Filler particles and pausing behaviour in Egyptian Arabic

Beeke Muhlack, Omnia Ibrahim
Language Science and Technology, Universität des Saarlandes

Background

- Disfluencies show speaker-specific patterns [1, 2]
- Task/cognitive load can effect disfluency production [3, 4]
- Vowel quality of filler particles (FPs) is language-specific [5]
- Many languages employ central vowel in their FPs [6], but there are exceptions (e.g., Spanish [7])

Do speakers show different disfluency patterns (across tasks)?

Which vowel quality is used in Egyptian Arabic FPs compared to vowel inventory?

Data

- 7 native Egyptian Arabic speakers (3 f, 4 m) [8]
- 2 monological tasks (Daily life, Map task)
- Speaking time min. 1 minute per task (total 19 minutes)
- Annotation of FPs and other disfluencies
  FPs: *uh*, *um*, *hm*, glottal, lexical FPs
  other disfluencies: lengthenings, repetitions, silent pauses (p), filled pauses
- 129 disfluencies, 357 silent pauses, 8 filled pauses (FP flanked by silence on both sides)

1

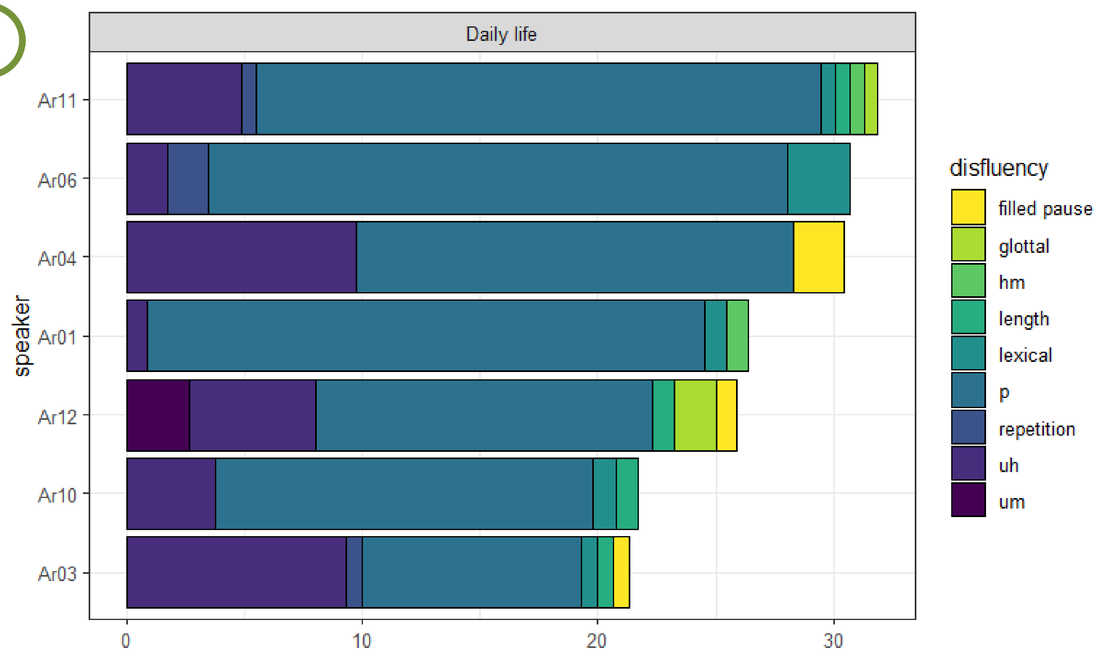

Fig. 1: Frequency count of disfluencies per speaker in the task: Daily life (monological spontaneous speech)

