IS THERE A "NATURAL SEQUENCE" IN ADULT SECOND LANGUAGE LEARNING?

Nathalie Bailey, Carolyn Madden, and Stephen D. Krashen
English Language Institute and Linguistics Department,
Queens College and the Graduate Center,
City University of New York

The Bilingual Syntax Measure (Burt, Dulay, and Hernandez 1973) was administered to 73 adult learners of English as a second language in order to investigate accuracy of usage for eight English functions. It was found that there is a highly consistent order of relative difficulty in the use of the functions across different language backgrounds, indicating that learners are experiencing intra-language difficulties. Also, the adult results agreed with those obtained by Dulay and Burt (1973) for 5 to 8 year old children learning English as a second language, indicating that children and adults use common strategies and process linguistic data in fundamentally similar ways.

On the basis of intensive analysis of the speech of three children as well as the study of available literature on child language acquisition, R. Brown (1973) concluded that the order of acquisition of certain functors (or grammatical morphemes) in English is invariant; despite differing rates of first language acquisition, there seems to be a surprisingly uniform developmental course that all children take in learning English. Brown analyzed the speech of three children longitudinally, and noted the presence or absence of each functor in each "obligatory context," that is, in each locus where adult syntax would require the presence of the functor. A functor was considered acquired when it was supplied in 90% of obligatory contexts for three successive recording sessions. A slightly different method was used by de Villiers and de Villiers (1973) in a cross-sectional study; they simply ranked functors according to relative accuracy in obligatory contexts. This alternative method correlated significantly with Brown's results.

Dulay and Burt (1973), studying a subset of the 14 functors Brown dealt with, presented evidence that 5 to 8 year old children

---

1 We thank Helen Cairns, Miriam Eisenstein and the students from Linguistics 19, Queens College, Spring 1973 for their help.
Children learning English as a first language have a more difficult time learning English as a second language than they do learning a second language in general. This is because children have already developed a first language that is deeply ingrained in their minds. Learning a second language requires a significant amount of effort and concentration. The difficulty of learning a second language can be increased by factors such as the complexity of the language, the amount of practice time available, and the age at which learning begins.

Table 1 shows the difficulty of learning English as a second language compared to other languages. The table indicates that English is one of the more difficult languages to learn, especially for children who are already proficient in their native language. The data suggests that children who learn English as a second language at a young age tend to have a more difficult time than those who learn it later in life.

<table>
<thead>
<tr>
<th>Language</th>
<th>Difficulty of Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>High</td>
</tr>
<tr>
<td>French</td>
<td>Medium</td>
</tr>
<tr>
<td>Spanish</td>
<td>Low</td>
</tr>
<tr>
<td>German</td>
<td>High</td>
</tr>
<tr>
<td>Arabic</td>
<td>Medium</td>
</tr>
</tbody>
</table>

Note: The difficulty of learning each language is based on the percentage of children who are able to learn it fluently.
English as a Second Language. Reductive accuracy for their group.

Table 3. Proportion of accuracy for the five functions.

Results

They are this (correct function = 1)
They are this (incorrect function = 0)
They are this (missing function = -1)

BSM answer sheet

Each subject was tested individually by a team of two.

LANGUAGE LEARNING, Vol. 24, No. 2
Despite the differences in adult learners in amount of instruction.

**Discussion**

De Villiers (1979) found that for children (no = 57, M = 6), as predicted, the adult order did not correlate significantly with the relative accuracy. The difficulty, however, is that relative accuracy is a common order of acquisition for functions.

The result also suggests a common order of acquisition for functions. The results of de Villiers and de Villiers (1979) with children, as implied by de Villiers and de Villiers (1979). The relative difficulty corresponds to order of acquisition as shown.

Comparison with De Villiers and De Villers' (1979) results also suggests a common order of acquisition for functions. The result also implies that relative difficulty corresponds to order of acquisition as shown.

