Learning French in the primary school classroom: the origins of morphosyntax

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Overview of talk

- The research background: early instructed L2 learning
- Development of inflection in L2 French
- Research questions
- The "younger the better" L2 French project
- Results & discussion

Research background: early instructed L2 learning

- Characteristics of classroom learning:
  - Previously established L1
  - Restricted input
  - Structured practice
  - Limited communicative need (with implications for motivation)
  - Potentially enhanced roles for metalinguistic awareness + feedback
- Classroom learning is much studied with post-beginners
- L1 acquisition, early bilingual acquisition also much studied (Han & Rast, 2014)
- Beginnings of classroom L2 learning (natural languages) much less studied by comparison

Research background:
early instructed L2 learning (2)

- Adult instructed learners make early progress with inflectional morphology (VILLA project: Dimroth et al. 2013, Hinz et al 2013)
- Child instructed learners initially make slow progress with inflectional morphology (Shintani, 2015)
- Child learners rely strongly on formulaic language (Wong-Fillmore, 1976)
- The longitudinal "Progression Project" tracked 12 y.o. beginner learners of L2 French for 2 years (from Term 2 of study), finding that
  - Chunk learning interacted with the emergence of inflectional verb morphology over time;
  - initial failure to learn chunks by some learners compromised their overall classroom progress (Myles et al. 1998, 1999)

Research questions (this paper)

- How far does L2 morphosyntax emerge in the earliest stages of instructed classroom learning, for 7/8 year old learners?

- What is the relationship between the early learning of L2 formulas and the first appearance of L2 verb inflection?

- What is the relationship between the appearance of L2 verb inflection and the Determiner Phrase (article plus noun)?

- How can patterns of early morphosyntax emergence best be accounted for?

- Is early L2 morphosyntactic development in children more like L1/early bilingual development or adult SLA?

The 'starting ages' project

The "starting ages" project

Research design: participants

73 young learners in two schools, all L1 English

- Year 1 (5/6 year-olds, n = 27)
- Year 3 (7/8 year-olds, n = 26) (focus of this talk)
- Year 7 (11/12 year-olds, n = 18)

No previous instruction in target language (French)

Vocabulary pre-test showed only 6 words known above chance level:

Bonjour – madame – oui – un – deux – trois

Research design: classroom input

- Part-time qualified teacher (employed by project):
  - 38 hours of French instruction for each group of learners
  - 19 weeks at the rate of two weekly hours

- A common set of pedagogic principles delivered in an age-appropriate way

- An oracy-led approach, literacy in supporting role only

- All lessons audio and video recorded + CHAT transcription + observation notes, i.e. all L2 classroom French input was fully documented

Research design: testing

- Pre-test
  - Receptive vocabulary test
- Mid-project test (after 18 hours teaching)
  - Story retelling (discourse + syntax)
  - Elicited imitation (vocabulary, syntax)
  - Role play (discourse, vocabulary, syntax)
  - Input-based receptive vocabulary test (based on analysis of lexical input)
- Post-test (after 38 hours teaching)
  - As mid-project test, + working memory test
- Delayed post-test (2 months later)
  - Same as mid-project
- Focus groups about previous knowledge of French and general awareness of France and French language; attitudes; motivation
- One to one interviews (to explore learning strategies/ attitudes/ motivation)

Elicited imitation task (Yan et al., 2016)

- Stimuli of varying lengths with up to 9 familiar words

- Items are contextualised (see next slide)

- Participants hear an utterance and are asked to repeat it as exactly as possible

- Assumed that where the stimulus is an appropriate length, the participants can only repeat what they have been able to process in the utterance (Bley-Vroman & Chaudron, 1994)

- Learners are also asked comprehension questions in English after each section (to ensure their focus is on meaning)

Mes amis

Voici Xavier c'est une tortue

Voici Emilie c'est un lapin

Emilie est marron et blanche

Elle mange une carotte

Elle a de longues oreilles

Xavier ne peut pas courir vite

Il ne mange pas de carottes

Questions :

•**What is Emilie eating?**

•**What can't Xavier do?**

Analysis of EI results

- All individual lexical items coded on 3-point scale:

