# Are filled pauses meaningless? Uh, no.

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What does Obama say is the reason why he did those things?

How does Obama describe the process of "growing"

up" for himself?

What does Obama think is the reason why he sometimes takes a wrong step?





- What does Obama say is the reason why he did those things?
- How does Obama describe the process of "growing up" for himself?
- What does Obama think is the reason why he sometimes takes a wrong step?





- What does Obama say he did in his teenage years?
  - Experimented with drugs, drank (alcohol)
- What does Obama say is the reason why he did those things?
  - Selfishness, obsessed with self, couldn't focus on others
- How does Obama describe the process of "growing up" for himself?
  - Recognizing that "it's not about me"
- What does Obama think is the reason why he sometimes takes a wrong step?
  - He's trying to protect himself instead of trying to do God's work.

- - How many times did Obama say "uh"?
    - 13 times
  - How many times was Obama disfluent ("uh", "um", word repeats, false starts, etc.)?
    - 44 times
      - → 13 "uh"/"um"
      - → 11 word repeats
      - → 11 false starts
      - → 5 long silent pauses
      - → 4 other

Well, i- i- i- in my own life I'd- I'd break it up in stages, when uh I had a difficult youth. Uh my father wasn't in the house, uh I've written about this, uh there- uh uh you know there were times where uh I've experimented with drugs, and I drank, uh yeah in my teenage years, a-nd wh- what I trace this to is uh a certain selfishness on my part, I- I was so obsessed with me, and you know the- the reasons that I might be dissatisfied, that I- I- w- I couldn't focus on other people. And uh y- you know I think the process for me of growing up was to recognize that it's not about me, it's about ...

I uh wh- when I find myself um taking the wrong step, I think a lot of the times it's because I'm trying to protect myself, instead of trying to do God's work. And- and- an- and so that I think is- is my own failure

Well, in my own life I'd break it up in stages, when I had a difficult youth. My father wasn't in the house. I've written about this. You know there were times where I've experimented with drugs, and I drank in my teenage years. And what I trace this to is a certain selfishness on my part. I was so obsessed with me, and the reasons that I might be dissatisfied, that I couldn't focus on other people. And I think the process for me of growing up was to recognize that it's not about me, it's about ...

Absolutely. But look, you know, when I find myself taking the wrong step, I think a lot of the times it's because I'm trying to protect myself, instead of trying to do God's work. And so that I think is my own failure



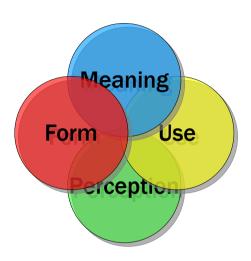
- What are filled pauses?
- Why do people use filled pauses?
- How do listeners use filled pauses?
- Is it bad to use filled pauses in speech?
- What's the relationship between filled pauses and fluency?



#### **Overview**



- An overview of filled pauses
  - Background
  - Form
  - Meaning
  - Use
  - Perception
- Filled pauses and other issues
  - Lexical status of filled pauses
  - Relation to fluency
  - Filled pauses in second language



### **Hesitation Phenomena**



- Pauses
  - Silent
  - Filled (uh, um)
- Lengthenings
  - a-nd what I trace this to is ...
- Restarts
  - · when I uh when I find myself taking the wrong step ...
- Repeats
  - <u>I- I</u> was so obsessed with me
- Self-corrections
  - I- I- w- I couldn't focus on other people
- False Starts
  - th-the uh wh-when I uh when I find myself ...





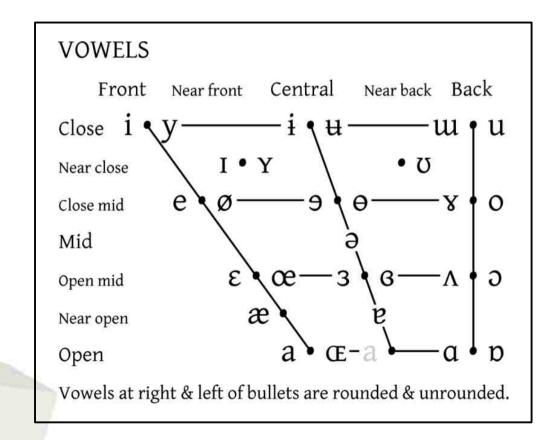
# Temporal aspects of Language

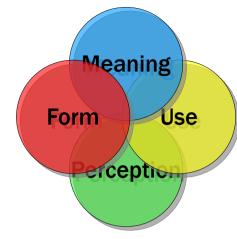
- Maclay and Osgood (1959)
  - "Hesitation Phenomena in Spontaneous English Speech"
- Frieda Goldman-Eisler (1961)
  - Temporal Variables
    - → Rate of speech
    - → Rate of articulation
    - → Pause frequency
    - → Pause length
    - → Stress-timing
  - "A Comparative Study of Two Hesitation Phenomena"
- Relevance to sociolinguistic factors politeness
- Relevance to performance factors fluency



