Methods and Terminology for Phonetic Aspects of Incremental Disfluency Synthesis

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1. Terminology
Disfluencies (DF): Cover term for anything that leads to an audible hesitation, break or deviation from expected fluent speech production. Describes the underlying macro structure.

Disfluency Elements (DFE): Cover Term for phonetic surface phenomena resulting from DF. Describes the audible micro-structure.

For enriching incremental speech synthesis, DFEs will be included.

2. Shribergian DF structure
Highlighted: DFEs

3. Incrementality in Dialogue Systems
Why include DFEs into speech synthesis?

4. Selected DFEs (open list)

5. Method Packages (draft)
System requirement 1: Buying Time
- The system is out of content, due to changes in speech plan, delays in delivery from the generator, etc.
- Try to bridge the appearing gap with as simple DFEs as possible (see 4.)
- If possible, apply LEN, if more time needed: SP, more: FP.
- Still more time needed? Try some REP

System requirement 2: Interrupt and Correct
- Something wrong has been (or is still being) uttered
- Depending on urgency, choose appropriate IP (may cause fragment)
- Continue with corrected material (leads to some kind of RR)
- If necessary, insert buying time package (see above).

*due to word cutoffs
**different repair types arise depending on how production after the DF continues. We do not intend to synthesize them specifically, but depending on the content chosen, they will occur automatically.