2

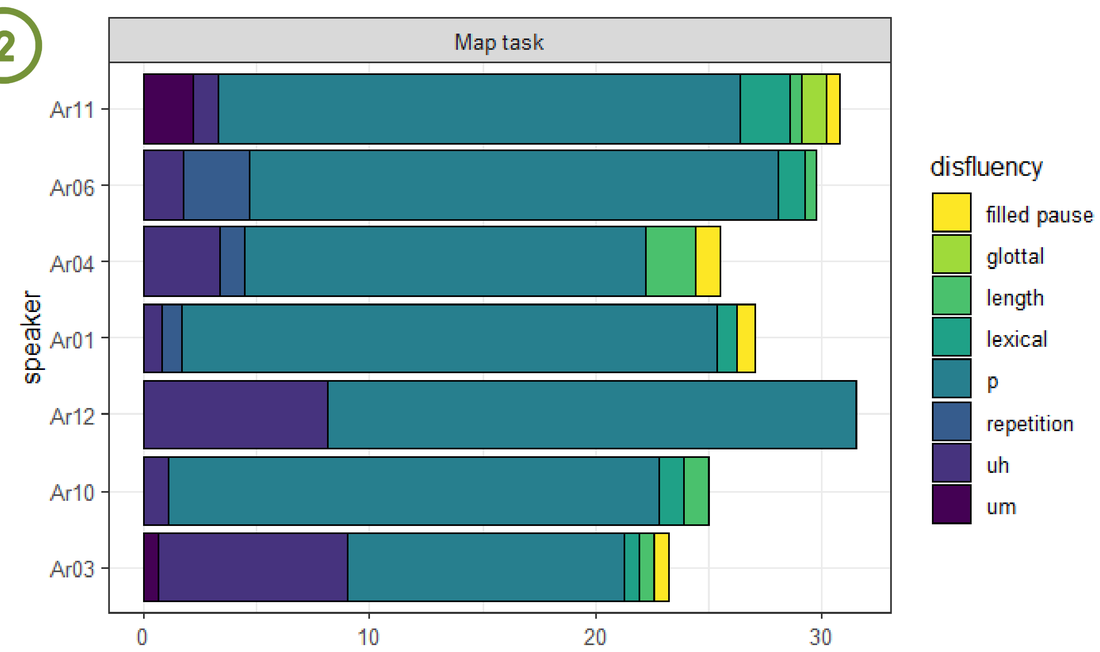

Fig. 2: Frequency count of disfluencies per speaker in the task: Map task (monological semi-spontaneous speech with map as visual aid)

