A Shared Infrastructure for Studying Second Language Acquisition

The study of second language acquisition can benefit from the same process of data-sharing and resource-sharing that has proven effective in areas such as first language acquisition and aphasiology. Using methods already in place, researchers can work together to construct a shared platform that combines data from spoken and written corpora, online tutors, and web-based experimentation. Many of the methods and tools for building this platform are already available as a result of earlier work on corpus sharing in first language acquisition. In this talk, I will illustrate the progress we have made at CMU on building relevant tools for corpus collection, psychometric evaluation, basic skills tutoring, web-based delivery of subtitled video, text-based learning, data-mining and “language learning in the Wild”. By working on a shared learning platform in a fully coordinated manner, researchers will be able to construct a rich new empirical basis for the study of second language acquisition.

Brian MacWhinney is Professor of Psychology, Computational Linguistics, and Modern Languages at Carnegie Mellon University. He received his Ph.D. in psycholinguistics in 1974 from the University of California at Berkeley. With Elizabeth Bates, he developed a model of first and second language processing and acquisition based on competition between item-based patterns. In 1984, he and Catherine Snow co-founded the CHILDES (Child Language Data Exchange System) Project for the computational study of child language transcript data. The TalkBank Project extends these methods to additional language areas such as aphasiology, second language learning, TBI, Conversation Analysis, and others. MacWhinney’s recent work includes studies of online learning of second language vocabulary and grammar, situationally embedded second language learning, neural network modeling of lexical development, fMRI studies of children with focal brain lesions, and ERP studies of between-language competition. He is also exploring the role of grammatical constructions in the marking of perspective shifting, the determination of linguistic forms across contrasting time frames, and the construction of mental models in scientific reasoning.