0	item not produced
1,2	prosodic placeholder produced
3	item correctly produced

- Individual productions analysed for:
  - Reproduction of formulaic verb phrases (VPs)
  - Reproduction of non-formulaic VPs
  - Reproduction of DPs within stimuli (19 items)

L2 production task (role play)

- Children worked with investigator in pairs/ triads
- Role play was semi-structured:
  - Exchange of personal information (names, ages, personal appearance, preferences) with a doll (voiced by investigator)
  - Description of doll's possessions (mini toys)
  - Group game "*Jacques a dit …*" ["Simon says …"]
- Investigator scaffolded children to complete all tasks
- Much production was primed

Analysis of role play tasks

- Role plays transcribed in CHAT

- CLAN-supported analyses at group and individual level for
  - Mean length of utterance (words)
  - Lexical output (types and tokens)
  - Formulaic utterances
  - Non-formulaic utterances of 2+ words (VPs and DPs)

Sample Y3 role play extract

*INVF: Maxence tu as un animal ? tu as un animal ?

*MAXE: what's that ?

*CORF: le chat .

*MAXF: le chat .

[...]

*INVF: Corinne tu as un animal ?

*CORF: un hamster .

*INVF: ehm ehm et comment il s' appelle ?

*CORE: I have got millions of animals .

[...]

 *INVF: un hamster oui et quoi d' autre ?

*CORE: I have got le chien .

*INVF: il est quelle couleur ton chien ?

*CORE: ehm I have got +... black . I have got +... I have got +... marron .

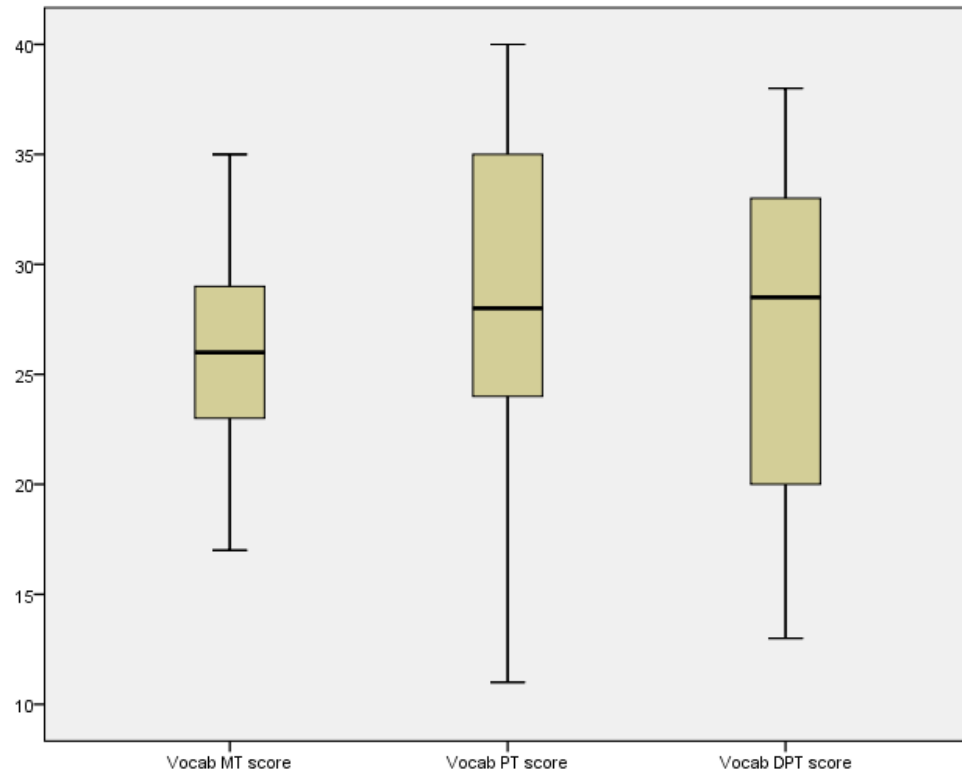*INVF: un chien marron ? ehm ehm .

*CORF: le chien marron .

