Title of presentation: The interplay of perceived naturalness and emotionality in voices

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Abstract (Max. 200 words with minimal references).

Perceived naturalness of a voice is a prominent feature which affects our interaction with both human and artificial agents. In humans, naturalness can be affected by voice distortion or transformation. In artificial agents, its tremendous importance has been acknowledged through multiple efforts to create and constantly improve synthetic voices to resemble human expressions. However, there is a lack of understanding to which degree voice naturalness relates to an effective expression and perception of vocal emotions. On the one hand, previous findings suggest that listeners display a strong tendency to pick up and process emotions even in highly artificial voices. On the other hand, a lack of natural prosody may disrupt emotional processing. In a current voice morphing study, we collected ratings of perceived naturalness and emotionality on manipulated voices with certain acoustic distortions. We found that emotionality was remarkably robust against reductions of voice naturalness. At the same time, voice naturalness seems to moderate emotion recognition performance and emotional processing on the neural level. Due to a lack of systematic research efforts, however, many questions around the interplay of perceived naturalness and emotionality in voices remain unresolved and demand for further research.