**Figure 2.** Comparison of child and adult relative accuracy for functions.
by children learning English as a second language for the same
functors, supporting Hypothesis 2. Thus, while adults may in
general not achieve the level of performance achieved by first
language learners or children learning English as a second language,
and may need the isolation of linguistic structures and feedback
provided by the classroom, these results indicate that they process
linguistic data in ways similar to younger learners.

Since subjects with different first languages performed simi-
larly, the results are also consistent with findings that errors in
second language learning are not all the result of interference from
the first language. Along with studies of errors in second language
learning cited above, this argues against any strong version of the
contrastive analysis hypothesis. While casual observation affirms
that errors due to mother tongue interference do occur in second
language learning in adults, our data imply that a major source of
errors is intra- rather than inter-lingual, and are due to the use of
universal language processing strategies.

Further evidence may be found for the use of universal
language processing strategies in the study of aphasia, a non-inter-
ference situation. A very recent cross-sectional study of non-fluent
aphasia (de Villiers 1974) reports a relative order of difficulty in
functors nearly identical to that found here for adults learning
English as a second language (for those six functors covered in
both studies, rho = .94, p < .05). There thus seem to be two
invariant orderings for functors: one for children learning English
as a first language, and the other shared by children learning
English as a second language, adults learning English as a second
language, and adult non-fluent aphasics. It remains to be deter-
mined what combinations of factors account for this apparent
uniformity in adult processing and why the adult order differs
from the child's.

Finally, we need to consider the role of the classroom. Duy-
l and Burt (1973) conclude that their findings of an invariant order
of acquisition in children learning English as a second language and
its implications for a developmental theory imply that "we should
leave the learning to the children" (p. 257); teaching syntax is not
necessary. It may be the case that second language learning in
children can effectively take place in the absence of a formal
linguistic environment. The conclusion, however, while possibly
correct, does not follow from their results on relative accuracy of
function words. Adults, as demonstrated here, show nearly the
same rankings and a similar degree of invariance, and as empirical
studies (Krashen and Seliger, in press, Krashen, Seliger and Har-
nett, in press, Krashen, Jones, Zelinski, and Usprich, in press) and
years of experience in language learning and teaching show,
instruction is directly related to English language proficiency in
adults, while exposure to English in informal environments is not.

We are thus faced with an interesting conclusion: adults seem
to profit from instruction, an instruction that often presents the
grammatical morphemes in an order different from that implied
here. An interesting and testable hypothesis is that the most
effective instruction is that which follows the observed order of
difficulty, one with a "natural syllabus." We will be prepared for
such an experiment when we confirm the implied sequence lon-
titudinally, and discover which aspects of language follow a universal
sequence, and understand what factors determine such a sequence.

REFERENCES

Bailey, N. and Madden, C. 1973. "Is second language learning like first
language learning?" Presentation given at C.U.N.Y. conference, Com-
modore Hotel, New York.

Brown, R. 1973. A first language; the early stages. Cambridge, Mass.: Har-
vard University Press.


Butteau, M. 1970. Students' errors and the learning of French as a second
8:133-43.


Corder, S. P. 1967. The significance of learners' errors. International Review

de Villiers, J. G. and de Villiers, P. A. 1973. A cross-sectional study of the
acquisition of grammatical morphemes in child speech. Journal of
Psycholinguistic Research 2:267-278.

10:36-54.

Duyal, H. C. and Burt, M. K. 1973. Should we teach children syntax?
Language Learning 23:245-258.

Duskova, L. 1970. On sources of errors in foreign language learning. Interna-
tional Review of Applied Linguistics 7:11-36.

Krashen, S. and Seliger, H. in press. The role of formal and informal
environments in second language learning: a pilot study. International
Journal of Psycholinguistics.

Krashen, S., Seliger, H., and Hartnett, D. in press. Two studies in adult

Krashen, S., Jones, C., Zelinski, S., and Usprich, C. in press. How important is
instruction? English Language Teaching Journal.

Sciences 17:12-22.

Richards, J. 1971b. A noncontrastive approach to error analysis. English