOCIATED COGNATE	monnaie	coin	money
TRUE COGNATE	téléphone	telephone	n/a

Predictions



References

- 1. Kroll, J. F., & Stewart, E. (1994). Category interference in translation and picture naming: Evidence for asymmetric connections between bilingual memory representations. *Journal of Memory and Language*, 33(2), 149–174.
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- 3. Allan, K. (2006). Lexicon: Structure. Encyclopedia of Language & Linguistics (Second Edition), 148–151. https://doi.org/10.1016/B0-08-044854-2/01096-8
- 4. Woolpert, D. (2019). The impact of Spanish on the English lexical processing of Dual-Language learners. *TESOL Quarterly*, 53(1), 221-232. doi: http://dx.doi.org/10.1002/tesq.444.
- 5. Wu, J., Chen, Y., van Heuven, V.,J., & Schiller, N. O. (2019). Dynamic effect of tonal similarity in bilingual auditory lexical processing. Language, Cognition and Neuroscience, 34(5), 580-598.

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Results

Figure 1: Mean reaction times (ms) for each cognate type and related condition.

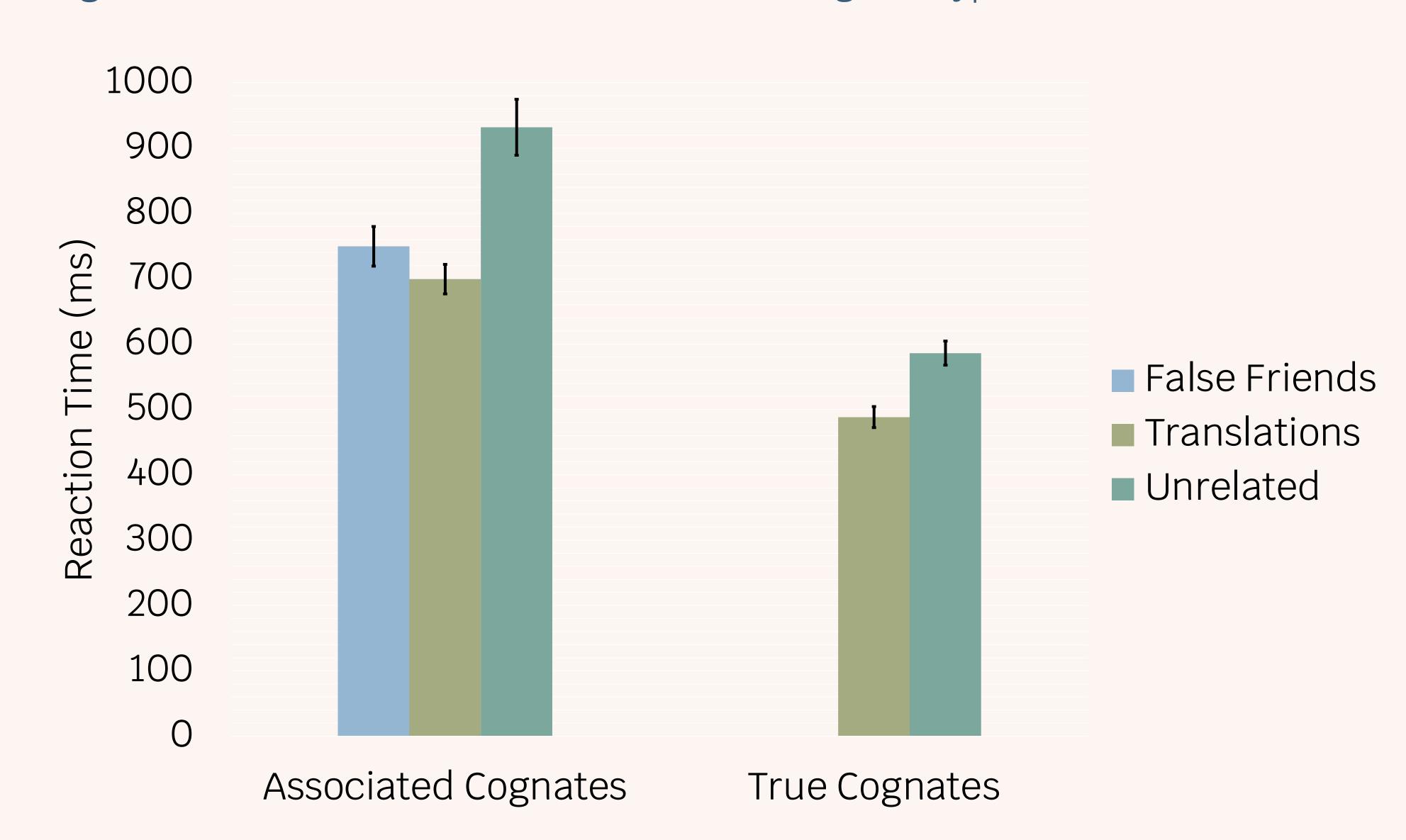


Table 1: Mean accuracy (percent) for each cognate type and related condition.

