Voices of Power and Passion

Many species of animals use vocal communication in mating rituals, warning conspecifics, conveying location of food sources, and social learning. Not surprisingly, the human species has perfected this system of communication by developing first spoken and then written language. I will argue that the expression of emotion has been an important motor for this evolutionary advancement. In many species we find multimodal "affect bursts" which communicate reactions to environmental events and behavioral intentions to conspecifics through synchronized vocal, facial and bodily expression. It becomes increasingly plausible that both speech and music evolved from such affect bursts. In this talk, I will highlight the major strengths of vocal communication, especially voice quality, as compared to facial expression. While the face is a relatively discrete signaling system for specific reactions and messages, in large part restricted to human communication, the voice is a phylogenetically old and continuous carrier of information about the vocalizer's physique, enduring dispositions, strategic intention and current emotional state. The dynamic nature of voice delivery, including changes in voice quality, rhythm, intonation, and timing, is a major asset in communicating the unfolding of emotional reactions continuously in real time, allowing for instantaneous adaptation. In addition to theoretical considerations, including the suggestion of a path model for vocal communication, I will present recent empirical research from our laboratory, for both the speaking and the singing voice. Specifically, the signaling of speaker, power, passion and personality will be addressed. In addition, a variety of potential applications in different domains will be discussed.