

Is literacy a factor in L2 morphosyntax development?

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Our population

- **Learners with interrupted or no formal schooling who are unable to read in any language**
 - They lack metalinguistic skills enabling to focus on language forms
 - They are past the age of puberty and the so-called critical period for language learning (Lenneberg 1967)

Predictions



Lower levels of L2 grammar and of L2 reading success in comparison to formally-educated and literate older learners and to younger learners

This has been observed (Condelli et al. 2003; Kurvers & van de Craats 2008; Tarone et al. 2009; Young-Scholten & Strom 2006)

But is this due to lack of literacy and metalinguistic skills? Some argue it is.

Acquisition vs learning

- ❑ Young children are equipped to *acquire* language, but still lack metalinguistic skills to *learn* language, to treat it as an object (Gombert 1992)
 - Are children disadvantaged compared to formally-educated post-puberty learners who have metalinguistic skills? Of course not.
- ➔ Children subconsciously soak up the language around them – they acquire language – and after several years their grammar and sound system are largely indistinguishable from that of the members of their speech community (Chomsky 1957; Fodor 1983)

Acquisition vs learning

- Post-puberty learners can both *learn* new languages consciously and *acquire* new languages subconsciously (Krashen 1985; Schwartz 1993)
 - **Acquisition** is the spontaneous and subconscious process of soaking up language, where mere exposure to a language results in implicit, internalized mental knowledge
 - **Learning** (or **learned linguistic knowledge**) is the process of accumulating conscious knowledge of rules and forms



Adult learners with limited or interrupted formal education are in a position similar to babies: while they are cognitively more sophisticated in many ways, their lack of or limited formal education or print literacy means they struggle with explicit learning


Immigrant SLA

□ Decades of research have shown that acquisition of morphosyntax by post-puberty L2 learners (cf. Hawkins 2001; Vainikka & Young-Scholten 2007)

- Is not tied to a teacher's explanations or to grammar books
- Is possible through mere exposure to a language

Heidelberger Pidgin Projekt (Becker et al. 1977)	L1 Italian, Spanish L2 German	48 adults	cross-sectional
ZISA (Zweitspracherwerb italienischer, portugiesischer und spanischer Arbeiter) (Clahsen et al. 1983)	L1 Italian, Portuguese, Spanish L2 German	45 adults 12 adults	cross-sectional 2 years longitudinal
ESF (European Science Foundation) (Klein & Perdue 1992, 1997; Perdue 1993)	L1 multiple, L2 multiple	40 adults	2 ½ years longitudinal
LexLern (Lernbarkeitstheorie und lexikalisches Lernen) (Clahsen et al. 1991)	L1 Korean, Turkish, L1 Spanish, L2 German	17 adults 7 learners	cross-sectional
Pavia project (Giacalone Ramat 2003)	L1 multiple, L2 Italian	20 adults	longitudinal

The possible role of literacy

- ❑ What if there is no critical period for acquisition of an L2? (Disregarding lack of success in arriving at a fully native-like grammar)
 - ❑ What if there is no critical period for learning to read, including developing phonemic awareness in connection with word decoding in alphabetic scripts? (e.g. late L1 readers, Morais et al. 1979; late L2 readers, Kurvers & van de Craats 2008; Young-Scholten & Strom 2006)
 - ❑ However, literacy (and treating language as an object) is required under views of adult L2 acquisition where intake depends on learners *noticing* forms in the input
 - Tarone et al. (2006) found that level of literacy determined their study participants' ability to repeat the researcher's recasts
 - They concluded that lack of literacy impedes L2 morphosyntactic development
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Others have looked at L2 development in relation to

Overgeneralization by low-schooled immigrants

□ Julien et al. (2015) also looked at the role of literacy, during L2 development

- Oral production and comprehension of functional morphology in L2 Dutch by 40 immigrants with varying levels of schooling and home language literacy with L1 Arabic, Tarifiyt Berber and Turkish
- They used forms of *gaan* 'go' and *zijn* 'be' as semantically vacuous finiteness markers ('dummy auxiliaries') as **placeholders**

➔ For learners, use of placeholders represents a 'structural step in the acquisition of finiteness' (p. 54), while they are tentatively positing TP and AgrP, guided by UG, e.g. by Chomsky's Economy Principle

Overgeneralizations and literacy

- We've each looked, from a *Basic Variety* perspective, at single word overgeneralizations in L2 Italian, and from an *Organic Grammar* perspective, at overgeneralizations of multi-word sequences in L2 English
- These are developmental patterns which seem to be peculiar to immigrant adults to see how these might be connected to literacy

