

# separate-syntax vs. shared-syntax accounts

## De Bot, 1992 – bilingual blueprint of the speaker

- conceptualiser construction of a preverbal message
- language-specific formulators grammatical and phonological encoding
- articulator pronunciation

## Ullman, 2001 – declarative/procedural model

- lexicon declarative memory system
- L1 grammar procedural memory system
- L2 grammar (not fully automatic) both declarative and procedural memory systems

## Hartsuiker et al., 2004 – bilingual lexicalist model

- conceptual level (conceptual information)
- lemma level (combinatorial, category, featural information)
- word-form level

# present perfect vs. passé composé

Do French-English bilinguals have a single, languageindependent representation of *present perfect* and *passé composé*, or two separate ones?

> auxiliary verb + past participle Mary has written a book. Marie a **écrit** un livre.

# Usage differences

### present perfect

- recent past
- results of past events

### past simple

- distant past
- no link to the present

#### passé composé

# Auxiliary verbs

### English

have Mary has written a book. Mary has left.

#### French

*avoir* 'have' – unergative verbs Marie a écrit un livre.

*être* 'be' – unaccusative verbs Marie est sortie.

# The organisation of grammatical tenses in the bilingual mind: English present perfect and French passé composé

# Anna Skałba Faculty of English, Adam Mickiewicz University in Poznań

# cross-linguistic syntactic priming

#### cross-linguistic syntactic priming – more frequent production of a sentence with a given syntactic construction in one language (e.g., The book has been read) following the exposure to the equivalent version of the construction in a different language (e.g., La lettre a été écrite)

## Stimuli

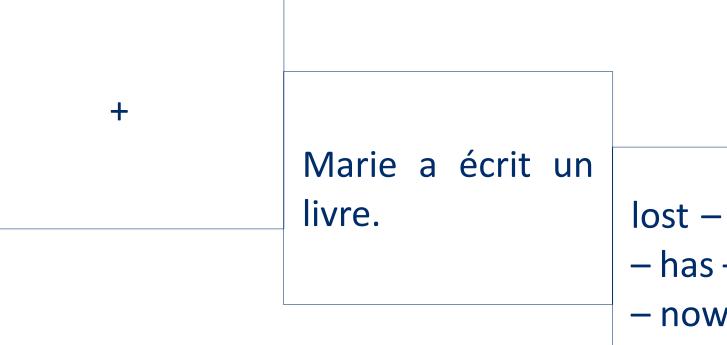
### 1. experimental condition

- prime sentence in French in *passé composé* Marie a écrit un livre
- target words enabling for the formation of a sentence in English in both *present perfect* and *past simple* John – has – lost – his – keys + additional words not fitting the sentence

#### 2. baseline condition

- prime noun phrase in French *le livre de Marie* 'Mary's book'
- target formed on the same principle as in the experimental condition

### Procedure



## **Hypothesis**

more *present perfect* sentences in the experimental condition (after a *passé composé* prime) as compared to the baseline condition (after a noun phrase prime)

# lost – keys – have – has – his – when – now – John

# Stimuli

- mes friends sont arrived 'my friends are arrived'