Cognate Type	Related	Average Accuracy	Standard Deviation
Associated Cognate	False Friend	89.2%	31.0%
Associated Cognate	Translation	89.4%	30.8%
Associated Cognate	Unrelated	76.8%	42.2%
True Cognate	Translation	98.9%	10.3%
True Cognate	Unrelated	94.0%	23.7%

Discussion

Interference of lexical items:

- Having a false friend interferes with access to true meanings of words in bilingual word recognition
- This suggests that there is a single lexicon that stores words from both languages
- Supports the Multilink Model

Replicated cognate facilitation effect:

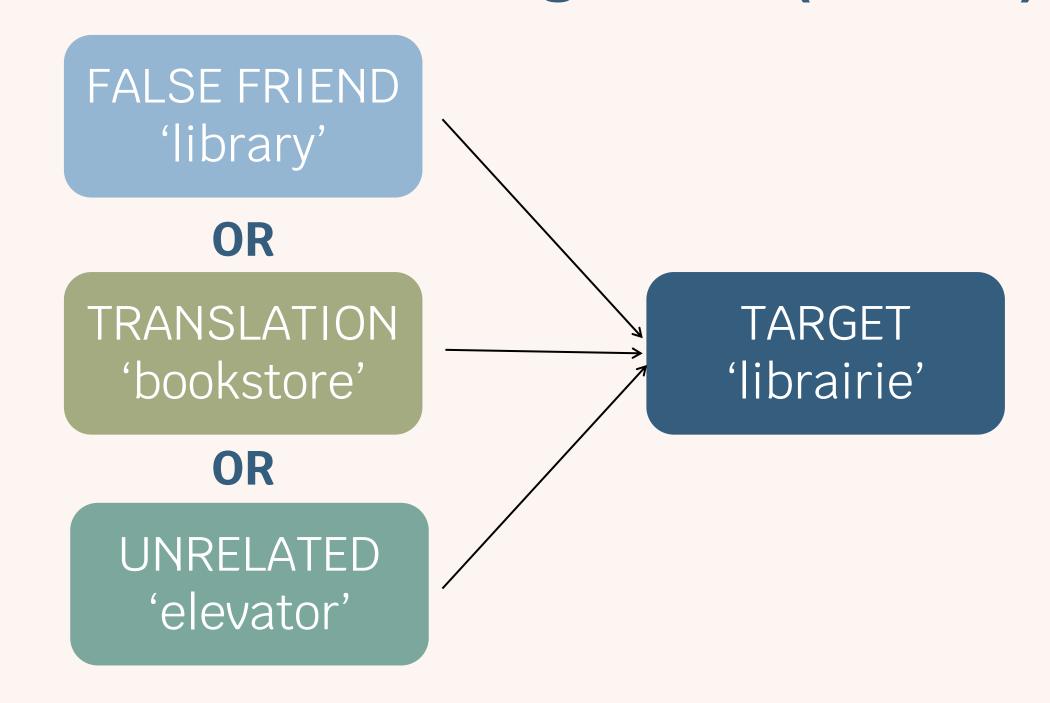
- True cognates are processed faster than non-cognate translation equivalents
- Words that sound similar across languages are processed faster than words that do not sound alike

Methods

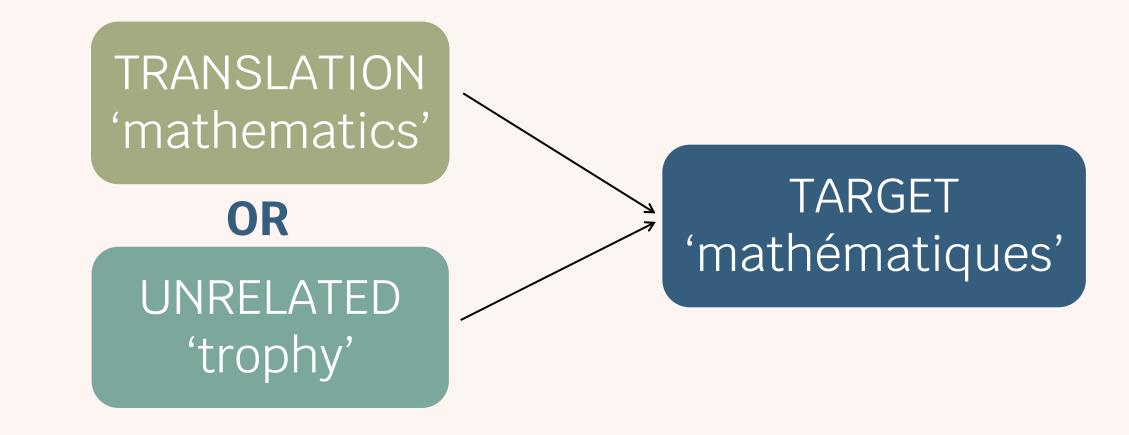
Auditory Translation Priming Task



Associated Cognates (n = 28)



True Cognates (n = 28)



Participants

- Native English speakers; secondlanguage French speakers (n = 50; mean age = 26 years; started French mean age = 5.5 years)
- Daily (%) use of French = 8.5%
- French speaking self-rating = 6/10
- French listening self-rating = 7/10

Future Considerations

Does interference only occur in novice learners of a second language, or is it also seen in speakers who are balanced bilinguals?