3

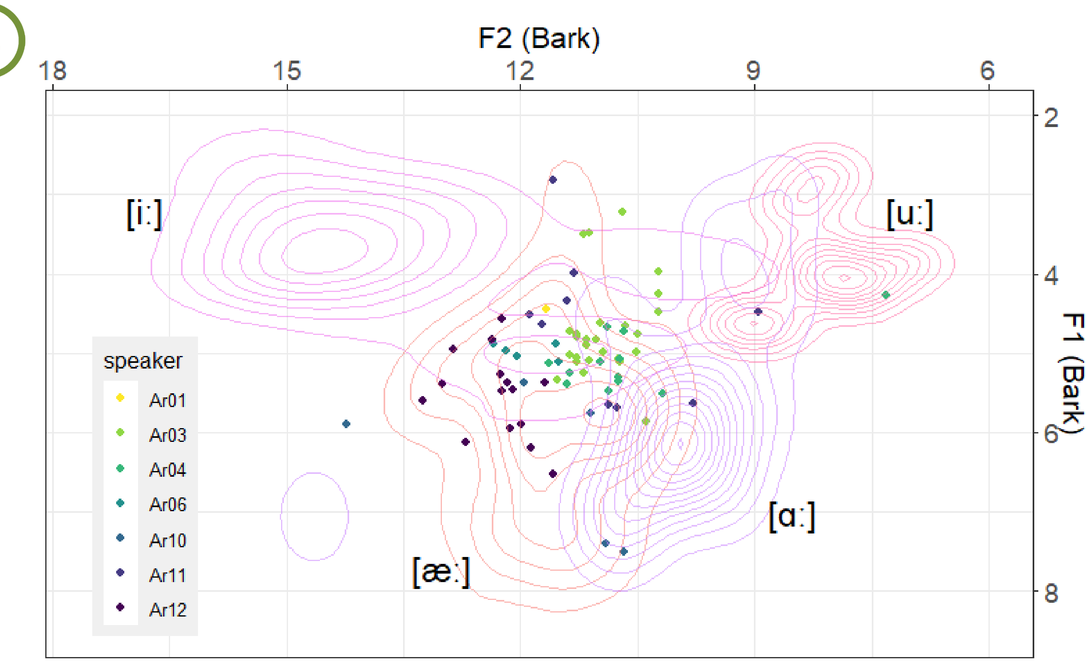

Fig. 3: Formant measurement of vocalic FPs (*uh*) and long vowels in lexical material. Overlap (Pillai-score) of *uh* (n = 76) with corner vowels: [i:] 0.45; [æ:] 0.06; [ɑ:] 0.35; [u:] 0.5

4

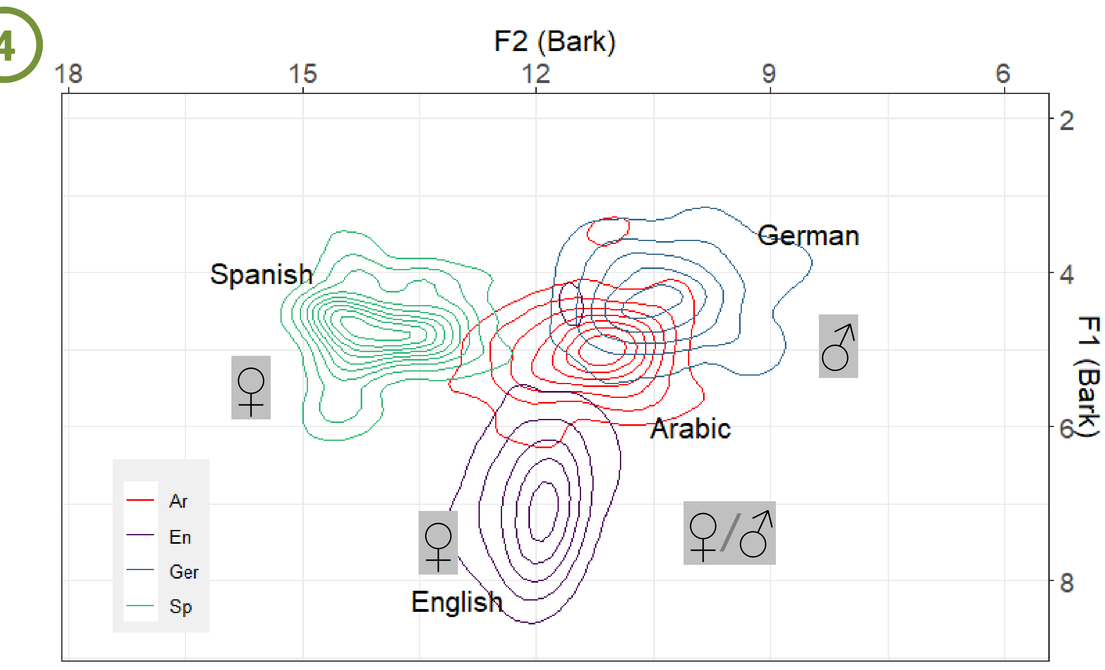

Fig. 4: Comparison of vowel qualities of vocalic FP across languages. Overlap (Pillai-score) of Arabic *uh* with other languages: En 0.21; Ger 0.08; Sp 0.69 (Data from [9, 10])

Summary

- Speakers show individual disfluency patterns but seem to be rather stable across tasks
- Speakers use more pauses than other disfluency phenomena
- Vowel quality of Arabic vocalic FPs closest to Arabic long vowel [æ:], but this vowel has a high spread
- Vowel quality of Arabic vocalic FPs highest overlap with German FPs, less with Spanish and English FPs [9, 10]

References

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[muhlack|omnia]@lst.uni-saarland.de