

Code-switching after language-specific syntax: Is there a cost?

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Background

- Cross Language Overlap/Ambiguity

	Dutch		English
Cognate Overlap in phonology, orthography and meaning	Hotel	=	Hotel
Homograph Overlap in phonology, orthography, not meaning	Room	=	Cream

If a bilingual can function as two monolinguals, word recognition in one language should not be influenced by overlap with another language.

Non-selectivity

- Parallel activity of words in the target language and also in the language not in use (e.g., Dijkstra, 2005)
- Yet bilinguals can read and speak in one language alone without random errors of language
- Bilinguals develop a mechanism of control that enables fluent performance and also code switching (e.g., Green, 1998; Myers-Scotton, 2002)

Role of Sentence Context

- Readers still experience cross-language activation from the unintended language (e.g., Duyck et al., 2007; Libben & Titone, 2009; Schwartz & Kroll, 2006)
- Semantic biases may eliminate such activity (e.g., Van Hell & De Groot, 2008)

Language-specific Syntax

- Syntax differs across language (semantics is largely shared)
- Language-specific syntax may provide cues to the reader
- An example of Spanish-specific syntax:

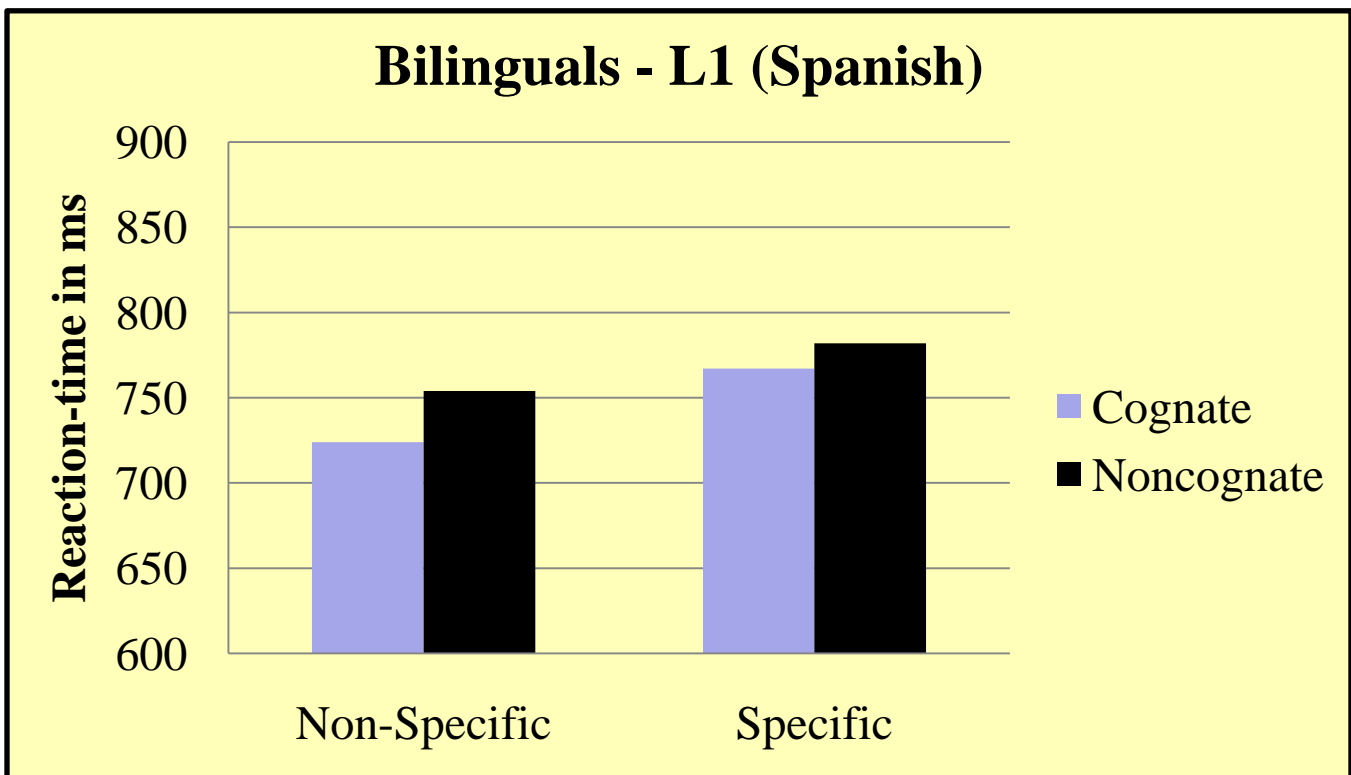
use of clitic (le),      subject of RC ([pro])

Las monjas le dieron las mantas que [pro] habían bordado a la directora del orfanato.

The nuns gave the quilts that they had embroidered to the director of the orphanage.

