Testing the Initial State

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Outline

Rationale
Methodology
Results
Discussion & Conclusion

Structure of French and English
Theories of L2 acquisition
Research questions

Background

- Originally part of my PhD research (collected Dec 2006 & March 2007)
- Looking at the acquisition of negation & adverbs.

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- Examine what role (if any) the L1 (English) plays in L2 (French) development.
- Empirically test influential theories of L2 initial state.

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- Empirically test influential theories of L2 initial state.
- PhD funded by AHRC (ref: 2005/120142) and was part of the AHRC funded FLLOC project (ref. 112118)
- Lead by Florence Myles (Newcastle (now Essex)) and Ros Mitchell (Southampton now retired)
- www.flloc.soton.ac.uk

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Word order differences: negation

French

- Marie (ne) lit pas le livre.
  M. (ne) reads not the book
  S-V-Neg-O

- *Marie (ne) pas lit le livre.
  S-Neg-V-O

English

- *Marie reads not the book.
  S-V-Neg-O

- Marie does not read the book.
  S-do-Neg-V-O

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- Marie (ne) lit pas le livre.
  M. (ne) reads not the book
  S-V-Neg-O

- *Marie (ne) pas lit le livre.
  S-Neg-V-O
  .

BUT S-aux-Neg-V-O

- Marie (ne) a pas lu le livre.
- Marie has not read the book.

English

- *Marie reads not the book.
  S-V-Neg-O

- Marie does not read the book.
  S-do-Neg-V-O

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Word order differences: adverbs

French

- Marie lit souvent le livre.
  M. reads often the book
  S-V-A-O

- *Marie souvent lit le livre.
  S-A-V-O

English

- *Marie reads often the book.
  S-V-A-O

- Marie often reads the book.
  S-A-V-O

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Word order differences: parameter/ feature setting

According to Pollock (1989) these differences are the result of different verb placement.

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Word order differences: parameter/ feature setting

According to Pollock (1989) these differences are the result of
different verb placement.

In English the lexical verb remains in VP. Auxiliaries and modals in
TP
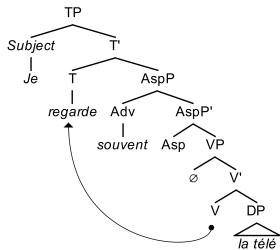
In French all verbs raise from VP to TP.

French has strong uninterpretable Tense feature on all verbs
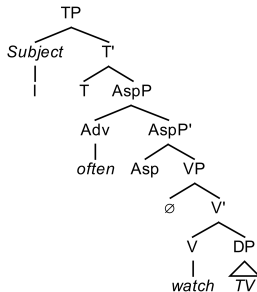(Lasnik 2007).

English does not.

Learnability issue: English learners must add the Tense Feature to
all verbs.

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Underlying phrase structure (adverb), Pollock 1989, Cinque 1999

English

French.

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Theories of L2 acquisition

- Organic Grammar/Minimal Trees (Vainikka and Young-Scholten 1996, 2005)
    - Romano (2008) & Yuan (2001)
    - Myles (2004, 2005)
- Full Transfer/ Full Access (Schwartz and Sprouse, 1996)
    - Grüter 2006, 2008
    - Bohnacker (2006)
- Modulated Structure Building (Hawkins, 2001)

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Predictions of Full Transfer/Full Access

1. Functional categories will be present from the outset.

2. There will be evidence of L1 transfer in functional categories, i.e. adverbs and negation may appear pre-verbally (75% on S&S criteria).

3. Re-setting to the target L2 feature is possible given sufficient input.

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Predictions of Organic Grammar

1. Initial stage with no evidence of functional projections - i.e. a bare VP with no tense or agreement beyond default forms.
2. Functional projections will emerge gradually.
3. No L1 transfer of functional projections, i.e. once tense is acquired then verb raising should be obligatory (at least 60% on VYS criteria).

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Predictions of Modulated Structure Building

1. Initial stage with no evidence of functional projections - i.e. a bare VP with no tense or agreement beyond default forms.

