Week 2. Recent history of L2A research

### Behaviorism
- In the 1950’s and 1960’s, the techniques of language teaching were based on a behaviorist view of language.
- Language under this view is essentially a system of habits; learning proceeds by producing a response to a stimulus and receiving either positive or negative reinforcement (e.g., positive if your intended meaning was understood). If you receive enough positive reinforcement for a certain response it will become a habit.

### Contrastive Analysis
- If language is a set of habits and if L1 habits can interfere with TL habits, then the proper focus of teaching should be on where the L1 and TL differ, since these are going to be the places which cause the most trouble for learners. This is often referred to as the Contrastive Analysis Hypothesis.

### Contrastive Analysis
- Takes language to be a set of habits and learning to be the establishment of new habits.
- Locates the major source of errors in the first language (habits).
- We should be able to account for errors by considering differences between L1 and TL.
- Predicts greater differences lead to more errors.
- Differences must be taught, similarities will be implicitly transferred from the L1.
- Difficulty/ease of learning a particular TL is determined by the differences between L1 and TL.

### Behaviorism
- The problem was, as famously observed by Chomsky in his review of Skinner’s *Verbal Behavior*, language isn’t a collection of reinforced habits.
- Children learning an L1 do not simply reproduce what they’ve heard; they very often use language creatively, producing things they’ve never heard before, understanding things they’ve never heard before. They show evidence of internalized rules by producing forms like *He goed.*
**Behaviorism**

- The rules are very abstract and complex, and they are underdetermined by the data children hear—yet speakers growing up in the same speech community end up with a highly uniform set of internalized rules.
- Children don’t make the mistakes for which they could receive negative reinforcement in the first place.

**Contrastive Analysis**

- Second language learners do a lot of the same things (e.g., over-regularization of forms like *He comed*).
- Many errors that second language learners make cannot be traced to influence of their L1.
- “Transfer of habits” doesn’t seem to be consistent across languages. Zobl (1980) showed that French learners of English failed to show evidence of a predicted error, but English learners of French did.

**Contrastive Analysis**

- Zobl (1980): In French, object pronouns generally come before the verb: *Je les vois* ‘I see them (lit. I them see)’. In English object pronouns come after the verb: *I see them*.
- French learners of English never produced *I them see*.
- English learners of French did produce things like *Je vois elle* (‘I see her’ cf. *Je la vois*).

**Contrastive Analysis**

- Contrastive Analysis certainly doesn’t predict subjective (psycholinguistic?) difficulty; a second language learner may very easily produce an erroneous form, or struggle and produce a correct form.
- It is actually not at all straightforward to enumerate the “differences” between languages (hence, it is hard to predict where problems would arise, under the Contrastive Analysis Hypothesis).

**Error Analysis**

- One of the next steps was to look seriously at the kind of errors learners were making.
- Since Contrastive Analysis turned out not to be a productive pedagogical tool, the idea behind Error Analysis was to look at errors that the students are making to determine the “source” of the error.
- Error ≠ mistake

**Error Analysis**

- The idea is that errors could come either from some kind of interference from the learner’s native language, or simply from an incompletely developed knowledge of the target language.
- It was hoped that by analyzing the source of the errors, we could learn more about the contributions of interference and development.
Error Analysis

- One of the conclusions reached in error analysis studies was that the majority of errors did *not* come from interference caused by the learner’s native language, but were rather “interlanguage-internal” errors.

- Error analysis can be considered a step along the way to the hypothesis that learners have an interlanguage—a grammatical system that is nevertheless not target-like.

Interlanguage

- If the learner has an internal grammar (not the grammatical system of the target language, but a system “on the way” to the TL), then we can view it as developing, and we can ask the question of whether it shows stages of development.

Stages of acquisition

- In the 70’s, it was determined that children learning their L1 go through strikingly uniform stages, regardless of the language that they are learning. Ages vary by individual but not very much.
  - Babbling (6 months)
  - Intonation patterns (8 months)
  - One-word utterances (12 months)
  - Two-word utterances (18 months)
  - Word inflections (36 months)
  - Questions, negatives (39 months)
  - Complex constructions (5 years)
  - Mature speech (10 years)

Stages of acquisition

- Also, kids learning English seem to go through consistent stages as well. Brown (1973) found that kids learn morphological inflections in a consistent order:
  - Present progressive (-ing)
  - Prepositions (in, on)
  - Plural (-s)
  - Past irregular
  - Possessive (’s)
  - Articles (a, the)
  - Past regular (-ed)
  - 3rd singular regular (-s)
  - 3rd singular irregular

Does L2A progress in uniform stages as well?

- One of the first investigations of this looked at 60 children whose L1 was Spanish and 55 whose L1 was Chinese, all learning English as an L2 (Dulay and Burt 1974).

- They found that the Chinese and Spanish groups showed a similar order of acquisition of morphemes, basically the same as the order Brown found for L1A of English.

Does L2A progress in uniform stages as well?

- They devised an acquisition hierarchy which holds of the two L1s when learning English as an L2.
  
- This strongly suggests that this is *not* a process of unlearning “L1 habits”, since L1 doesn’t matter.