The Basic Variety

- **Functionalist approach (Klein & Perdue 1992, 1997; Perdue 1993)**
 - “all 40 learners [*of the ESF project*] investigated developed a relatively stable system to express themselves which
 - seemed to be determined by the interaction of a small number of organizational principles,
 - was largely (though not totally) independent of the specifics of source and target language organization,
 - was simple, versatile and highly efficient for most communicative purposes.”
 - “(...) it represents a particularly natural and transparent interplay between function and form in human language.” (pp. 303-304)
 - There is no inflection in the BV, i.e., utterances have a non-finite organization (basic forms)

Stages in the BV theory: L2 Italian

(Giacalone Ramat 2003)

STAGE	WORD ORDER	VERB TYPES	AGR/TENSE	PRONOUN S	SYNTAX
PREBASIC VARIETY	pragmatic (topic-comment organization)	no distinction; existential <i>c'è</i> 'there is', thematic verbs	none	1st, 2nd, 3rd personal pronouns	negation; juxtaposition; coordination
BASIC VARIETY	argument structure; agent-verb-patient → syntax: SVO	thematic verbs	none ("basic forms", e.g. verbal theme, unanalyzed present forms or infinitives)	more pronouns	juxtaposition; coordination
POSTBASIC VARIETIES	resembles the L2	copula (some forms)	past participle (-to, e.g. <i>anda-to</i> 'gone')		prepositions governing Ns
		auxiliaries (<i>essere</i> 'be', <i>avere</i> 'have')	differences in the present tense		subordination: causal → temporal → final adverbials
			imperfective past (some forms of 'be')		completives → relatives
		progressive construction (<i>stare</i> 'stay' + gerund')	imperfective past morpheme for thematic verbs (-v-)		
			future		
			conditional and subjunctive		

Placeholders in L2 Italian

□ Mocciaro's (2020) longitudinal study on 20 sub-Saharan African language and Bangla speaking adults (10 literates, 10 low/non-literate) who were acquiring Italian in a naturalistic context (with low exposure)

□ Results

- Learners produce overgeneralized forms of copula/auxiliary to temporarily express functions they are aware of (e.g. tense, person) but that cannot yet express in a target-like manner
- Non-target constructions where (inflected) functional forms co-occur with (unanalyzed) lexical verbs (e.g., *ero dormo* 'I was I sleep > I slept' (target form: *dormivo*; cf. Bernini 1989, 2003)
- *Fare* 'do' constructions, in which an overgeneralized form of *fare* expresses 'verbness/process' and the thematic verb expresses meaning, e.g. *io fare mangiare* '(lit.: I do eat) I eat'
- Non-/low-literate learners use non-target constructions more frequently and in a more stable way than literates
- Lack of literacy leads them to exhibit a stronger preference for strategies that involve the selection of forms more easily identified in the input such as auxiliaries which are separate words rather than morphemes which are suffixes.

Organic Grammar

- **Generative-based approach (Vainikka & Young-Scholten 1998a, 1998b, 2011)**
 - At the beginning of acquisition learners do not project functional syntax
 - Initial interlanguages are **minimal trees** whose headedness is based on L1s
 - Functional elements are acquired in response to input because they differ across languages
 - When learners get sufficient input, they **build structure** based on Universal Grammar mechanisms still available to them
 - The building of structure occurs in **stages** and morphosyntax becomes more and more complex

Organic Grammar stages: L2 English

STAGE	WORD ORDER	VERB TYPES	AGR/TENSE	PRONOUNS	SYNTAX
VP	L1 order, then L2 order	thematic (main) verbs	none	no subject, object pronouns absent	none
NEGATION PHASE	resembles the L1 apart from complex syntax	thematic verbs; copula 'is'	none	pronoun forms begin to emerge	negation; single clauses; formulaic or intonation-based questions
ASPECT PHASE	resembles the L1 apart from complex syntax	<i>-ing</i>	none	pronoun forms begin to emerge	negation; single clauses; formulaic or intonation-based questions
TENSE PHRASE	resembles the L2 apart from complex syntax	thematic verbs, modals; copula (beyond <i>is</i>)	no agreement; not productive tense and aspect	more pronoun forms, but they can still be missing	conjoined clauses; formulaic <i>wh</i> -Qs; yes/no Qs without inversion
AGREEMENT PHASE	resembles the L2 apart from complex syntax	thematic verbs, modals, copula (beyond <i>is</i>), auxiliaries in all forms and tenses	productive tense, aspect; some agreement, especially forms of 'be'	pronouns obligatory, <i>there</i> and existential <i>it</i>	simple subordination; <i>wh</i> -Qs but all Qs may lack inversion
COMPLEMENTIZER PHASE	always resembles the L2	complex tense and aspect forms; thematic verbs, modals, auxiliaries	forms usually correct, apart from newly attempted ones	use of <i>there</i> and <i>it</i> beyond stock phrases	complex subordination; all Qs with inversion