2. Functional projections will emerge gradually.

3. There will be evidence of L1 transfer in functional categories, i.e. L1 English learners of French will initially hypothesize a weak uninterpretable tense feature so adverbs and negation may appear pre-verbally.

4. Re-setting to the target L2 feature is possible given sufficient input.

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Predictions summary

	FT/FA	OG	MSB
VP only		✓	✓
Functional categories develop		✓	✓
Functional categories from outset	✓		
L1 transfer in functional categories	✓		✓

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Research Questions

1. what does the second language learner possess at the outset of the L2 acquisition process
   - Do they have functional categories (TP) from the outset?
   - Is there evidence for a VP only stage?
2. what is the role of the first language (L1) in L2 acquisition?
   - Is there evidence of L1 transfer in any functional categories present?

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Participants
Task

Subjects

- 28 instructed English native speakers learning French in UK school
- 1 year of study (78-94 hours of French)
- 10 native speaker controls (ERASMUS students in UK)

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Tasks

Each student completed four tasks:

1. Pre-test: X-lex receptive vocabulary measure

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Each student completed four tasks:

1. Pre-test: X-lex receptive vocabulary measure
2. Oral production task
   - one task elicited negation and adverbs
   - 10 obligatory contexts for each structure.
   - each student completed the production task before the judgement task

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   - 10 items each for negation and adverbs.

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1. Pre-test: X-lex receptive vocabulary measure
2. Oral production task
   - one task elicited negation and adverbs
   - 10 obligatory contexts for each structure.
   - each student completed the production task before the judgement task
3. Comprehension task
   - 10 items each for negation and adverbs.
4. Grammaticality judgement task
   - 64 tokens on task
   - equally weighted between grammatical and ungrammatical
   - students had to circle whether a sentence was very good/ good/ bad/ very bad/ don't know
   - 16 items targetting negation, 24 for adverbs

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Example of oral production adverb task

Student had to give a short
sentence including the word
given.
Target: Elle lave souvent le chien.
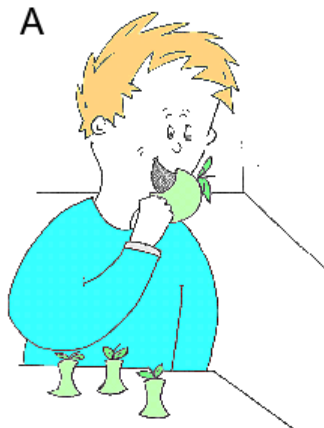(Gloss: She washes often the
dog)

souvent

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Example of oral production negation task

Student had to give a short
sentence saying the person was
not doing the activity.
Target: Elle ne joue pas au golf.
(Gloss: She plays not golf)

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Comprehension: example of adverb item

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Comprehension: example of negation item

A

B

Vocabulary results

X-lex receptive vocabulary scores

|	Xmas	Easter	Controls
Raw	1278.57	1096.43	4920.00
Adjusted	457.14	435.71	4770.00
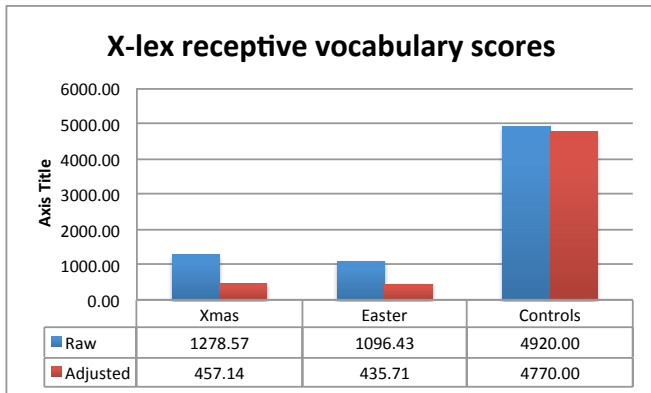
- Xmas = 78 hours of instruction
- Easter = 94 hours of instruction
- No sig differences for Raw ($p=.673$) or Adjusted scores ($p=.920$)

