Contrastive analysis: An overview

Contrastive Analysis (CA)

In the 1960s to 1990s before the SLA field as we know it was established, Charles Fries (1945:9) wrote: "The most efficient materials are those that are based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner." 

Robert Lado, *Linguistics Across Cultures*, 1957:

"Individuals tend to transfer the forms and meanings and the distribution of forms and meanings of their native language and culture to the foreign language and culture — both productively and when attempting to speak the language and to act in the culture and receptively when attempting to grasp and understand the language and culture as practiced by natives." (1957, in Gass and Selinker 1983, p. 1)

Contrastive Analysis Hypothesis (CAH)

CAH - This extension of the notion of CA attributed the ability to predict errors to a CA of two languages, a predictability that practitioners associated with the degree of similarity between the two systems.

Robert Lado (1957:2)

"...those elements that are similar to this native language will be simple for him, and those elements that are different will be difficult."

The mainstream of CA:

The bulk of the SLA field was concerned, however, with prediction of errors:

The simplistic model:

The most simplistic version was the belief that linguistic differences based simply on similarities and differences alone could be used to predict learning difficulties. Thus, the following quote:

A simplistic prediction:

"Where two languages were similar, positive transfer would occur; where they were different, negative transfer, or interference, would result."

More sophisticated models:


The table shows a hierarchy of difficulty:

<table>
<thead>
<tr>
<th>Type of Difficulty</th>
<th>L 1 English; L 2 Spanish</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Split x ← x</td>
<td>x ← para</td>
<td></td>
</tr>
<tr>
<td>2. New  Φ ← x</td>
<td>marking</td>
<td>gramatical gender</td>
</tr>
<tr>
<td>3. Absent x ← Φ</td>
<td>Do as a tense carrier</td>
<td></td>
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<tr>
<td>4. Coalesced x ← y</td>
<td>his/her is realized as a single form &quot;au&quot;</td>
<td></td>
</tr>
<tr>
<td>5. Correspondence x ← x</td>
<td>-ing ← -ado as a complement with verbs of perception</td>
<td></td>
</tr>
</tbody>
</table>

Stockwell, Bowen, and Martin: Hierarchy of Difficulty

This goes beyond simple lists of similarities and differences.

Hierarchy of Difficulty:

They had a hierarchy of difficulty as part of their analysis, with the most difficult at the top and the least difficult at the bottom.

This model is more sophisticated:

The Stockwell, Bowen, and Martin model, unlike the Lado model, does not predict the greatest difficulty in the new and missing categories.

Examples of problems predicting:

Buteau (1970:138), for instance, found that for English speakers learning French "the French sentences that correspond literally to their English equivalents are not necessarily the easiest to learn."

*Psycholinguistics* (Osgood 1953)

* "When two sets of materials to be learned are quite different or are easily discriminated by the learner, there is relatively little interaction, that is, learning one has little effect upon learning the other. If they are similar in such a way that the learning of one serves as partial learning of the other, there may be..."
facilitation, or positive transfer. If, however, the similarities either of stimuli or responses are such that responses interfere with one another, then there will be greater interference as similarity increases.

Behaviorism: Language acquisition as habit formation

As the discussion of Audiolingualism mentioned, Contrastive Analysis was associated with behaviorism. Initially, this association with behaviorism gave CA academic respectability, providing a theoretical foundation for the approach.

Problems for the CAH version

However, the CAH version of CA, that is, the predictive version ran into some problems.

1. Association with behaviorism: 1959 Noam Chomsky’s classic review of Skinner’s Verbal Behavior, in which Chomsky seriously challenged the behaviorist view of language. CAH, intimately associated with behaviorism, got caught in this discrediting of the view of language.

2. Mispredictions: Specifically, the supposed ability of CAH to predict errors was not supported by the facts.

hit and miss predictions

it underpredicted, that is, it failed to predict some errors; it overpredicted, that is, it predicted some errors that failed to occur; of course, it also got some right.

Why?

As Long and Sato (1984) pointed out, one cannot depend upon the analysis of a linguistic product to yield meaningful insight into a psycholinguistic process.

Note CAH failed, not CA.

The failure discussed thus far is the failure of CAH, not the failure of CA.

Strong vs. weak versions of CA

Wardhaugh (1970) proposed a distinction between the strong and the weak version of the CA.

The strong version (CAH) predicts a priori. The weak version deals with learner errors and uses CA, when applicable, to explain them a posteriori, that is, after the fact.

In fact, this was the beginning of error analysis, that is, the detecting of the source of errors.

Error Analysis (= EA)

Of course, CA survived. No one can deny that the L1 influences L2 performance.

Thus, the next approach was to limit the analysis to the examination of errors that students actually made. This, however, had its problems.

Language acquisition as rule formation

Under the influence of Chomsky’s theory of language acquisition, researchers began studying the speech of children learning English as their L1. They attempted to use this to write a grammar of what the children were producing.