Results 1: Overview of progression (Y3 group, n=26)
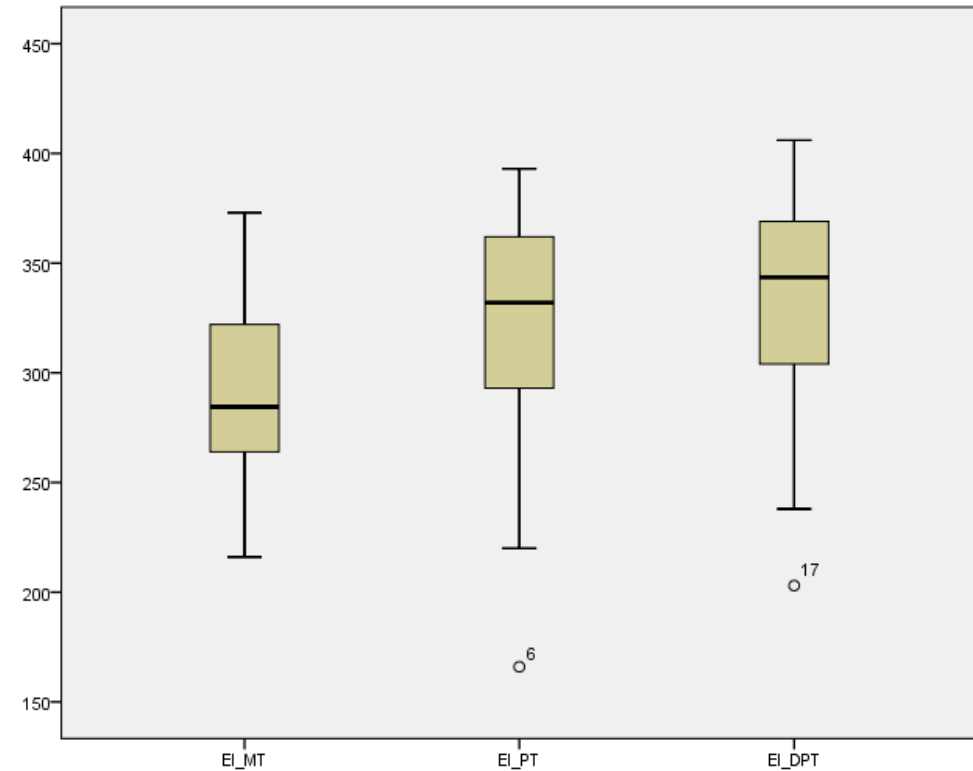
Overall progression (vocabulary & EI)

Receptive vocabulary

(Improvement not significant)

Elicited Imitation (total scores)

(Improvement significant, large effect size: ANOVA, Wilks' Lamda =.421, F(2,24)=16.528, p<.000, multivariate eta squared = .579)

Overall progression (role play output)

Time point	Utterances (group total excl. INV)	Words (group total excl. INV)	MLUw
Mid test	859	2006	2.34
Post test	1232	2853	2.32
Delayed post test	1086	2550	2.42

Results 2: Formulaic utterances and verbal inflection

(Re)production of high frequency formulaic sequences in EI test

Item no.	Item (chunk underlined)	Item accuracy at Mid test (%)	Instances in teacher input (30 lessons)	No. lessons where heard
1	Bonjour <u>je m'appelle</u> Suzie	92.8	127	12
16	<u>Quel âge as-tu</u>, Suzie ?	96.4	123	6
17	<u>J'ai</u> trois <u>ans</u>	97.1	188	6
24	<u>Asseyez-vous</u> tout le monde	92.1	240	23

Only one other complete item ever approaches this level of accuracy: "<u>Je n'ai pas de </u>soeurs" (91.9 at DPT; 51 occurrences in teacher input in 10 lessons)

(Re)production of inflected V forms in EI test

Forms	Input frequency	Accuracy in reproduction
Je n'ai pas As-tu Elle a Je m'appelle	High (50+ tokens)	High (>2)
J'ai C'est NP est	High	Mixed/ affected by immediate context
Je suis Elle n'a pas Il mange elle ne mange pas	Low	High
Elle s'appelle Il s'appelle NP ne peut pas	Low	Low

Change in inflected V forms with time

Mean scores for 24 V forms within EI test

(on 0-3 scale, forms within chunks included)