Examples of adverb oral production

- elle regarder de téé souvent (FS23: SVXA).
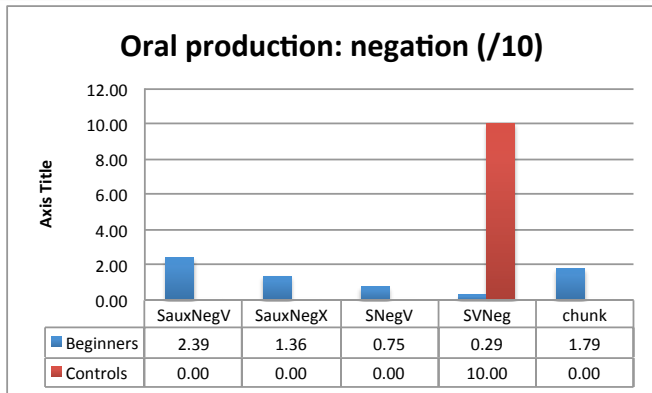- elle encore faire la natation (FS19: SAV)

Oral production results:adverb

Oral production: adverbs (/10)

	SVAX	SVA	SAV	SVXA
beginner	0.75	1.29	4.61	1.96
control	6.10	3.40	0.00	0.40
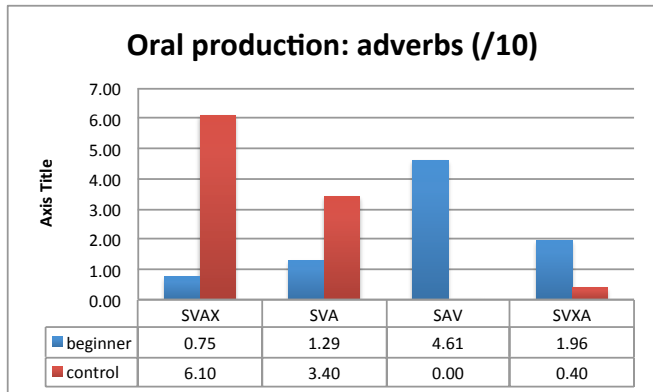
- target structure: SVAX (but SVA also grammatical)
- L1 structure: SAV = most common structure for beginners (129/280).

- il ne pas boire (FS17: SNegV)
- elle n' est pas brosse les dents (FS01: SauxNegV)

Oral production results: negation

Oral production: negation (/10)

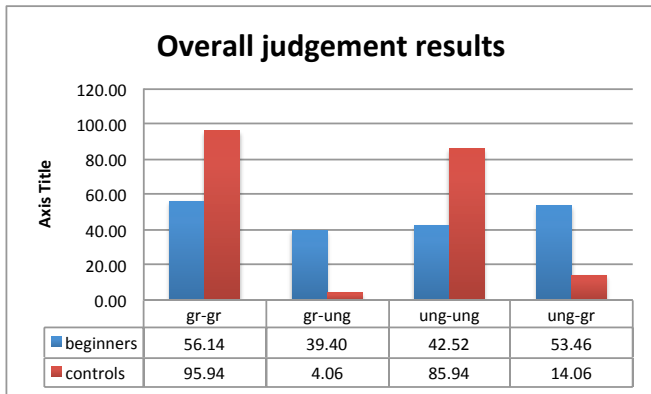|	SauxNegV	SauxNegX	SNegV	SVNeg	chunk
Beginners	2.39	1.36	0.75	0.29	1.79
Controls	0.00	0.00	0.00	10.00	0.00

- target structure: SVNeg = almost unattested in beginners
- L1 structure: SNegV or possibly SauxNegV/X.
- auxNeg = most common structure (SauxNegV: 67/280, SauxNegX: 38/280)