Placeholders in L2 English

Phrase and head	examples	Head identification	Placeholders predicted
AspP	Progressive aspect (<i>-ing</i> suffix) <i>Is the action on-going?</i>	Easy: <i>-ing</i> straightforward to identify as head as it's a syllable and varies little (this phrase excludes forms of auxiliary 'be').	no
NegP	The morpheme <i>not</i> <i>Did the action take place or not?</i>	More difficult: requires forms of 'do'.	yes
TP	Past tense (<i>-ed</i> suffix) <i>When did the action take place?</i>	A challenge: existence of regular and irregular past tense morphology.	yes
AgrP	Subject-verb agreement; the suffix <i>-s</i> in 'he walks' <i>Who did something?</i>	The greatest challenge: weak paradigm + confusion about what <i>-s</i> marks (plural, possessive, agreement)	yes

Placeholders in L2 English

□ Vainikka et al. (2017) on 14 Arabic-, Urdu-, Dari-, Punjabi- and Pahari-speaking adults with varying home language schooling/literacy who were taking English classes in the UK.

□ Results

- **Non-literates overgeneralize multi-word sequences not directly related to the actual verbal head to mark morphosyntactic functions in L2 English (e.g., *in the* to mark progressive aspect, e.g. *in the drink*)**
- **Even when these strings belong to a different category than expected, they are nonetheless closed class elements, i.e. function words and not content words are identified in the input**
- **Learners know from continued access to UG that every projection requires a head, but because they are uncertain exactly what fills that head, they recruit functional elements other than the target elements**
- **Selection of prosodically *heavier* forms than suffixes is due to a greater reliance on auditory as compared to visual memory**

Place holders in acquisition of TP and AgrP

Learner	L1 lit	L2 lit	Place holder	Task	Responses
Zabila VP	0	Lowest	n/a	All tasks	Overgeneralization of –s to nearly all verbs
Amro NegP	0	Lowest	You need I am/I'm	Habitual action in 3 rd singular	you need is smoking; I am read; I'm cook; I am is clean; this girl I'm go; this man I'm go
			I'm + V-ing	Progressive in 3 rd sg and pl	two guys I'm reading; three guys I'm washing
Tazeem NegP	ok	Some	is go is go to	negation	(boy) is go to don't drink; is go to no wash; is go to no play; go to no painting; go to no play
			go to is go to	Habitual action in 3 rd singular	Is go to read; is go to wash; is go to food cooking
			is go; like go to	Progressive in 3 rd sg and pl	(singular) Is go to eat; (plural) every three like go to cleaning
MohS TP	0	Lowest	in the	Habitual action in 3 rd singular	in the drink; in the writing; in the coming
			in In the	Progressive in 3 rd sg and pl	in writing; in the eat; all plural: in the cooking; in the no cooking; in writing; in the wash
Sultani TP	ok	Lowest	don't don't like	negation	is don't open door; don't like; is don't like painting; don't like drive
			for	Habitual action in 3 rd singular	think for cornflakes; is reading for a book
			for in	Progressive in 3 rd sg and pl	(sg) eat for; (sg) laugh for; (sg) is like for; (sg) is laugh for; (pl) is in cooking for; (pl) is wash for
MohM TP	0	Lowest	I don't	negation	I don't + subject-verb (object/IO/object) subject + I don't + object I don't + subject-auxiliary-verb
			the	Habitual action in 3 rd singular	the smoking; the have
			the	Progressive in 3 rd sg and pl	(sg) the play; (pl) the write; (pl) the walk
Naz AgrP	ok	Good	dislike	negation	dislike washing; dislike driving; dislike to open

What overgeneralizations indicate

- ❑ Overgeneralization overlays, but does not alter BV or OG stages
- ❑ It can involve morphemes, words, multi-word sequences
- ❑ Overgeneralized forms are **placeholders** that learners temporarily use as they work on identifying the relevant heads in the input
 - Post-puberty learners struggle to identify heads of projections due to challenges acquiring the phonology of the L2
 - This phonological challenge in turn poses problems for separating suffixes such as *-ed* from the verb stem (Vainikka & Young-Scholten 1998a, b; Zobl & Liceras 1994)



The challenge of identifying heads is compounded for low/non-literate learners because they experience less visual reinforcement of linguistic forms

Conclusions

- ❑ Different theoretical approaches lead to the same conclusions, and this strengthens their validity
- ❑ Overgeneralizations are not random mistakes but highly systematic errors
- ❑ Systematicity appears to reflect the lack of literacy skills, which leads learners to develop linguistic strategies based on what is more easily identifiable in the oral input
- ❑ This produces specific subpatterns, but by no means does it alter the general developmental path of acquisition, i.e. the stages of second language acquisition

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