

Individualized feedback for lexical stress errors

Towards a CAPT system for French learners of German

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Language Science and Technology

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Introduction

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Sitaram et al. (2011) says blah blah blah.

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Table 1.1: I made a table, isn't that awesome?

some	stuff	in
a	pretty	table

Computer-Assisted Pronunciation Tutoring

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2.1 Pronunciation in foreign language teaching

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

2.2 CAPT systems

2.2.1 Selecting errors to target

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written

in of the original language. There is no need for special content, but the length of words should match the language.



Figure 2.1: Criteria for selecting errors to target in a CAPT system.

2.2.2 Survey of existing CAPT systems

2.3 The IFCASL project

2.3.1 Individualized feedback in CAPT?

2.3.2 The IFCASL corpus

Lexical stress errors for French learners of German

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

3.1 Frequency of production

3.1.1 Prosody of German vs. French

3.1.2 Lexical stress errors in the IFCASL corpus

3.2 Impact on Intelligibility

3.3 Automatic detection

Diagnosis of lexical stress errors

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

Feedback on lexical stress errors

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

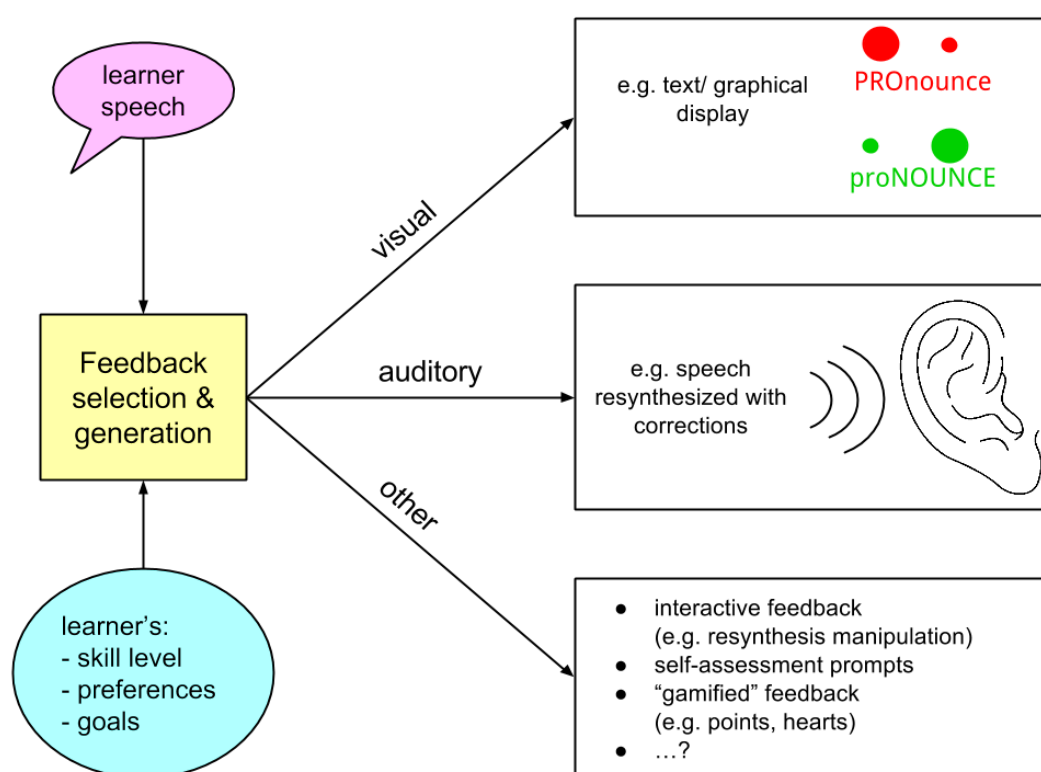


Figure 5.1: Delivery of prosody feedback in different modalities.

Conclusion and outlook

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Bibliography

Duong, Minh, Jack Mostow, and Sunayana Sitaram (2011). “Two methods for assessing oral reading prosody”. In: *ACM Transactions on Speech and . . .* 1.212.

Sitaram, S, J Mostow, Y Li, A Weinstein, D Yen, and J Valeri (2011). “What visual feedback should a reading tutor give children on their oral reading prosody?” In: *SLaTE*.