Comprehension task results

Comprehension results

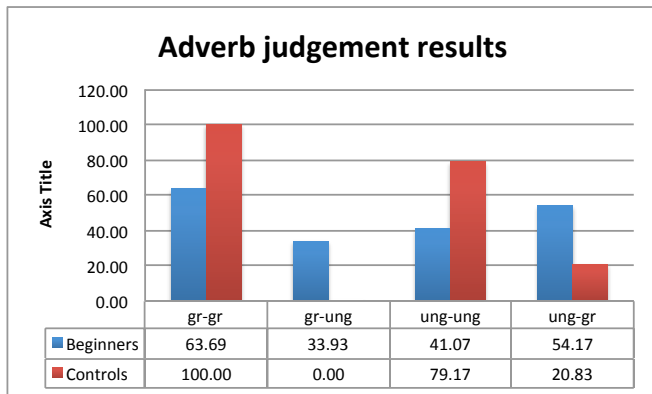|	negation	adverb
■ beginner	53.93	65.71
■ control	99.00	94.00
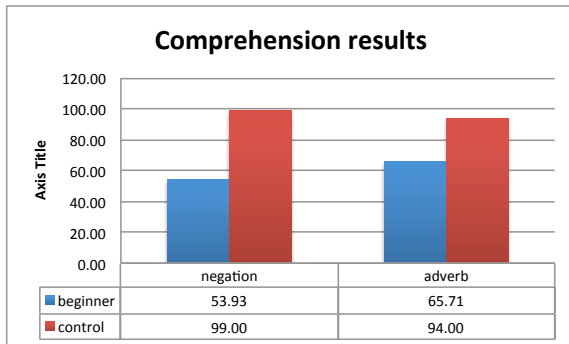
- comprehension at chance level for negation. Higher for adverbs.
- significant difference between negation and adverbs for beginners ($p < .05$)

Grammaticality judgement task results: overall

Overall judgement results

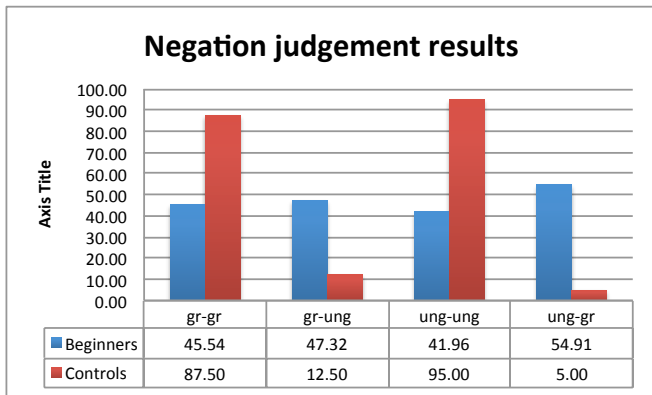|	gr-gr	gr-ung	ung-ung	ung-gr
beginners	56.14	39.40	42.52	53.46
controls	95.94	4.06	85.94	14.06

- For all items on GJT (includes clitics)
- Slight tendency for beginners to accept rather than reject.

Grammaticality judgement task results: adverbs

Adverb judgement results

	gr-gr	gr-ung	ung-ung	ung-gr
Beginners	63.69	33.93	41.07	54.17
Controls	100.00	0.00	79.17	20.83

- Beginners accept ungrammatical SAV (57/112: L1 order).
- Some controls accept ASVX (lentement, souvent) and SVXA (toujours, encore)

Grammaticality judgement task results: negation

Negation judgement results

Axis Title	gr-gr	gr-ung	ung-ung	ung-gr
■ Beginners	45.54	47.32	41.96	54.91
■ Controls	87.50	12.50	95.00	5.00

- Beginners accept ungrammatical SNegV (58/112, 59%) (L1 order) and SneV (65/112, 58%).

Discussion

1. Do we see evidence of a bare VP-stage?

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   - No. Sentence internal adverbs (SVAX, SAV) and negation are common.
2. Do we see evidence of functional categories (TP)?

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   - No. Sentence internal adverbs (SVAX, SAV) and negation are common.
2. Do we see evidence of functional categories (TP)?
   - yes

Discussion

1. Do we see evidence of a bare VP-stage?
   - No. Sentence internal adverbs (SVAX, SAV) and negation are common.
2. Do we see evidence of functional categories (TP)?
   - yes
   - oral production: SVAX and SAV = 53.6%,
   - NegP = 48%.