So-called “rule formation”:

“She doesn’t want to go.

“id does it”.

“arried”.

Notice that such forms cannot be the product of imitation.

Developmental errors:

SLA researchers found that in SLs the learners committed similar “developmental” errors, errors that were not apparently due to L1 interference.

Interlingual versus intralingual errors (Richards, 1971)

Errors found to be traceable to L1 interference were termed interlingual. CA was used to explain them.

A large number of similar errors, however, were found to be committed by SL learners regardless of their L1. These were termed intralingual errors.

Intralingual errors:

These were analyzed to see what sort of strategies were being used.

overgeneralization

simplification

communication based induced errors

Mistakes vs. errors

Corder distinguished between mistakes and errors.

Mistakes were “involuntary slips of the tongue”, the type of random mistakes we all make.

Errors were systematic errors in the student performance reflecting incomplete mastery of some aspect of the language.

Example format

Error type

Example

Explanation

Interference

Interference

“She is the book of my friend.

The omission of the subject appears to be interference from Spanish, the use of ‘of my friend’ rather than ‘my friend’s book’ also appears to be Spanish influence.

Intralingual

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Intralingual
*Last week Jim didn’t know where Bill is living.
*Shirley doesn’t know what the dog is doing.
The speaker has perhaps overgeneralized the pattern for subject-auxiliary inversion and applied it to the so-called embedded question. Note that this is a statement, not a question.

Simplification
* I studied English for two years.
The omission of the plural marker following the noun year could be termed simplification; note that no information is lost. The cardinal number already signals plurality.

Communication-based
The learner uses ‘airball’ for ‘balloon’ (word coinage from Tarone, 1980).
The learner incorrectly labels the object (perhaps knowingly), but successfully communicates a desired concept.

Induced errors
* She cried as if a baby cries. (Shostrom 1974)
The teacher had given ‘like’ for the meaning of ‘as if’ without explaining how the grammar has to be different for ‘as if’. E.g.,

She cried as if she were a baby and
She cried like a baby cries.

Criticism of EA
Schachter and Celce-Murcia (1977) focused only on errors did not deal with avoidance
Relative clauses: Chinese and Japanese vs. Spanish and Farsi
English passive avoidance by Arabic speakers
Phrasal verbs by Hebrew speakers

In short,
EA did not deal with what the students were doing that caused them to succeed, that is, it did not deal with what led to learning.

Morpheme studies:

- **ING PROGRESSIVE**
- **PLURAL**
- **COPULA**
- **AUXILIARY**
- **ARTICLE**
- **IRREGULAR PAST**
- **REGULAR PAST**
- **3RD SINGULAR**
- **POSSESSIVE**

Krashen’s (1977) ‘Natural Order’ for ESL
Brown (1973) study of L1
Dulay and Burt (1973, 1974) L2
Developmental sequences: WH-questions
Studying the developmental sequences, e.g., the sequence in which WH-questions are acquired:
- tag questions
- WH-fronting
- subject-verb inversion

In short,
generally it was argued that L1 and L2 sequences were essentially identical and that children learned the L2 just as native speakers had learned as their L1.
However, some of the data suggests that, while this is largely true, it is not completely so e.g., Ravem (1968, 1970)

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while there were similarities, there were also differences.

Wode's German children (1976): Wode studied the ESL acquisition of four German-speaking children aged four to ten. Wode argued that the children's reliance on their L1, when there was a 'crucial similarity'.

Post-verbal negation: Wode's subjects exhibited a stage in their acquisition of the English negative in which the negative was placed after the verb. 

*John go not to the school.*

Transfer from German? Undoubtedly, in part. German has the negative after the verb. However, the children have this stage in their English only because English has a similar pattern — more restricted but similar than the students were imitating.

He isn’t listening.

She can’t mean that.

The analysis: Wode argued that the negative transfer error arose since negative placement were in English and German were similar enough to encourage the children's reliance on L1.

Developmental sequences: negation

1. External (whole utterance)
   - No this one.
   - No you playing here.

2. Internal, pre-verbal
   - Juana no / don’t have a job.
   - Bart no like Lisa.

3. Auxiliary + neg.
   - I can’t play the guitar.
   - Shirley do not eat hamburgers.
   - I don’t eat vegetables.

4. With subject-verb agreement.
   - I don’t like television.
   - She doesn’t drink alcohol.

Other learner strategies:

Prefabricated routines
- Do you saw this rabbit run away?
- Do you saw three feet?
- Do you bought this too?

Formulaic utterances
- Do you put it?

Acquisition of forms and function
- Waduyu kam from?
- Waduyu kam Taillan?
- Waduyu say?

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Robert Bley-Vroman (1983) notes that it is common to analyze child acquisition (and adult acquisition) in terms of their manipulation of the adult target model. This, of course, is taken as in a very real sense neither children nor second language speakers have full access to that model.