Week 13.
Effects of Instruction

**L1A vs. L2A**

- A question that arises—particularly if “UG is involved” (on some people’s versions) in L2A—is: To what extent is (classroom) instruction beneficial to the ultimate state of an L2’ers language?
- A related question: Is one kind of instruction more effective than another?
- Intuitively, we’d assume it does, but not all research seems to point that way.

**White 1991**

- White (1991) investigates the role of negative evidence in L2A.
- Looking in particular at adverb placement in English and French.
- You may recall:
  - Marie regarde souvent la télévision.
  - Mary often watches television.
- Conclusion: The verb raises to INFL in French.

**Verb raising?**

- If the verb raises (French):
  - \( S \rightarrow V \rightarrow \text{Adv} \rightarrow O \)
  - \( *S \rightarrow \text{Adv} \rightarrow V(\rightarrow O) \)
- If the verb does not raise (English):
  - \( *S \rightarrow V \rightarrow \text{Adv} \rightarrow O \)
  - \( S \rightarrow \text{Adv} \rightarrow V(\rightarrow O) \)
- Do L2’ers actually reset the verb raising parameter?
  If so, we expect to see evidence that both facts are known.

**F--->E**

- Coming from French (SVAO, *SAV), learning SAV is ok in English requires only positive evidence.
- But to learn that SVAO (ok in French) is bad in English would require negative evidence.
- Question is: If you provide such negative evidence, does it help? If you don’t, will the L2’ers learn *SVAO in English?

**French kids (monolingual) learning English in school**

- Prior to adverb instruction, pre-tested.
- Experimental group then instructed on adverbs. Control group instructed on question formation. This is (it is claimed) the only point where adverbs are taught. (So question kids were never taught??)
- First post-test.
- Five weeks later, second post-test.
- One year later, another post-test (of adverb group).
Tasks

- Cartoon story (grammaticality test): Continuous story, where kids were supposed to read sentences and correct any word order errors with arrows.
- Preference task (which is right? first one? second one? both? neither? no idea?)
- Manipulation task (words on cards to be arranged into a sentence)

Results—judgments

- The effect of instruction was pretty dramatic in the first and second post-tests. Explicit instruction (pos and neg) helped. (Preference task—same).

Results—Preference task and PP

- Sentences with PPs were explicitly tested.
  - John walks quickly to school.
  - John quickly walks to school.
  - cf. *John eats often ice cream.
- Kids weren’t taught about these, but the question was: will they generalize and disallow SVAPP if they disallow SVAO.
- It’s not clear what this is going to show us, either way. This doesn’t follow from V-raising at all.
- Turned out: Kids did disprefer SVAPP. And?

Results—First & Second post-tests

- French speaking kids start assuming that English is like French re: verb-raising (adverb placement).
- Teach them and they learn where the adverbs can and can’t go.
- Don’t teach them (that is, give them just positive evidence while teaching them something else) and they don’t seem to learn where adverbs can and can’t go.
- But wait…

The one-year-later test

- …those kids who were helped so dramatically by instruction—that knowledge they gained didn’t last.

Well, this is weird.

- So, negative evidence helps, but not really in any “big picture” way.
- And “positive evidence” received by the control group wasn’t enough… right?
- Well, this part might not be warranted—the kids learning how to form questions may not have gotten good positive evidence about adverbs. Suggests a followup study where one group is “flooded” with appropriate positive evidence to see if that helps.
- It would be nice if that will help. Otherwise, isn’t this just showing us that people (kids?) just can’t really learn (long term) how to place an English adverb?
And what did those kids know anyway?

- Turns out that plenty of kids produced both SVAO and SAV orders—but no one adult, native grammar can produce both.
- Kids (the control group) instructed on do-support (from which one should be able to deduce that verbs don’t raise in English) didn’t get the adverb facts.
- Kids overgeneralized to *SVAPP.
- Looks a lot like kids trying desperately to remember a (prescriptive) rule, rather than absorbing an English competence.

Hmm.

- It seems like these French kids are speaking “affected (prescribed) French” really, all along—whether given a positive flood, explicit positive & negative evidence, or training on do-support and question formation.
- So far, we don’t really have any evidence of parameter resetting under any circumstance.

