pSCb40. The role of source and filter cues in emotion recognition in speech. Disa Sauter (Birkbeck College London, Henry Wellcome Building, Malet Street, WC1E 7HX London, UK, d.sauter@bbk.ac.uk), Frank Eisner (University College London, Institute of Cognitive Neuroscience, 17 Queen Square, WC1N 3AR London, UK, f.eisner@ucl.ac.uk), Stuart Rosen (Department of Phonetics and Linguistics, University College London, Gower Street, WC1E 6BT London, UK, s.rosen@ucl.ac.uk), Sophie K. Scott (University College London, Institute of Cognitive Neuroscience, 17 Queen Square, WC1N 3AR London, UK, sophie.scott@ucl.ac.uk)

In the context of the source-filter theory of speech, it is well established that intelligibility is heavily reliant on information carried by the filter, that is, spectral cues (e.g., Faulkner et al., 2001; Shannon et al., 1995). However,

the extraction of other types of information in the speech signal, such as emotion and identity, is less well understood. In this study we investigated the extent to which emotion recognition in speech depends on filter-dependent cues, using a forced-choice emotion identification task at ten levels of noise-vocoding ranging between one and 32 channels. In addition, participants performed a speech intelligibility task with the same stimuli. Our results indicate that compared to speech intelligibility, emotion recognition relies less on spectral information and more on cues typically signaled by source variations, such as voice pitch, voice quality, and intensity. We suggest that, while the reliance on spectral dynamics is likely a unique aspect of human speech, greater phylogenetic continuity across species may be found in the communication of affect in vocalizations.