Gullifer et al. (2010)

- Preliminary evidence that language-specific syntax modulates parallel activation



- Cognate facilitation only in the syntax non-specific condition:
  - Language-specific syntax eliminates the cognate effect

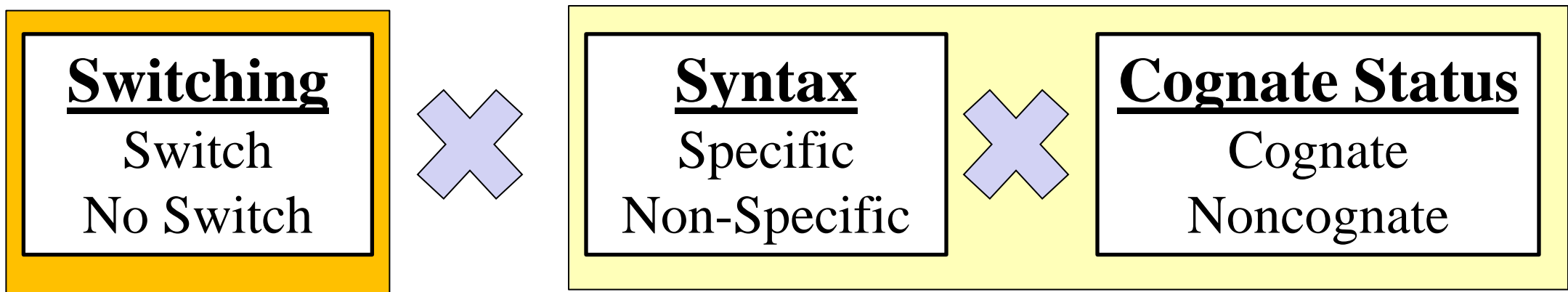
Code-switching (CS)

- Fluent bilinguals can seamlessly switch between language
- Across and within sentences (inter- vs intra-sentential switching)
- CS may depend upon the degree of parallel activation

Goal of the Current Study

- Further examine the role of language-specific syntactic constraints in modulating parallel activation of the bilingual’s two languages
- Examine whether CS depends on non-selectivity
- Determine whether a CS is more effortful following language specific syntactic constraints

Materials



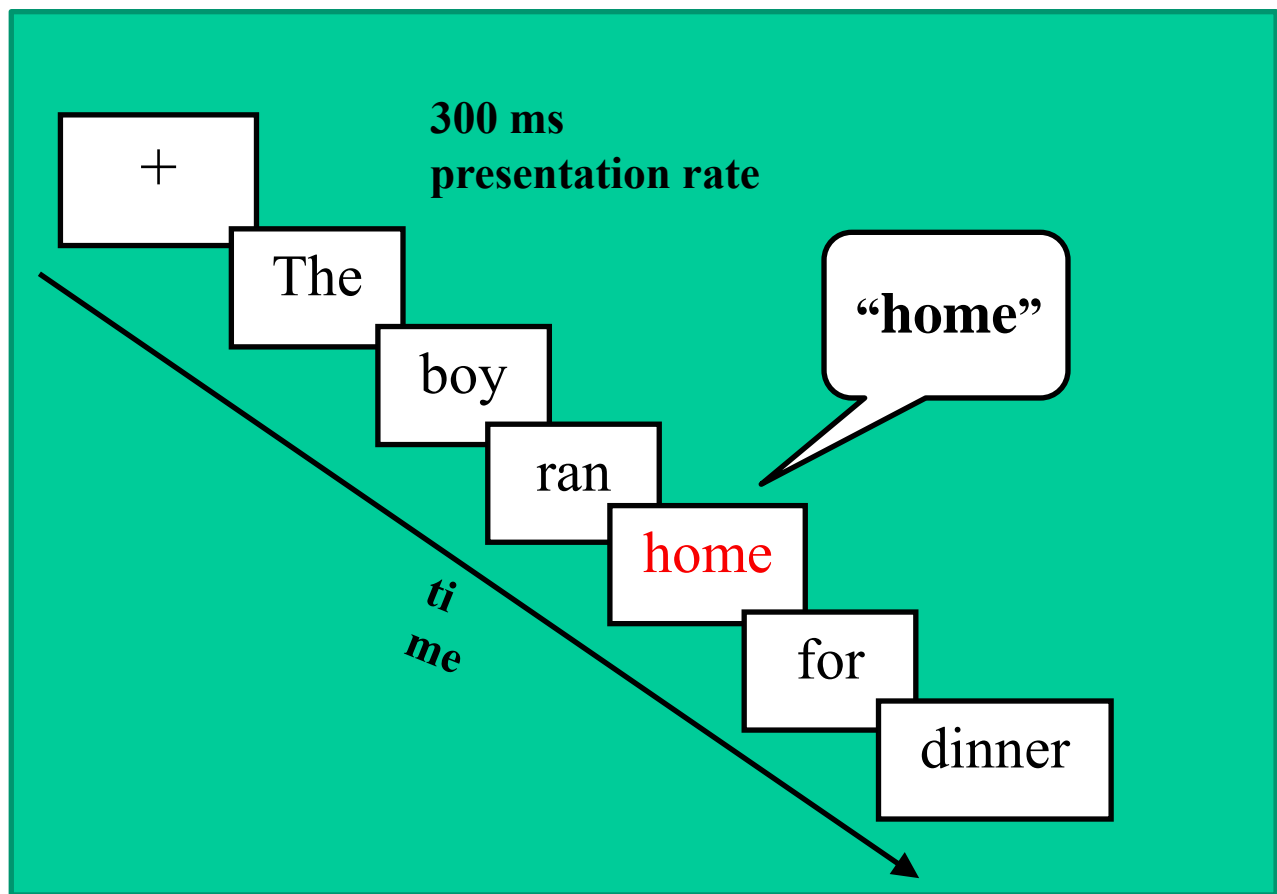
Examples (Cognates)

