

INTRODUCTION TO THE CORNELL LANGUAGE ACQUISITION LAB (CLAL)

1. Aims of the Cornell Language Acquisition Lab

The Cornell Language Acquisition Lab primarily researches the developmental course of first language acquisition in the young child and seeks its explanation. It is deliberately cross-linguistic, driving and conducting comparative studies across different languages in different countries, in order to factor out universal from language- and culture-specific factors. In this way, the lab research programmatically pursues the questions: What is biologically programmed about language knowledge and its acquisition? What must be acquired and how? In addition, CLAL participates in research on adult second language acquisition and comparisons between first and second language acquisition, as well as bilingualism.

The lab involves an interdisciplinary team combining developmental psychologists with linguists, both graduate and undergraduate, as well as faculty, who work together in all aspects of data collection, transcription analysis, and report preparation. The interdisciplinary Cognitive Studies program at Cornell provides further interdisciplinary interaction, e.g. with Computer Science.

Our analyses of language acquisition are intended to provide a comprehensive, permanent and infinitely expandable set of data which can be utilized repeatedly in new cross-language studies. Current research is investigating the acquisition of several basic aspects of syntactic structure and the human computation of natural language. The theory of Universal Grammar provides hypotheses for testing.

The data are intended to allow for systematically comparative cross-linguistic analysis both on the acquisition of *specific structures* (e.g., the embedding structures involved in relative clauses) and on various general principles and parameters which are hypothesized to underlie them.

We conduct our syntactic analyses in such a way that they are both descriptive, e.g., describing the actual course of development of specific structures, and explanatory, i.e., testing the various hypotheses regarding principles and parameters that underlie each specific language structure. Thus we aim to provide both developmental norms and underlying explanations.

2. Supplementary Aims:

- i. Contribution to a valid, reliable cross-linguistic database of children's speech transcripts (natural and experimental) which can ultimately be shared with the field at large, as it will be coded on computer and validated by several native speakers under the direction of linguistic experts (through the development of a new software tool, the Virtual Linguistics Lab, VLL).
- ii. Establishing a more extensive and sound basis for developmental norms which can provide a reference for evaluation of language development through natural speech analysis in deficient and or developmentally delayed populations.
- iii. Comparisons between first and second language acquisition.
- iv. Investigation of the cognitive systems underlying bilingualism and multilingualism.

- v. Linking psycholinguistic findings regarding language acquisition to their biological foundations, e.g. through study of brain science, aphasias, and hemispheric specialization.