Introduction

- Around six words in every one hundred are affected by disfluency (Fox Tree, 1995)
- Their occurrence is commonly associated with difficulties encountered in planning an utterance (cf. Oomen & Postma, 2001)
- Evidence suggests they may play a beneficial role in comprehension (e.g. Arnold, Tanenhaus, Altmann, & Fagnano, 2004)
- One influential claim has been that the fillers uh and um function as signals, each with distinct meanings (Clark & Fox Tree, 2002)

Are disfluencies intentionally produced by speakers, as a signal of ongoing difficulty, for the benefit of their listeners?

Aims

- Three questions are addressed:
  - Are speakers sensitive to the presence of an interlocutor?
  - Do disfluencies reflect difficulties in speech planning?
  - Does the presence of an interlocutor influence speakers’ production of disfluency?

Experiment

- 20 native British English speakers
- participants performed both:
  - a picture-naming task (monologue condition)
  - a picture-matching task (dialogue condition)

Materials

- four scripts, each referring to sixteen items, were prepared for a confederate of the experimenter:
  - eight “alignment” names referring to images shared by the participant
  - eight filler names
- four grids, each containing sixteen different images:
  - eight “alignment” images, corresponding to those in the confederate’s script
  - four easy to name images (high frequency and high codability)
  - four hard to name images (low frequency and low codability)

Procedure

- Picture-naming task
  - participant instructed to name each image in two grids in sequence
- Picture-matching task
  - participant performed task with confederate
  - both took turns to name an image in their set
  - confederate was scripted to use either the preferred or dispreferred name for alignment images
  - alignment images were always named by confederate first

Coding and Analysis

- Each description was transcribed and coded as either fluent or disfluent
- Descriptions were only rated disfluent if they contained forms of disfluencies which could likely be considered as signals:
  - uh
  - um
  - Prolongations (e.g. the pronounced thee rather than thuh)
  - Repairs
  - Repetition
- Analyses used Logit Mixed Effects Models

Results

Participants were more likely to use dispreferred name if confederate was present and had already used the name (p < .001)

Utterances containing harder image names were more than twice as likely to be disfluent than those containing easier ones (p = .012)

Participants were 1.6 times more likely to refer to images disfluently per unit increase in H (high H → low codability; p = .015)

However, as frequency and codability were highly correlated, the addition of log frequency did not improve the fit of the model (p < 1)

The presence of the confederate was not found to be having an effect upon production of disfluency (p < 1)

Conclusion

- Participants were sensitive to the presence of an interlocutor
  - More likely to use dispreferred names after hearing them used by the confederate
  - Their rates of disfluency appeared to reflect difficulty with speech planning
  - More likely to be disfluent when names were harder
  - However, participants did not appear to be producing disfluencies with the purpose of signalling difficulty to their interlocutor
  - Equally likely to be disfluent when an interlocutor was present, as when one was not

References