Discussion 2

1. Is there L1 transfer in functional categories?

Discussion 2

1. Is there L1 transfer in functional categories?
   - yes

Discussion 2

1. Is there L1 transfer in functional categories?
   - yes
   - SAV (production $= 46.1\%$, gjt $= 51\%$)
   - NegP $= 45\%$, gjt (SNegV) $= 58\%$

Which Initial State theory best fits the data?

- Not enough unambiguous evidence of TP to support FT/FA.

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- Not enough unambiguous evidence of TP to support FT/FA.
- Too much evidence of L1 transfer for OG.

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- Modulated Structure Building?

Which Initial State theory best fits the data?

- Not enough unambiguous evidence of TP to support FT/FA.
- Too much evidence of L1 transfer for OG.
- Modulated Structure Building?
- Gone past bare VP stage?

Conclusions/ Caveats/ Limitations

- Wide range of structures so there is a lack of unambiguous TP.
- Beginners use a lot of chunks with negation and avoidance with adverbs.
- Oral production mirrors GJT.
- Comprehension task shows that they struggle with processing negation and adverbs (at least as drawn in comprehension task).

Thank you
Any questions?
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Oral production sum results

Sum totals

	SVAX	SVA	SAV	SVXA	noV	Saux NegV	Saux NegX	SNeg V	SVNeg	chunk
beginner	21	36	129	55	54	67	38	21	8	50
control	61	34	0	4	0	0	0	0	100	0
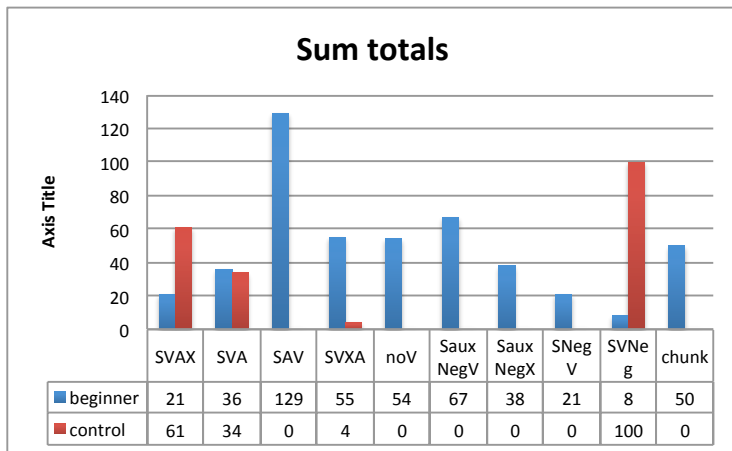
Subjects

- 5 groups of 15 instructed English native speakers learning French in UK school and university environments
- high advanced students had all spent at least 5 months residency in France
- 10 native speaker controls (ERASMUS students in UK)

	begin	low-int	high-int	low-adv	high-adv
N	15	15	15	15	15
years study	1	4	6	8	10
age	12-13	15-16	17-18	19-20	21-23

Pre-test: X-lex (Meara & Milton 2003)
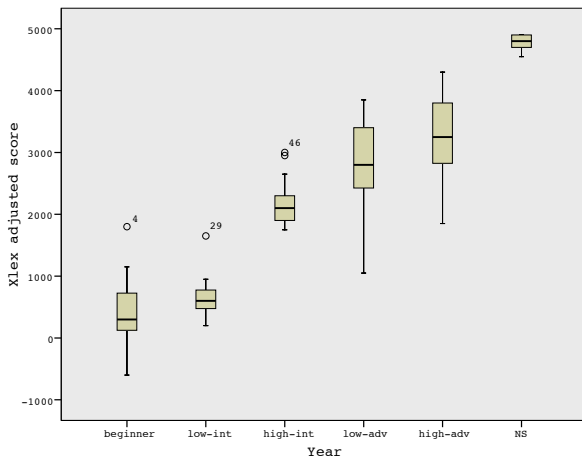
Example Chunk utterances