<table>
<thead>
<tr>
<th>Case</th>
<th>Word Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sg copula (is)</td>
<td>Sg aux (is)</td>
</tr>
<tr>
<td>Pl aux (are)</td>
<td>Progressive (-ing)</td>
</tr>
<tr>
<td>Past irregular</td>
<td>Cond’l aux (would)</td>
</tr>
<tr>
<td>Possessive (’s)</td>
<td>Long plural (-es)</td>
</tr>
<tr>
<td>3sg (-s)</td>
<td>Past part. (-en)</td>
</tr>
<tr>
<td>Perfect aux (have)</td>
<td>Past part. (-en)</td>
</tr>
</tbody>
</table>
Does L2A progress in uniform stages as well?

- Because this was child L2A, there is a chance that whatever drove L1A is driving their L2A—so, in a way, it isn’t that surprising that they acquire English in the same way that a kid learning English as a L1 would.
- We cannot generalize this result to adult L2A, it had to be tested.

Does L2A progress in uniform stages as well?

- Several studies were done, all with strengths and shortcomings, but the bottom line seems to be that there is a largely L1-invariant order of acquisition of these morphemes in L2A,
- This effect seems to appear across test types (indicating that it isn’t an artifact of the test itself).

Does L2A progress in uniform stages as well?

- There are lots of questions to consider with respect to this:
  - What should count as “acquisition”? Using it whenever it is required? Using it at all? Using it only when it is required?
  - What is the source of this order? Frequency in the input data? Perceptual salience? The internal structure of the language faculty?
  - How generalizable are the results of these 11 morphemes to language acquisition as a whole?

Does L2A progress in uniform stages as well?

- The bottom line (sort of “averaging over” the studies) seems to be second language acquisition does progress in a largely L1-invariant, systematic order, similar to but not completely identical to the orders observed in L1A.

Krashen’s “Monitor Model”

- An early and influential model of second language acquisition was the “Monitor Model”, based on five basic hypotheses:
  - The Acquisition-Learning Hypothesis
  - The Monitor Hypothesis
  - The Natural Order Hypothesis
  - The Input Hypothesis
  - The Affective Filter Hypothesis

The Acquisition-Learning Hypothesis

- Acquisition and Learning are different.
  - Acquisition refers to the (subconscious) internalizing of implicit rules, the result of meaningful naturalistic interaction using the language.
  - Learning refers to the conscious process that results in knowing about the language, e.g., the result of classroom experience with explicit rules.
  - That is, you can learn without acquiring (or acquire without learning).
  - Krashen hypothesizes that learned and acquired rules are stored differently; one cannot eventually be converted into the other; they are simply different.
The Natural Order Hypothesis

• Acquisition proceeds in a “natural order” (i.e. the order of morpheme acquisition discussed earlier).

• This says nothing about learning, only acquisition.

The Monitor Hypothesis

• A linguistic expression originates in the system of acquired knowledge, but prior to output a “Monitor” checks it against consciously known rules and may modify the expression before it is uttered.

The Input Hypothesis

• The Input Hypothesis draws on the Natural Order Hypothesis; the idea is that there is a natural order of acquisition, but in order to advance from one step to the next, a learner needs to get comprehensible input, input which provides evidence for the stage one level past the learners’ current level. The idea is that only this level of input is useful for the advancement of acquisition.

• Krashen’s view on acquisition: Speaking does not cause acquisition, it is the result of acquisition, having built competence on the basis of comprehensible input.

• If input is at the right level and comes in sufficient quantity, the necessary grammar is automatically acquired.

• The language teacher’s main role, then, is to provide adequate amounts of comprehensible input for the language learners.
The Affective Filter Hypothesis

- Another aspect of the need for comprehensible input is that it must be “let in” by the learner. Various “affective” factors like motivation, anxiety, can “block” input and keep it from effectively producing acquisition.

The overall model

- Although Krashen’s “Monitor Model” suffers from a lack of specific testable details, it has had a significant impact on L2A research, and has an intuitive appeal.

Some critiques on record re: the Monitor Model

- Are acquired and learned rules really stored so separately that they cannot interact? Gass & Selinker’s textbook points out that “it is counterintuitive to hypothesize that nothing learned in a formal situation can be a candidate for [fluent, unconscious speech]”.
- But this doesn’t seem to be a very persuasive objection—First, counterintuitiveness is not an argument. Second, even if formal, learned rules are stored completely separately, nothing prevents the use of these rules in production from providing input to the acquisition system, providing an indirect “conversion” of knowledge.

Some critiques on record re: the Monitor Model

- G&S also observe (attributing the objection to Gregg) that in Krashen’s model, the Monitor only affects output (speech, writing), but anecdotal evidence for use of formally learned rules in decoding heard utterances is easy to come by.
- Perhaps this is true of Krashen’s particular statement, but there seems to be no need to toss out all aspects of his hypotheses based on an oversight of this sort—it seems easily repairable by extending the model to allow learned competence to also monitor input and provide input to the acquired competence.

Some critiques on record re: the Monitor Model

- Most of the objections to the Monitor Model focus on the impreciseness of the hypotheses; although Krashen may not have treated them this way, they clearly must be used only as a starting point, a way to think about the process of L2A. Further research in this direction needs to be focused on trying to refine the existing “hypotheses” to yield testable (falsifiable) hypotheses with a higher degree of specificity.