Being bilingual: the view from Linguistics

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Second Language Acquisition

The question: what is the role of first language (L1) in the acquisition of a second language (L2)?
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The framework: syntactic theory
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**The framework:** syntactic theory

**The tool:** learner corpora and natural language technology
What is L1 knowledge?

- **Specific features of mother-tongue (L1):**
  e.g. vocabulary, sounds, verb morphology for past tense, gender markings, syntactic patterns e.g. cliticisation of pronouns in Romance (*te lo dije*).
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- **Universals of language structure:**
  highly **complex combinatorial system** for phrase and sentence building (**syntax**) with shared principles across natural languages.
Language engineering I: combining phrases

(1) Ann is marrying an old schoolmate.
(1) Ann is marrying an old schoolmate.
Language engineering I: combining sentences

(2) Ann said something.

(3) Ann said she is marrying an old schoolmate.
Language engineering II: moving phrases

(4) Who was Ann talking to last night?
Language engineering II: moving phrases

(4) Who was Ann talking to last night?

(5) Who was Ann ... talking to ... last night?
Language engineering II: moving phrases

(4) Who was Ann talking to last night?
(5) Who was Ann ... talking to ... last night?

Q

Who

Q

was

S

Subj

Ann

VP

V

was talking

Obj

to who
Relative clauses: combining movement and recursion

(6) Ann was talking to a guy last night.
(7) I liked the guy.
I liked the guy Ann was talking to ...
What about second language acquisition and second language teaching?

- Learners have access to and can master highly complex linguistic structures before they acquire specific features of the L2.
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- Learners have access to and can master highly complex linguistic structures before they acquire specific features of the L2.
- Complex linguistic structures are used by learners even when L2 specific knowledge is not yet acquired and often well before relevant structures appear in the curriculum.
Learner corpora

- L2 learner corpora: an empirical bridge between developmental SLA research and teaching
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- Cambridge Learner Corpus (CLC), Cambridge Assessment and CUP
- EF Cambridge Open Language Database (EFCAMDAT), Dept of Theoretical and Applied Linguistics.
(8) I had to married a aweful man that i don’t love for some time
(9) We have a lovely baby boy who named Nicolas ....
(10) You shouldn’t pay lots of money for things what you don’t need
The challenge of big data

- How can we extract information about linguistic structures (e.g. subjects, objects, verbs, questions, relative clauses) from large datasets?
- Natural language technology vital for automated data processing.
An example of a parsed sentence

Subject: She
Verb: bought
Object: the new book
When do RCs appear?

RCs become productive in levels 4-6 (CEFR A2) but they are introduced in the curriculum from level 9 (late B1 and B2).

Figure: Percentage of RCs per sentence

- Brazilian
- Chinese
- German
- Mexican
- Russian
(11) Wins who scores the most points.

(12) This job is really the most suitable job what I have found for you

(13) If you want to know opinion that what you need

(14) when we at the KFC we wanted to order something what we want to eat

(15) also make a rule if who broke the rule need to do some performance to us

(16) this game who is called bowling alley takes place on an area of about 8 meters x by 3 meters
Linguistic complexity and communication

(17) I had to marry an aweful man that I don’t love for some time...
Linguistic complexity and communication

(17) I had to married an aweful man that I don’t love for some time...
(18) I had to marry an awful man (and) I don’t love the awful man for some time...
Linguistic complexity and communication

(17) I had to married an aweful man that I don’t love for some time...
(18) I had to marry an awful man (and) I don’t love the awful man for some time...
(19) I had to marry an awful man (and ) I don’t love him for some time...
(20) I had to marry a man (and) the man is awful (and) I don’t love the man for some time....
Linguistic similarity and L1 effects

- Doesn’t the specific L1 matter?
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- Learners can transfer features from their L1 to their L2 when the two languages are typologically similar.
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- Learners can transfer features from their L1 to their L2 when the two languages are typologically similar.
- Romance learners easily acquire ‘that’ as a relativisor in English transferring features from their native relativisor (e.g. que, qui etc). By contrast, Russians, Germans and Chinese cannot transfer such features and as a result overuse ‘who’ in their relative clauses.
Conclusion

- L2 learners can master highly complex structure even when they have limited knowledge of specific features of L2 grammar.
- Linguistic complexity is vital for efficient communication.
- L2 learners use the power of the universal combinatorial principles to meet communicative requirements producing ‘improvisations’ of high structural complexity but, often low accuracy; the acquisition of specific features of the general structures is influenced by similarities in language specific features between L1 and L2.
- Language teaching can benefit from better linking specific features of L2 to the highly complex syntactic knowledge L2 learners master already at early stages of acquisition.
From L1 to L2 knowledge

The Cambridge Bilingualism Network

https://sites.google.com/site/cambiling/home