Flooding, secondhand

- According to White (1992; SLR 8), in joint work with M. Trahey, they did try the “flooding” experiment, providing lots of relevant (but positive only) data about adverbs, over two weeks. So, they heard lots of SAV sentences, and of course no SVAO sentences.
- Tested before, immediately afterwards, three weeks later.
- Result: Flooded kids accepted SAV more, but didn’t really reject SVAO any more than controls.

Schwartz (1993) on birds and incompatibly-powered shavers

- Is knowing French like knowing what counts as a bird?
  - Birds are things that fly...
  - …but not airplanes—birds are animals...
  - …but not mosquitoes—birds have two legs...
  - …but also chickens and penguins, despite the fact that they don’t fly.
- Is learning French a process of progressive refinement like this?

Schwartz (1993)

- Well, native knowledge of French isn’t like that. People speaking French follow the rules for French, but they don’t seem to be consciously accessible.
- We can only guess what the rules must be, based on what sentences are good and bad.
- This seems kind of different from, say, knowing the rules governing how the knight can move in chess.

Schwartz (1993)

- So, is L2 knowledge like native knowledge?
- Supposing it is, then knowing the rules isn’t really part of knowing the language.
- Of course, you can learn the rules and consciously follow them. But is that knowing English?
  - Prepositions are things you don’t end a sentence with.
  - Remember: Capitalize the first word after a colon.
  - Don’t be so immodest as to say I and John left; say John and I left instead.
  - Impact is not a verb.
Schwartz (1993)

- Schwartz distinguishes two kinds of knowledge:
  - **Learned linguistic knowledge**
    - I want to definitely avoid splitting my infinitives.
  - **Competence**
    - *Who did John laugh after spreading the rumor that bought the coffee?*

L1A

- **UG** (the range of possible languages/grammars)
- **LAD** (a system for getting from the data to the particular parameter setting for the target language—not a conscious process, nor available to conscious introspection)
- **PLD** (positive input)

- Would it help the LAD to get rules explicitly? (“Use do to avoid stranding tense in Infl”; “Don’t extract an embedded subject out from under an overt complementizer”; “You want the other spoon.”)

L2A

- If L1AD can’t really use this information, why would we necessarily think that the rules we learn in French class are in the right form to “be absorbed” by the L2AD, if such a thing exists…?

- That is: L2 has things about it which can only be learned with the help of negative evidence. Yet this doesn’t guarantee that negative evidence will help.

How can we *tell* the difference between LLK and competence?

- (Good) parameters have wide-ranging effects. For example, verb raising:
  - *X: F question can’t use do-support.
  - Y: F adverbs ok between V and Obj.

- Train subjects on *X. If they reset the parameter, a) they should “automatically” know Y as well, and b) they can use negative evidence.

A point about parameter values

- A parameter value has several consequences.
- If a parameter value is changed it will have repercussions in several places.

- If we don’t see those repercussions (i.e. we see only one effect in one context), we can’t say that the parameter value has changed (you can’t change a parameter halfway like that).

Schwartz’s basic idea about why negative evidence won’t help

![Diagram](blah blah blah)
So why does it seem to be useful to be taught the rules?

- Perhaps—knowing the rules (though it is LLK) allows you in a way to generate your own PLD. It’s that PLD, the output of using the rules, which the “LAD” can make use of when constructing KoL.
- This might explain the apparent truth that practicing helps a lot more than just memorizing the rules…?

Doughty 1991: Second language instruction *does* make a difference

- Study of (restrictive) relativization in L2 English.
  - A woman [who is a professional architect] suggested the playground design.

- There is reason to believe that different kinds of relative clauses have different levels of “difficulty.”

