Evaluation of a simplified phonetic annotation scheme for disordered speech

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Attempts to train a computer to mimic a vocal pathology expert’s perception of perceivable voice problems have had limited success. A recent study successfully used a Cepstrum-based calculation (CPPs) to detect dysphonic speech, but it made significant false negative and false positive errors \cite{1}. Appropriate training data could improve calculation accuracy, but logistical and legal issues from the medical domain render large amounts of detailed, consistent training data difficult to produce. A simple scheme has been developed based on labeling one point in time for each of a few vowels in a read statement. Calculations from \cite{1} and \cite{2}, centered on neighborhoods of these vowels will augment the CPPs classifier. The annotation scheme will be evaluated with respect to its ability to assist a classifier to automatically predict perceptual labels \cite{1} from data, and practicalities such as inter/intra-annotator agreement.