

You talking to me?

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The most general aim of wh-questions is to seek for information, but they can have a wide range of other pragmatic functions. In this paper we investigate self-directed questions in dialogues that are lexicalised forms of vacillation (“how should I explain?”) and do not directly address the interlocutor. Their prosodic properties are compared with real wh-questions that seek for information. Data are based on the Hungarian version of the Columbia Game Corpus which is a computer-aided object placing game with two participants who see objects on their computer screen, but a blinking object is only visible to one player. Utterances from 5 dialogues with 9 speakers were analysed (sum: 112 minutes). We examined the following automatically extracted prosodic variables: mean energy, f0 level in terms of absolute midline slope and intercept, f0 range in terms of the the RMS between base- and topline, and the local f0 shape on the question words represented by the absolute values of a third order polynomial coefficients. Based on Ohala’s frequency code concept we expect higher energy, higher f0 level and range values as well as more pronounced local f0 shapes for the interlocutor-directed than for the self-directed questions. These hypotheses were mainly confirmed: for all energy, level and range related features as well as for two out of four local contour coefficients indeed significantly higher values were observed in interlocutor-directed questions (Mann-Whitney test, $p < 0.05$; for the remaining two features $p < 0.1$). We conclude that in our data the speakers indeed make use of the universal frequency code principles which are well captured by our prosodic parameterization. Finally, we trained random forest classifiers on the introduced feature set to predict question-directedness. A mean accuracy of 85 % in 10-fold cross validation was achieved confirming the usability of the proposed parameterization in off-talk detection in dialog systems.