Only present in the beginner group (26/150) Subject-chunk-verb

- Il (je n'ai pas) prendre le bus. (FS10)
- Il est (n'aime pas) lever. (FS04)
- Il a (n'aime pas) attend le bus (FS04)

Example Chunk utterances

Only present in the beginner group (26/150) Subject-chunk-verb

- Il (je n'ai pas) prendre le bus. (FS10)
- Il est (n'aime pas) lever. (FS04)
- Il a (n'aime pas) attend le bus (FS04)

Chunk-Subject-verb

- (Il n'est pas) j'aime écoute (FS01)
- (Ill n'est pas) je me lève. (FS21)
- (n'est pas) je me douche (FS02)

Examples of negation with an auxiliary

- Found in beginners (51/150) but less frequently with low-intermediates (25/150) and not with high-intermediates.
- Je ehm n'est pas ehm mes devoirs (FS01)
- (il n'est pas j'ai) [//] il n'est pas attendre le bus (FS08)
- elle n'est pas jouer au informatique (TS14)
- Je n'ai pas em lire ehm le newspaper (FS09-11)

play

Examples of preverbal negation

- Found in beginners (24.150) and low-int (35-150) but not high -int.
- Il ne pas de fumer (FS02-11, <u>FS05-11</u>)
- Il ne pas faire des devoirs (FS02-11)
- Il ne pas lever (FS05-11)

Oral task results for negation across groups

		beginner	low-int	high-int	low-adv	high-adv
V-Neg	*median*	0	1	14	15	15
	sum	0	44	179	214	210
	range	0	0-12	0-15	12-15	5-15
Neg-V	*median*	0	1	0	0	0
	sum	40	56	0	0	7
	range	0-9	0-13	0	0	0-7
auxNeg	*median*	2	0	0	0	0
	sum	69	25	0	0	2
	range	0-13	0-8	0	0	0-2
other	*median*	5	3	1	0	0
	sum	83	82	42	11	4
	range	0-15	0-15	0-15	0-3	0-1
omit	*median*	2	1	0	0	0
	sum	33	18	4	0	2
	range	0-6	0-3	0-3	0	0 -1

Oral task results for adverbs

		beginner	low-int	high-int	low-adv	high-adv	NS
Adv-V	*median*	7	1	0	0	0	0
	sum	82/225	50/225	2/225	6/225	0/225	0/150
	range	0-14	0-15	0-1	0-3	0	0
V-Adv-X	*median*	0	1	2	1	4	10.5
	sum	4/225	18/225	48/225	45/225	68/225	101/150
	range	0-2	0-7	0-11	0-9	1-11	6-13
other	*median*	5	11	13	13	11	4.5
	sum	99/225	143/225	174/225	172	155/225	48/150
	range	0-15	0-15	4-15	4-15	4-14	2-9
omit	*median*	2	1	0	0	0	0
	sum	40/225	14/225	1/225	2/225	2/225	1/150
	range	0-7	0-5	0-1	0-1	0-1	0-1

Oral production: use of object clitics

		beginner	low-int	high-int	low-adv	high-adv	NS
S-Cl-V	median	0	0	2	5	4	7.5
	sum	2/225	4/225	29/225	79/225	67/225	65/150
	range	0-2	0-3	0-7	0-13	0-9	1-11
S-V-Cl	median	0	0	0	0	0	0
	sum	1/225	0/225	3/225	0/225	0/225	0/150
	range	0-1	0	0-3	0	0	0
SVO	median	10	12	11	10	9	5
	sum	145/225	164/225	160/225	135/225	139/225	70/150
	range	0-15	3-15	5-14	2-15	5-14	3-15
other	median	4	3	2	1	1	1
	sum	77/225	57/225	33/225	11/225	19/225	15/150
	s.d.	0-14	0-12	1-4	0-2	0-2	0-3

Oral production: correlations

	Negation	Adverb	Obj Cl	Sub Cl
Negation	-	.592**	.616**	.846**
Adverbs	.592**	-	.391**	.547 **
Obj Cl	.616**	.391**	-	.668**
Sub Cl	.846**	.547 **	.688**	-