One way repeated measures ANOVA found a significant effect for time (Wilks' Lamda = .761, $F_{(2,22)}=3.46$, $p<.049$, multivariate eta squared = .239)
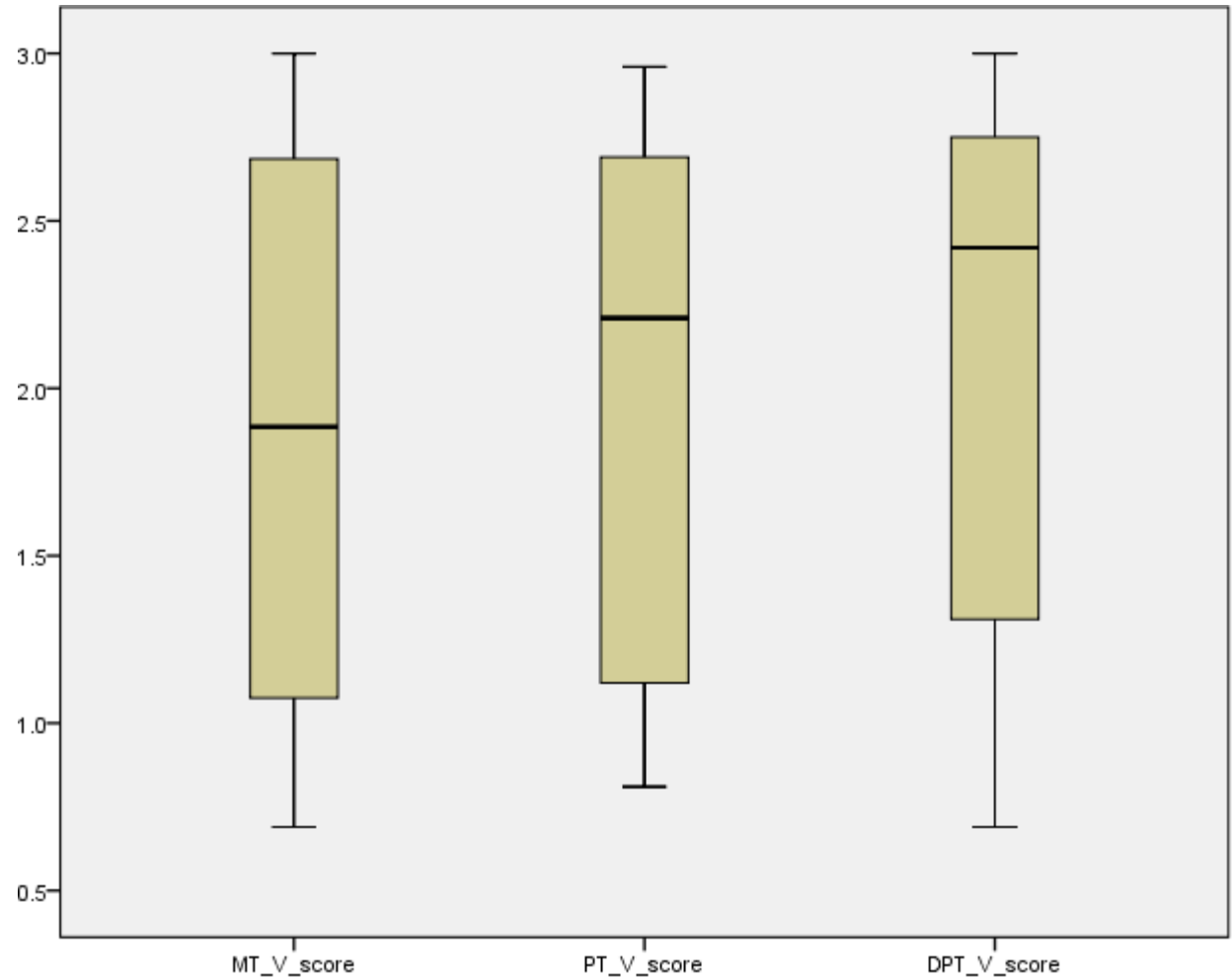
Production of formulaic language in role play (Y3 Post test)

Formulaic utterances relevant to role play task (all high frequency in T input)

Ça va

Ça va bien

Comment t'appelles-tu

Je m'appelle xx

J'ai xx ans

Quel âge as-tu

Jacques a dit xxx

Levez-vous

Asseyez-vous

Touchez xx

J'aime xx

J'ai xx

Mean number of formulaic utterances produced (tokens)