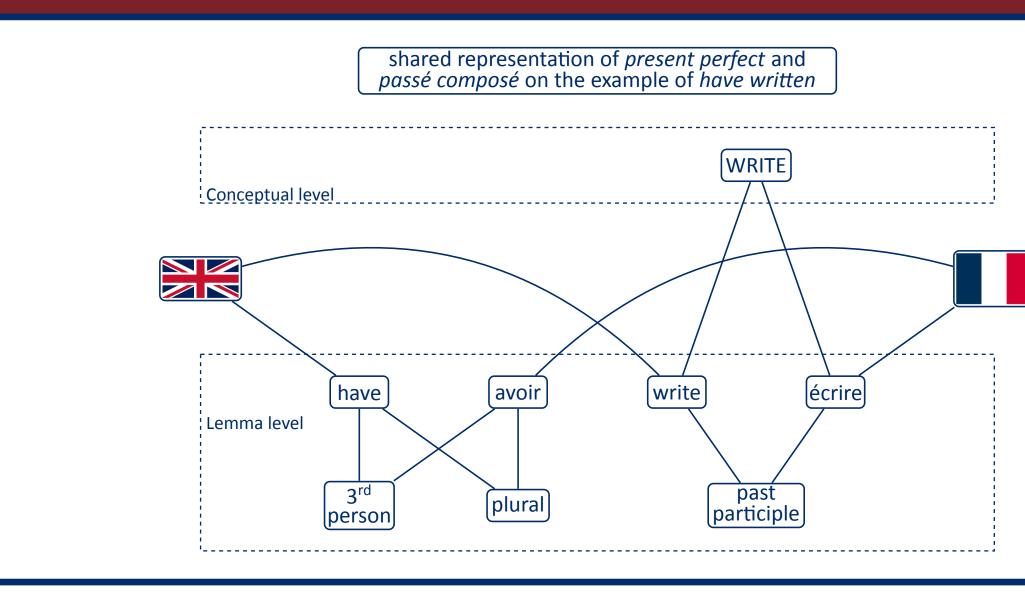
# 2. baseline condition

- the écrit has livre 'the written has book' divergent
- mes arrived sont friends 'my arrived are friends'

# Procedure

Hypothesis bilingual sentence superiority effect greater accuracy of recall for correct-order sequences (experimental condition) as compared to random-order sequences (baseline condition), regardless of auxiliary verb differences

# present perfect & passé composé within bil lexicalist model (Hartsuiker et al., 2004



# **Rapid Parallel Visual** Presentation

**sentence superiority effect** – more successful memorisation of grammatically correct sequences of words as compared to the same words presented in a random order

### .. experimental condition

- convergent
- has écrit the livre 'has written the book'
- divergent
- convergent

has écrit the livre

### ### ### ###

ingual	refe
	<ul> <li>Bernolet, S., Hartsuiker, R. J. &amp; Pickering, M. J. (2013) From langual language proficiency on syntactic sharing in bilinguals. <i>Cognition</i>, Cattell, J. M. (1886). The time it takes to see and name objects. <i>M</i> De Bot, K. (1992). A bilingual production model: Levelt's 'Speaking Declerck, M., Wen, Y., Snell, J., Meade, G., &amp; Grainger, J. (2019). Ut 149–154.</li> <li>Hartsuiker, R. J., Pickering, M. J., &amp; Veltkamp, E. (2004). Is syntax s in Spanish-English bilinguals. <i>Psychological Science</i>, <i>15</i>, 409–414. Hatzidaki, A., Branigan, H., &amp; Pickering, M. (2011). Co-activation ot 123–150.</li> <li>Loebell, H. &amp; Bock, J. K. (2003). Structural priming across language MacWhinney, B. (2005). A unified model of language acquisition. <i>Psycholinguistic approaches</i> (pp. 49–67). Oxford: Oxford Universit Tuninetti, A., Warren, T., &amp; Tokowicz, N. (2015). Cue strength in se <i>Experimental Psychology, 68</i>, 568–584.</li> <li>Ullman, M. T. (2001). The neural basis of lexicon and grammar in fir <i>Language and Cognition</i>, <i>4</i>, 105–122.</li> </ul>

## Stimuli

- 1. convergent condition
- 2. divergent condition

### Procedure

## Hypotheses





# eye-tracking

eye-mind hypothesis – cognitive processes linked to the focus of human eyes (e.g., longer fixations for difficult words, more regressions for ambiguous sentences)

Recently Mary has written a book. (Récemment Marie a écrit un livre.)

\*Last year Mary has written a book. (L'année dernière Marie a écrit un livre.)

> **Recently Mary has** written a book.

- 1 2 3 4 5
- 1 unacceptable
- 5 acceptable

#### 1. eye movements – convergent condition

shorter fixations and fewer regressions for French-English bilinguals (facilitation) than for Polish-English bilinguals

#### 2. eye movements – divergent condition

longer fixations and more regressions for French-English bilinguals (interference) than for Polish-English bilinguals

#### 3. acceptability judgements – divergent condition

higher ratings for French-English bilinguals (interference) than for Polish-English bilinguals

#### erences

age-specific to shared syntactic representations: The influence of second 127(3), 287-306.

*Aind, 11,* 53–65.

ng' model adapted. Applied Linguistics, 13, 1–24.

Inified syntax in the bilingual mind. Psychonomic Bulletin & Review, 27(1),

separate or shared between languages? Cross-linguistic syntactic priming

of syntax in bilingual language production. Cognitive Psychology, 62,

es. Linguistics, 41, 791–824.

In J. F. Kroll & A. M. B. De Groot (Eds.), *Handbook of bilingualism:* ity Press.

econd language processing: An eye-tracking study. *Quarterly Journal of* 

irst and second language: The declarative/procedural model. *Bilingualism:*