**Relative clauses**

- **Object relatives**: The man *who* I know *t* …
- **Subject relatives**: The man *who* *t* met me …
- And each kind can be itself either the subject or the object:
  - The man *who* I know left (Subj—Subj)
  - I called the man *who* I know (Subj—Obj)
  - The man *who* met me sneezed (Obj—Subj)
  - I called the man *who* met me (Obj—Obj)

**Relative clauses**

- And this goes beyond subject and object—there are relatives on indirect objects, on objects of prepositions, on possessors, and on objects of comparatives as well.
  - The man to whom I gave *t* a book…
  - The man I talked with *t*…
  - The man whose book I read *t*…
  - The man I am taller than *t*…

**Crosslinguistic typology**

- Not all languages allow all of the options. Some languages, for example, do not allow building a relative clause on the object of a comparative, like:
  - The man who I am taller than…
  - The one truck that my car is better than…

**Crosslinguistic typology**

- Keenan & Comrie (1977) made the now-famous observation that what kind of relative clauses a language allows is not random.
- Every language that allows relative clauses built on the object of a comparative allows all the other kinds too.
- Every language that doesn’t allow relative clauses built on objects of prepositions also doesn’t allow relative clauses built on the object of a comparative.
Noun Phrase Accessibility Hierarchy

• More generally, there seems to be a hierarchy of “difficulty” (or “(in)accessibility”) in the types of relative clauses.
• A language which allows this…
• Will also allow these. But not these…

Relation to L2A?

• Suppose that KoL includes where the target language is on the NPAH.
• Do L2’ers learn the easy/unmarked/simple relative clauses before the others?
• Do L2’ers transfer the position of their L1 first?
• Does a L2’ers interlanguage grammar obey this typological generalization (if they can relativize a particular point on the NPAH, can they relativize everything higher too)?

NPAH and L2A?

• Probably: The higher something is on the NPAH, the easier (faster) it is to learn.
• So, it might be easier to start by teaching subject relatives, then object, then indirect object, etc. At each step, the difficulty would be low.
• But, it might be more efficient to teach the (hard) object of a comparison—because if L2’ers interlanguage grammar includes whatever the NPAH describes, knowing that OCOMP is possible implies that everything (higher) on the NPAH is possible too. That is, they might know it without instruction.

Doughty (1991)

• Grammaticality judgment, sentence combination.
• The person who John is taller than is Mary.
• The book is very interesting. The book is under the chair. (Starting with the first sentence and not omitting any information) The book under the chair is very interesting. (Hopefully not The interesting book is under the chair).

Doughty (1991)—Subjects and training

• A control group (CG)
• A Meaning-oriented group (M-o G)
  – Saw paraphrases for OREP sentences
• A Rule-oriented group (R-o G)
  –Were walked through how OREP sentences were formed.
Doughty (1991) results

• Pre-instructional test:
  • Nearly all knew how to relativize a subject (6 of 20 did not). Four of those also knew how to relativize an object. Only two others knew how to relativize “lower”. Genitive relativization acted a bit strange; some subjects allowed this too (”out of order”).

Doughty (1991) method results

• All three groups (M-o G, R-o G, CG) improved significantly in relativization scores.
  • Why did CG improve?
  • Well, they were exposed to OPREP relatives—perhaps this was enough to help, even without having explicit attention called to them.
  • Nevertheless, instructed students scored significantly better than control students.

Doughty (1991) M-o G

<table>
<thead>
<tr>
<th>Subject</th>
<th>SU</th>
<th>DO</th>
<th>IO</th>
<th>OP</th>
<th>GE</th>
<th>OC</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>5</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>7</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>21</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>6</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>1</td>
<td>+</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
<tr>
<td>4</td>
<td>+</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
<td>−</td>
</tr>
</tbody>
</table>

Why did M-o G fare just about exactly as well as R-o G?

• Maybe they weren’t as different as intended—that is, maybe the dimension along which they differ isn’t a crucial one.
• Both M-o G and R-o G did better than CG.
• M-o G and R-o G had attention more saliently focused on the relative clauses.
• M-o G and R-o G had more explicit repetition of the relative clause.

What about markedness-based shortcuts?

• It looks like training them on OPREP successfully brought subjects to be able to relativize on everything higher (Subj., Dir. Obj., Indir. Obj.).
• But mysteriously, many people also seemed to get OCOMP by the post-test.
• Interlanguage grammars do seem to obey the typological requirements on languages (NPAH).
• Is genitive mis-analyzed in the NPAH typological work, given that it seems to be gotten early…?
For next time:

• Read White (1989), ch. 5 (markedness)
• Skim Braidi (1999), ch. 4 (typological universals; primarily NPAH)
• Read White (1989), ch. 6 (Subset principle)
• No summary due.