#### **Form**

- **English** /ə/, /ə:/,/əm/, /ə:m/
- **French** /œ/, /œ:/,/œm/, /œ:m/
- Japanese /ɛ:/, /ɛ:to/, /ɑno:/
- Spanish /ɛstɛ/

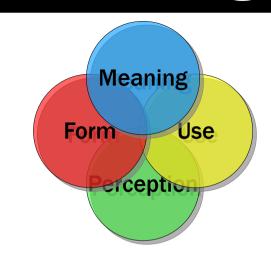




# Meaning



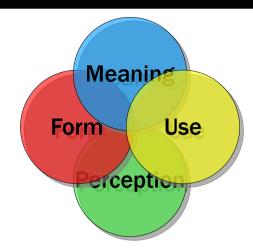
- There's some jam on your face.
- There's some uh jam on your face.
- (same meaning)
- Lexical status
  - FPs are interjections (Clark and Fox Tree, 2002)
  - FPs are not words (Ferreira and Bailey, 2004)







- Myths
- **■** Turn-taking
- Communication strategy (warning sign)
- Dispreferred seconds in adjacency pairs
- **■** Location: Content vs. function words



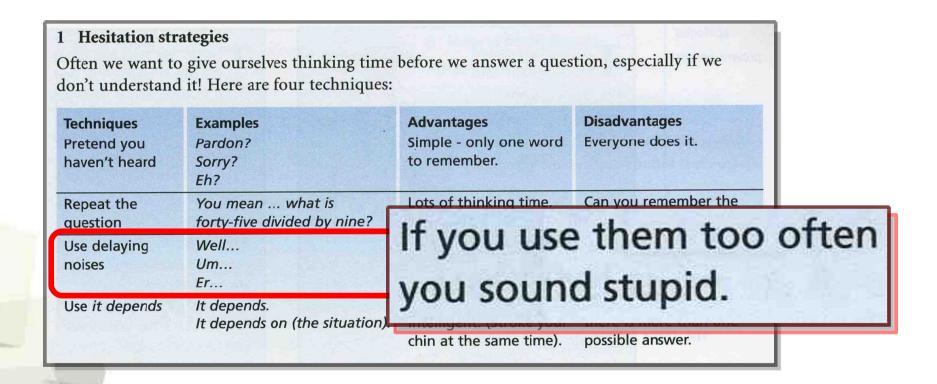




■ FPs "make you sound dumb."

http://www.scotthyoung.com/blog/2008/03/18/12-speaking-errors-that-make-you-sound-stupid/

English textbooks



# Intelligence

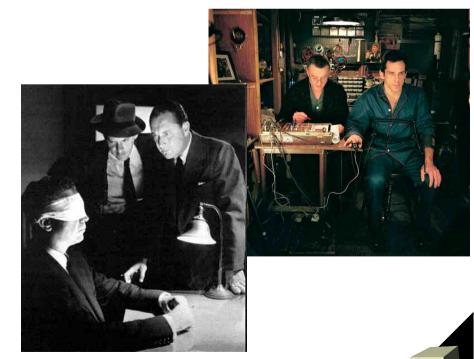


- Basil Bernstein (1962)
  - No correlation between FP rate and intelligence.
  - Correlation between FP rate and social class
    - → Working-class youth: lower hesitation rates
    - → Middle-class youth: higher hesitation rates
- Stanley Schachter et al (1991)
  - Columbia U. professors: about 5 FPs per minute in interviews



# **Deception**

- Popular view: People use FPs when lying
  - TV and film: lying marked by FPs in speech
- Benus, Enos, Hirschberg, and Shriberg (2006)
  - Controlled corpus of speech (32 participants)
  - FPs more closely related with truthfulness



# **Turn-taking**

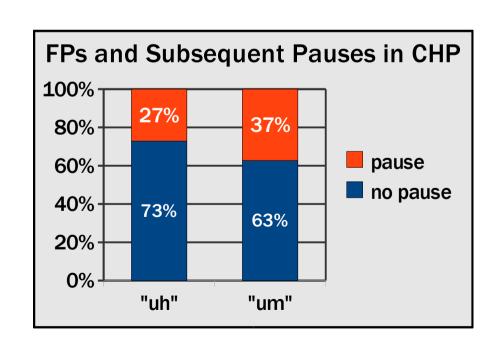


- Turn-taking: managing conversational turns
- In English, minimal response latency is optimal (Sacks, Schegloff, and Jefferson, 1974)
  - Among New York Jews, some overlap of turns is optimal (Tannen, 1985)
- Maclay and Osgood (1959): If a speaker "pauses long enough to receive the cue of his own silence, he will produce some kind of signal ([m, er]...) which says, in effect, 'I'm still in control—don't interrupt me!'" (p. 41)



