Feedback methods to improve phonetic and phonological skills in foreign language acquisition

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Introduction

- Difficulty of making learners aware of pronunciation problems
- Strong accent can interfere with intelligibility
- Pronunciation has been mainly left out in L2 teaching

>> Computer Assisted Pronunciation Training (CAPT)

Feedback (FB)

- Facilitates self-regulatory processes in order to accomplish a task
- Lyster and Ranta (1997) found six types of corrective FB (Fig. 1)
- Needs additional information/instructions on how to improve the mistake
- Lack of FB characterizes the negative side of current CAPT systems (Engwall et al., 2004)

Analysis and evaluation of feedback methods in CAPT

- 11 CAPT systems have been alaysed (Tab. 1)
- Graphical displays (e.g. wave forms) are difficult to interpret without phonetic knowledge
- None of Lyster & Ranta's (1997) FB types have been used
- Not a single system gives immediate information on how to correct the mistake

Proposed feedback methods

FB will be provides for typical mistakes in non-native utterances (Tab. 2)

- Explicit instruction on how to improve a mistake (Fig. 2 and 3)
- Descriptions for non-phoneticians
- Interactive graphical displays, e.g. vowel quality, pitch variation (“what you see is what you do”)
- Similar acoustic parameters of golden speaker
- Resynthesis of voice
- Self-manipulaton of prosodical features
- ...

Influence of individual learner strategy

- More than one learner strategy: only aural, only visual, combination of visual and aural (Eskenazi and Hansma, 1998)
- Test for learner strategies (games, questionnaires)

Future work

- Offline experiments to test proposed FB (individually)
- Perception experiments
- Consider different learner strategies

References