	Independent	Scaffolded/ approximate	All
Mean	5.96	.77	6.73
S.D.	2.01	.82	2.07

Production of inflected verb forms (outside formulaic chunks: n=6)

Prompted

elles s'appellent Gigi and Lou

carnet est bleu

il s'appelle Lou il s'appelle Jo

elle s'appelle le sœur Jo

elle est grand

Independent

il est blanc il est noir

Results 3: Determiner phrases

(Re)production of DPs in EI test (Y3 group)

- EI test included 19 Determiner phrases (Ns preceded by Indef/Def, Sing/Pl articles)
- Participants (n=26) produced four response types:
  - Zero responses (0+0)
  - Bare Nouns, either Placeholder or Accurate (0+P, 0+N)
  - Placeholder Determiners with Placeholder or Accurate Ns (P+P, P+N)
  - Accurate Determiners with Placeholder or Accurate Ns (Det+P, Det+N)

- Determiners were (almost) never produced without a following N

(Re)production of DPs in EI test (contd)

	Bare nouns*	D+N*
MT	48 9.9%	388 80%
PT	38 7.76%	412 84.08%
DPT	35 7.1%	434 88.03%

* Including place holders

Production of bare Ns/DPs in role play (Y3 Post tests)

	All Ns types	All Ns tokens	Bare N tokens	Bare N + Adj tokens	Det + N (+Adj) tokens
Mean (per child)	10.38	14.54	7.88	.23	6.62
S.D.	5.01	10.01	6.69	.51	4.4
% of all Ns (tokens)	n.a.	100.0	**52.65**	1.59	**45.77**

Examples:

*Jacques a dit * "pieds"*   *un lapin rose*
*j'aime * rouge*   *deux soeurs*
                                    Jacques a dit "les pieds"

Discussion: formulaic utterances and the emergence of VPs

- After 38 hours of instruction, participants are making good progress with memorising and using a set of formulaic sequences/utterances which are frequent/ valuable in the setting of classroom exchanges
- Less salient verb chunks may not be "noticed" (e.g. *c'est*)
- Little evidence yet of learners having started extracting verbs from chunks to use them productively
- Little evidence of productive use of verb inflections
- Reproduction in EI test of some VPs is very context sensitive
- Overall VPs show "item learning" (in the context of formulaic sequences) rather than "system learning"

Discussion: Nouns and Determiner Phrases

- Nouns are being learned and used productively
- Some DPs may have been memorised as chunks (e.g. *"les épaules"* – the shoulders)
- Participants can increasingly produce non-chunk DPs (e.g. *"un crayon vert"* – a green pencil)
- Bare nouns are rare in the EI, suggesting that learners are starting to have a full syntactic structure for DPs
- Bare nouns are common (52%) in the role play
- The fact that both English and French have articles may facilitate early (re)production of L2 articles (note errors where the two languages diverge, e.g. *"J'aime * violet"* [= I like purple]
- Learners rarely transfer English adjective placement from English (*un crayon **vert** – a pencil green)*

Conclusion

- Learners have made more progress on the acquisition of Determiner Phrases (DP) than the acquisition of Verb Phrases (IP)

- This suggests a dissociation between the projection of DP and IP, unlike in first or early bilingual acquisition

- However, our learners do not behave like adult SLA learners either, who very rarely omit determiners (e.g. Granfeldt 2000)

- In the role play, they behave more like L1 or early bilingual learners, who often produce bare nouns and placeholders

- Verbs appear in the context of formulaic sequences; little evidence after 38 hours that they have started breaking them down to free up the verbs to use them productively (Myles et al. 1998; 1999)

Conclusion (ctd.)

- Earlier = better in an instructional context?
  - Assumption is that younger learners will pick up the grammar of the language in the same way as first language learners do, and therefore outperform older learners
  - Evidence that learning process in 8 year olds in this study is different from both L1/bilingual learners and adult SLA learners
  - Implications for speed of acquisition unclear (but project as a whole showed that older learners were faster, confirming the literature on this topic e.g. Munoz, 2006)

Project team (ESRC award RES-062-23-1545)

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- Christophe dos Santos (Research Associate)
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