

Some Linguistic Problems with the Modelling of Speech Production

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Abstract: This paper focuses on the linguistic problems, when modelling the speech production. Most of the speech production algorithms, widely used in the practise, are developed in the early 70-ties. Moreover, when these algorithms were sophisticated in the 80-ties and 90-ties, they made the assumption, that the speaker speaks an Indo-European language, and more specific an Anglo-Saxon language. The paper throws some light on the linguistic problems when modelling the speech production of a speaker, which speaks a non-Indo-European language, such as Uralic or Altaic one. The paper presents new algorithms for speech production modelling, which are completely independent of the language, which the speaker is speaking, and are with accordance with computational power the state of the art computer systems.

