INVESTIGATING L2 FLUENCY

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L2 SPEECH FLUENCY

– An aspect of oral proficiency associated with smoothness and effortlessness (e.g., Chambers 1997)
  • Narrow sense of fluency / low-order fluency (Lennon 1990, 2000)
  • Distinct from complexity and accuracy (on the CAF-framework, see e.g., Housen, Kuiken & Vedder 2012)

– Three dimensions (e.g., Skehan 2009, 2014)
  • Speed
  • Pausing
  • Repair
THREE ASPECTS OF FLUENCY (SEGALOWITZ 2010)

1. Utterance fluency
   • Corresponds to Lennon’s narrow sense of fluency
   • Fluency-related features of an utterance

2. Perceived fluency
   • Listener’s judgment of fluency, based on impressions created by features in a speech sample

3. Cognitive fluency
   • Efficient cognitive processing (psycholinguistics)
   → Depends on your research question
CHALLENGES IN OPERATIONALIZING L2 (UTTERANCE) FLUENCY

– Studies mostly quantitative (e.g., Iwashita et al. 2008, De Jong et al. 2015)

– “[D]espite several decades of work, researchers have not discovered universally applicable, objective measures of oral fluency.” (Segalowitz 2010: 39)

  • Variation in the used measures

– Inferences made based on statistical significance, but not all fluency-related features are equally well suited for a quantitative examination

  • Speed and pauses obligatory elements, filled pauses and repair voluntary
UTTERANCE FLUENCY MEASURES

I. Speed / Temporal fluency
   1. Speech rate (syllables per minute)
   2. Articulation rate (syllables per minute of speaking time [excluding pauses])
   3. Phonation-time ratio (proportion of speaking time of total duration)
   4. Mean length of run (average number of syllables between silent pauses)

II. Pausing / Breakdown fluency
   4. Silent pause (SP) frequency
   5. SP Location (mid-clause / clause or AS-unit boundary)
   6. SP Duration
   7. Type: Non-lexicalized filled pauses (uh, um) counted separately

III. Repair fluency (Foster & Skehan 1999)
   9. False start
   10. Repetition
   11. Replacement
   12. Reformulation

(Peltonen & Lintunen 2016; see also e.g., Kormos 2006: 163, De Jong 2016: 212)
FLUENCY IN DIALOGUE (Peltonen 2017a)

– Fluency in interaction rarely studied (but see Riggenbach 1991; more recently Witton-Davies 2014, Tavakoli 2016)

• Individual fluency = within-turn contributions
• Interactional = (collaborative) between-turn aspects
  – Shared responsibility of maintaining the flow of speech across turn boundaries (confluence)
    (McCarthy 2010: 7, see also Sato 2014, Galaczi 2014)

(see also Peltonen 2017b)
MEASURING DIALOGUE FLUENCY (Peltonen 2017a)

– Some (monologue) utterance fluency measures were adapted for the purposes of dialogue analysis and additional measures were used for capturing dialogue fluency
  
  • **Average turn length** (Syllables divided by the number of turns; cf. MLR in monologue)
  
  • The number of turn pauses
  
  • The length of turn pauses
  
  • The number of other-repetitions
  
  • The number of collaborative completions (Turns completed by the interlocutor)
Take-home messages

– Be precise with wordings and conceptualisations
– Choose measures according to research questions
– Common measures are good starting points, but a critical eye is needed
– Some fluency features are better approached from a qualitative perspective; for a comprehensive analysis both approaches needed
– L1 tendencies should be noticed
– Analysing monologues is important, but usually spoken communication consists of dialogues


