Poster Abstract

The Establishment of DisorderedSpeechBank: A digital archive of disordered speech across languages

We plan to establish a digital archive of disordered speech, DisorderedSpeechBank, and this poster describes the progress made so far, and the plans for the future. The project will also establish an international team of researchers in clinical linguistics to plan and collect material for the archive, and the initial members of this team participated recently in a 3-day workshop.

DisorderedSpeechBank will consist of a digital archive of sound files and video files representing samples of disordered speech, in a variety of languages. These sound and video files will be accompanied by high-fidelity transcripts, and acoustic analysis files together with imaging files (such as ultrasound imaging), as appropriate. At all times, the importance of developing ethical guidelines and appropriate permissions in the collection of data will be stressed.

The archive will be made available to researchers, as well as speech-language pathology educators and students. For researchers, the attraction of such an archive is the ability to refine analysis methods and formulate and test hypotheses about disordered speech without having to 'reinvent the wheel' in terms of primary data collection. For educators and students, an archive of high quality speech data allows them to learn and practise analysis of disordered speech and the application of diagnostic tools on a variety of cases. The ultimate goal of this research is the improvement of evidence-based therapy for developmental and acquired speech disorders, as well as the improvement of research opportunities.

The current funding from the Riksbank Jubileumfond covers the costs of 2 workshops, of three days duration each. The first workshop took place in October 2015, and the second one in May 2016. The progress made during the workshops are described in the poster.

The benefits of an internationally accessible archive, which can serve as a tool both for researchers, and for the training of future speech-language pathologists, have been amply demonstrated by existing archives in the area of child language acquisition (MacWhinney, 2000, see: http://childes.psy.cmu.edu/), and adult-acquired disorders of language (MacWhinney, Fromm, Forbes & Holland, 2011, see http://talkbank.org/APhasiaBank/). There is an archive project, currently in progress, that aims at the collection of representative samples of normal, non-disordered developmental speech in the major languages of the world (Rose & MacWhinney, 2014, see http://childes.psy.cmu.edu/phon/). Our planned digital archive of disordered speech will complement these other initiatives, and make a major contribution to the systematic, data-driven analysis of speech and language around the world.

References

MacWhinney, B. (2000). *The CHILDES Project: Tools for analyzing talk. Third Edition*. Mahwah, NJ: Lawrence Erlbaum Associates.

- MacWhinney, B., Fromm, D., Forbes, M. & Holland, A. (2011). AphasiaBank: Methods for studying discourse. *Aphasiology*, *25*,1286-1307.
- Rose, Y., & MacWhinney, B. (2014). The PhonBank Project: Data and software-assistend methods for the study of phonology and phonological development. In J. Durand, U. Gut & G. Kristoffersen (Eds.), *The Oxford handbook of corpus phonology*. Oxford, UK: Oxford University Press. Pp. 380-401.