Global TIMIT L2 Simple English

Authors: Hongwei Ding, Sishi Liao, Yuqing Zhan, Jiahong Yuan, Mark Liberman

Introduction

Global TIMIT L2 Simple English is a TIMIT-like corpus in L2 English, part of the “Global TIMIT” series. The sentences of the corpus were selected from the original TIMIT as “simple” to read by Chinese learners of English.

Each dataset has 50 speakers and 120 sentences per speaker. Among the 120 sentences, 20 are read by all speakers (“Calibration”); 40 are read by 10 speakers (“Shared-1”); and 60 are read by 5 speakers (“Shared-2”). The total number of sentence types is, therefore, $20 + 40*(50/10) + 60*(50/5) = 820$. Global TIMIT L2 Simple English has 50 Chinese learners of English, 25 female and 25 male, recorded at Shanghai Jiao Tong University. The Chinese learners of English are college students and are fluent in English.

HMM/GMM-based forced alignment, with employment of explicit phone boundary models, was applied to obtain phonetic segmentation.

Data

The corpus contains 6000 utterances. Each utterance has four data files as listed below:

- *.flac: flac files
- *.phones: phone segmentation files
- *.words: word segmentation files
- *.TextGrid: Praat TextGrid files

Base filenames have the form SP##_###, where the first digit string is a 0-padded subject number and the second is a 0-padded sentence number. Odd subject numbers (SP01, SP03, …) represent male speakers; and even subject numbers (SP02, SP04, …) represent female speakers. Sentences numbered from 001 to 020 are “Calibration” sentences, 021-060 are “Shared-1” sentences, and 061-120 are “Shared-2” sentences.