

High speed ultrasound/acoustic database of lingual articulation in typically developing children between three and thirteen years old

Collected within the ESRC research project ES/K002597/1,
“Coarticulation and tongue differentiation in children between three and thirteen years old”
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Technical information on the dataset

The ultrasound/acoustic data consist of 70 electronic folders, archived using 7-Zip software (freely available, <http://www.7-zip.org/>). The size of the archived data is ~85 GB; once unzipped, the size is ~150 GB. The data are in an internal format generated and readable by Articulate Assistant Advanced (Ultrasound Module) software produced by Articulate Instruments Ltd, www.articulateinstruments.com. The data are stored at Queen Margaret University, Edinburgh, and are available on request from Dr Natalia Zharkova (email: nzharkova@qmu.ac.uk).

Structure of the data

With the exception of 3-year-old and 13-year-old participants, the data for each group of speakers are stored in one archived file, named, e.g., “5yo.7z”). 13-year-old participants' data are split into two archived files, one corresponding to the recordings where the head was stabilised in relation to the ultrasound transducer (“13yo_stabilised.7z”), and the other one corresponding to the recordings where the transducer was held by the experimenter (“13yo_handheld.7z”). 3-year-old participants' data are split into three archived files, containing the data from speakers 1 to 4, 5 to 7, and 8 to 10 (“3yo_1_2_3_4.7z”, “3yo_5_6_7.7z”, and “3yo_8_9_10.7z”, respectively).

Within each archive, the data for each speaker are contained in a dedicated folder (named, e.g., “5yo_7”; “11yo_1”; “13yo_4_stabilised”; “13yo_9_handheld”).