THE PHONETICS AND PHONOLOGY OF INTERACTION

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Speech and language serve interlocutor's communication, consequently they are bound to human-human or human-machine interaction. Most models of speech and language processing fail to take into account the co-ordinative principles underlying these and other forms of social interaction. e.g. by regarding communicative interaction to take place in a symbolic space. abstracting away from the phonetic detail in the speech signal, from communicative "noise" such as overlapping speech, and from the physiological properties and constraints underlying communication.

In the last couple of years, we have carried out research on various phenomena relating to the phonetic and phonological properties of speech-in-interaction, e.g. in the field of speech timing, co-ordinative rhythm in feedback and overlapping speech, the interaction of segmental and suprasegmental phonetic detail etc. [e.g. 1, 2, 3, 4, 5]. Our research results support the point of view that a certain level of dynamic inter-speaker co-ordination is a necessary prerequisite for a subsequent symbolic-linguistic analysis of the incoming speech signal by enabling the listener to selectively attend to and produce relevant fine phonetic detail. It is furthermore argued that models of temporal co-ordination can justly be regarded as part of the phonological component of speakers, as a co-ordinative mechanism driving attentional processes must conform to the language specific properties.

References

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