LVCSR-BASED LANGUAGE IDENTIFICATION

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ABSTRACT

Language identification is an important problem in multilingual speech recognition and understanding. A language identification system needs to identify the language of a spoken sentence. This paper discusses the influence of various acoustic and linguistic factors on language identification accuracy.
3. OVERALL SYSTEM STRUCTURE

There are several kinds of architectures for IID systems. An integratred architecture consists of a single global recognition system which is language-independent as described in [3]. One drawback is the increase in complexity when adding languages to be identified.

Each language to be system is trained, with...
5.1. First Experiments

In earlier experiments we used German data recorded at Kielrueh and English data recorded at CMU (to get native speakers). The CMU data are collected in office environments while the data collected at Kielrueh were not clean. We found that testing uninformative questions overestimate the language model significantly [9]. To obtain results, we
5.3. **Final System**

Finally, we built two 4-language systems to identify German, English, Spanish, and Japanese. For these final systems, we used the new recognizer [7] which was improved in the meantime by e.g., incorporating the decoder and better phonetic models. Therefore, we called this approach **Mespec**.