

# Do L2 lexical and syntactic development go hand in hand?

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## Introduction

- ▶ What causes learners to acquire new syntactic features?
- ▶ In L1, development of syntactic features linked to vocabulary size.
- ▶ David et al (2009) found link between lexical diversity and MLU but not uninterpretable features.
- ▶ Treffers-Daller & Rogers (2014) found link between receptive vocabulary knowledge and uninterpretable Tense features in L2 French.
- ▶ Lexical effects causing problems in structure building in L2 processing (Hopp 2016).

## Minimalism & the Lexicon: The strong view

Ouhalla (1991:7-10) suggests

*[T]here should in principle be a distinction between two notions of the lexicon, a grammatical lexicon which contains functional categories and which belongs to the domain of UG, [and] a mental lexicon which contains substantives and which exists independently of UG, that is an autonomous module of the mind/brain.*

Emonds (2002): there is a 'syntacticon' and a 'mental dictionary'.

## The "Interface" view

*The invariant syntactic knowledge which learners have is a template present in the mind of the learner which can be modified by the information inserted within it. There cannot be a driving force for development in the syntax. It follows therefore that that driving force really comes from the lexis. Towell (2003:4)*

## Gender

- ▶ French has grammatical gender on nouns (unlike English).
- ▶ Gender is divided between masculine and feminine.
- ▶ la [FEM] porte [FEM] (the door)

## Verb movement

- ▶ French = strong uninterpretable tense features on all verbs.
- ▶ French: Je regarde souvent la télé (I watch often TV).

## Research Questions

1. Is there a relationship between the acquisition of vocabulary and functional features (uninterpretable)?
2. If so, how do they interact?

## Tasks

- ▶ Receptive vocabulary test (X-Lex: Meara & Milton 2003)
- ▶ Cloze test (Tremblay 2007)
- ▶ Finite Story (Dimroth et al 2010) - written version
- ▶ Written story composition task

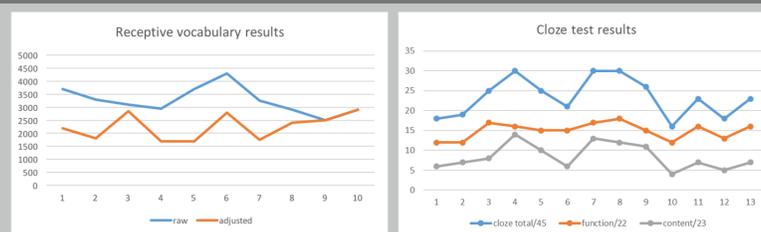
## Participants

- ▶ Thirteen learners of French at UK university.
- ▶ All had studied prior to university entry (level B1-B2)
- ▶ 10 female, 3 male.
- ▶ Paid £10 to participate.

## Contact Information

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## Baseline proficiency results



- ▶ Is there a link between the cloze test and vocabulary size?
- ▶ raw X-lex score and function words:  $r = -.549$ ,  $p = .038$ .
- ▶ Following David et al (2009) compared lexical diversity (VOCD) with MLU.:  $r = -.626$ ,  $p = .025$  (on film task).

## Functional features

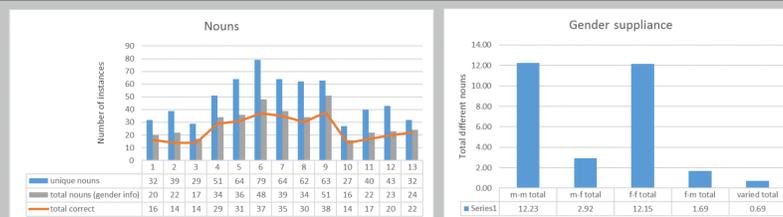
### Nouns

- ▶ Total number of unique nouns.
- ▶ Correct gender versus incorrect gender (versus changing gender).

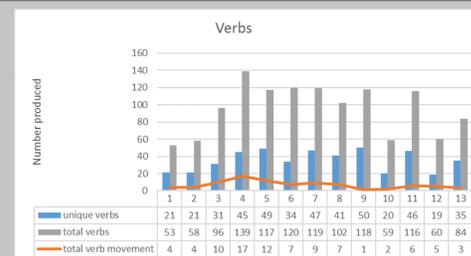
### Verb movement

- ▶ clear evidence of verb movement (negation, adverbs, quantifiers).
- ▶ included "Monsieur Rouge ne fait rien et il reste encore dans sa maison parce qu'il a peur." (F04) (*Mr Red does nothing and he still remains in his house because he is afraid*).

## DP results



## TP results



## Results summary

- ▶ Relationship between numbers of unique nouns and correct gender usage.
- ▶ correct gender (DP) relates to general proficiency measures (cloze, MLU, VOCD) but not receptive vocabulary.
- ▶ Relationship between total number of verbs used and verb movement.
- ▶ Verb movement (TP) relates to general proficiency measures (cloze, MLU, VOCD) but not receptive vocabulary.

## So what does this mean?

- ▶ In order to produce correct gender then you need lots of (different) nouns.
- ▶ In order to produce verb movement then you need to use lots of verbs.

## Discussion

- ▶ Similar findings to David et al regarding embedded clauses and MLU.
- ▶ Contrary results on gender and verb movement (only on the film task).
- ▶ BUT verb movement doesn't entail correct gender (contra structural building approaches)
- ▶ Strict disassociation between syntax and vocabulary (lexicon) is probably too strong.
- ▶ Does the lexicon need to have certain characteristics (thresholds? associations?) before syntactic features can be acquired?