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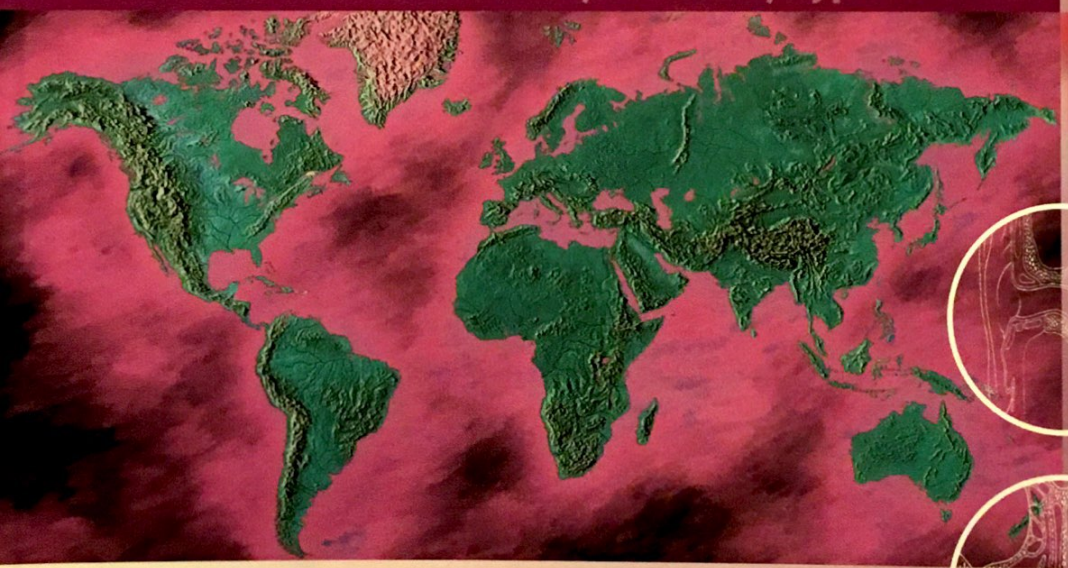

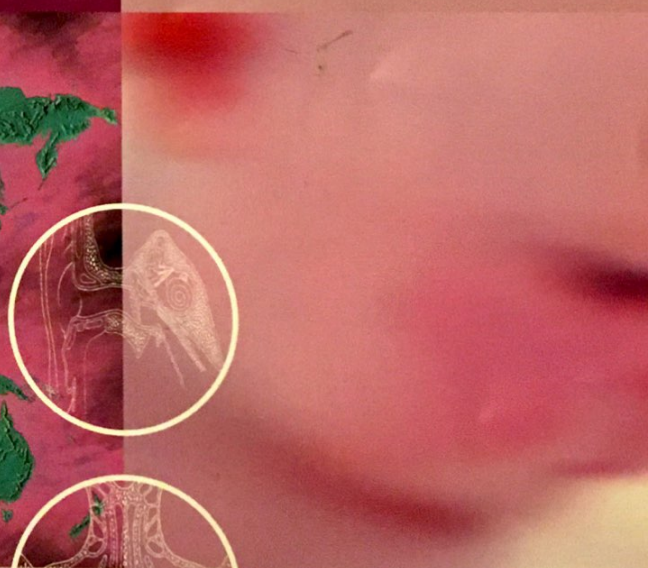

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Protophone classification of speech in implanted toddlers using acoustic analyses of their suprasegmental features

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Aims: (a) To study the structure of protophones of spontaneous speech of two implanted children and classify them via acoustical analysis of their suprasegmental features; (b) to track a developmental order of infant vocalizations.
Material and Methods: The spontaneous productions of two Greek implanted children (ages: 1:10–2:7, post-implant ages: 0:0–0:11) were examined. Over a span of six months an extensive record of protophones was transcribed via the IPA. Duration and pitch contour were analyzed via PRAAT. Utterance characteristics were analyzed in relation to a) children's age b) post-implant age.
Results: Certain developmental classification schemes emerged via the multi-level phonological analysis. The structure of protophones depended upon implantation age since the younger, early-implanted child showed more complex patterns. Consonant-vowel sequences were established by the post-implant age of six months.
Conclusions: The analysis of protophones can serve as a prognostic indicator for the detection of other disabilities in implanted infants/toddlers.