Code-switched Syntax Non-Specific	El taxista que estaba estacionado en la esquina de la panadería llevó <b>the professor</b> to her house.
English Syntax Non-Specific	The taxi driver who was parked at the corner of the bakery took the <u>professor</u> to her house.
Spanish Syntax Non-Specific	El taxista que estaba estacionado en la esquina de la panadería llevó al <u>profesor</u> a su casa

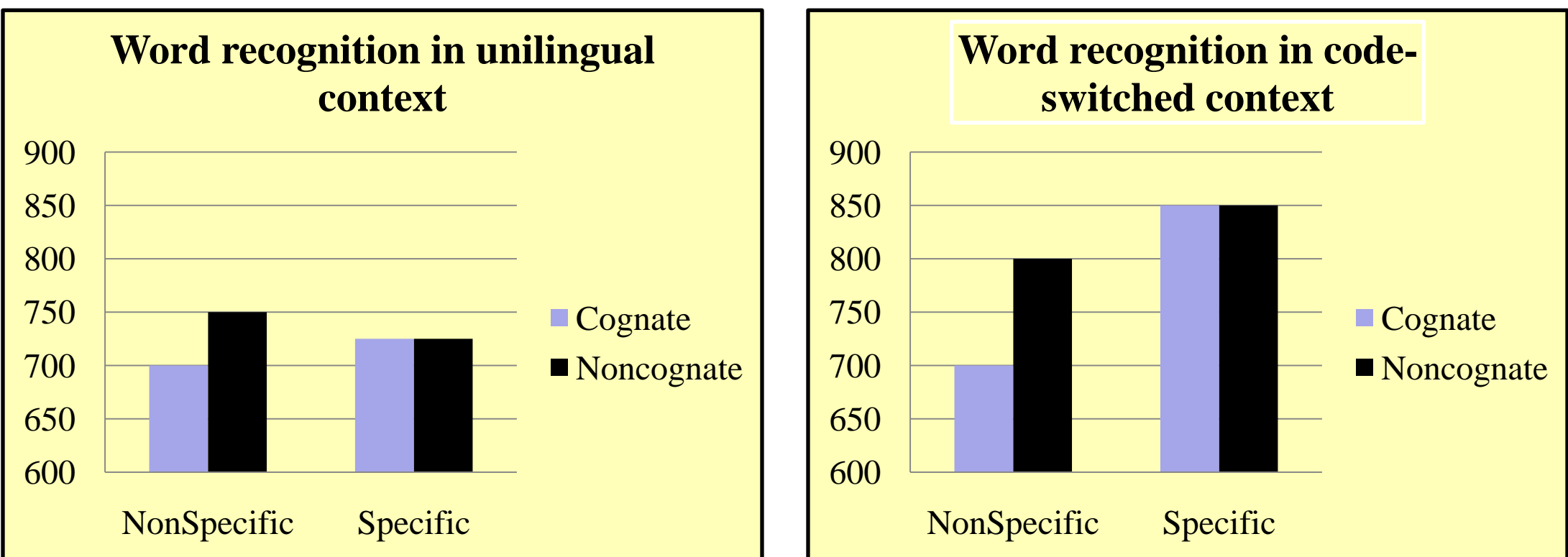
Participants

- Bilinguals living in Granada
  - L1 immersed, rarely code-switch
- Bilinguals living in the US (e.g., New York)
  - L2 immersed, frequently code-switch

RSVP Naming



Predicted Results



- Replicate results from Gullifer et al. (2010)
  - Cog facilitation in nonspecific
  - Eliminated after language-specific syntax
- If language-specific syntax causes selective access
  - No cognate effect
  - CS should be more effortful
- In non-specific
  - May get larger cognate effect
  - Recognition easier for cognates following CS

Discussion / Conclusions

- Elucidate the mechanisms underlying CS
  - Does CS depend on parallel activation?
- Investigate CS during reading
  - Is there a general cost? Is it modulated by cognates?