

Title: An acoustic analysis of Greek for the development of a speech training tool for applications in education and speech pathology

The aim of the research is to measure selected acoustic parameters of the Greek vowels, consonants and major features of suprasegmental parameters. In particular, for vowels, F0, F1, F2, F3 frequencies, as well as duration and intensity will be measured. Analysis for consonants will be carried out as well. Specifically, regarding stop consonants, duration and acoustic cues of release will be measured. For fricatives the focus will be on frequencies, intensity and duration, and for liquids and nasals formant frequencies and duration will be measured. In all cases, the measurements will include phonemes both isolated and in a variety of phonetic environments as well as in stressed and unstressed syllables. The findings from this initial part of the research will be used in order to develop or at least create the basis for the development of training software. The target is that the software will function as a speech training tool that could be used by learners of Greek as a 2nd/foreign language and people with speech disorders such as hearing impairment.