# **Communication strategy (warning sign)**

- Stalling device (to gain thinking time)
- Smith and Clark (1993); Clark and Fox Tree (2002)
  - FPs are used to give listener a warning of impending delay in message transfer
    - → "uh" → shorter delay
    - → "um" → longer delay
- Rose (1998, 2009)
  - Corpus of Hesitation
     Phenomena (CHP)
    - → 4 speakers
    - → 8,200 words
    - → 1,686 HP tokens
  - Support for the distinction between uh and um





# Dispreferred seconds in adjacency pairs

- Adjacency Pair (Finegan, 1994; Levinson, 1983)
  - Sequence of conversational turns where first turn restricts the possible second turns.
- Preferred second (turn)

A: Wanna' see a movie this weekend? Invitation

B: Yeah, sounds good!
 Acceptance

Dispreferred second

A: Wanna' see a movie this weekend? Invitation

B: No, thanks.
 Declination

Dispreferred second, softened (hesitation)

A: Wanna' see a movie this weekend? Invitation

B: Uh ... no, thanks.
 Declination



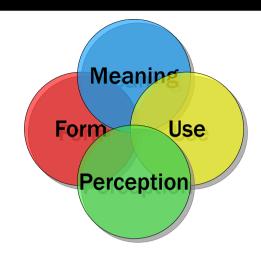
#### **Location: Content vs. function words**

- Maclay and Osgood (1959)
  - Compared pauses before ...
    - → Content words: nouns, verbs, adjectives, etc.
    - → Functions words: pronouns, articles, preposition, auxiliary verbs, etc.
  - FPs were more likely to occur before content words than function words.
- However, later studies have not confirmed this reliably.



# **Perception**

- **■** Listeners' evaluation of FPs
- **■** Feeling-of-another's-knowing
- Syntactic parsing
- **■** Discourse processing





- Speakers with a high hesitation rate have been judged by listeners as
  - less truthful (Fox Tree, 2002; Kraut, 1978)
  - less open (Fischer & Apostal, 1975)
  - less credible (McCroskey & Mehrley, 1969; Sereno & Hawkins, 1967)
  - less competent (Norton-Ford & Hogan, 1980).
- Problems with these studies
  - Focus on HP, not just FPs
  - Participants knew they were evaluating the speakers' speech.



- Christenfeld (1995): "Does it hurt to say um?"
  - Three versions of the same recording
    - → As-is, with FPs
    - → With FPs changed to SPs
    - → With FPs deleted (no pauses)
  - Two groups of listeners
    - → Focus on content
    - → Focus on delivery
  - Post-listening evaluation of relaxedness

		No Pause	Filled Pause	Silent Pause
1	Delivery Group	best	sa	me
The second second	Content Group	sa	me	worst

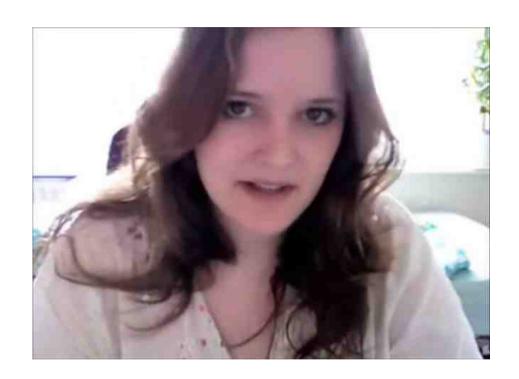


■ No advantage to changing FPs to SPs (i.e., "Don't say 'um'!" is not helpful advice.





■ No advantage to changing FPs to SPs (i.e., "Don't say 'um'!" is not helpful advice.



How relaxed do you think she is in this video blog?



Christenfeld concludes, "When an audience attends to style, it may well be the result of the content being unworthy of attention, or the speaker's style being distracting. In this case, ums will not be associated with poor speech, but noticing ums will be. Just about every speaker produces ums, but the good speakers, by keeping substance, not style, as the center of attention, will effectively hide their hesitations." (p. 185)

# **Syntactic parsing**

- FPs more common at clause boundaries than within clauses (Swerts, 1998; Rose, 1998)
- Bailey and Ferreira (2003)
  - How do listeners process sentences with FPs?
  - Grammaticality judgment task: Participants heard sentences and judged whether they were grammatical.

Karen talked to the mailman and the neighbors began to gossip.

→ "grammatical"

Karen talked to the mailman and uh uh the neighbors began to gossip.

→ "grammatical"

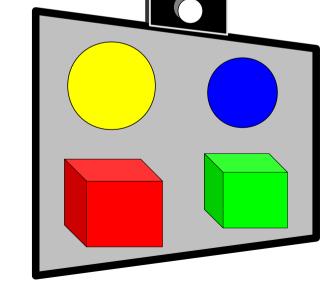
Karen talked to the mailman and the neighbors uh uh began to gossip.

→ "not grammatical"

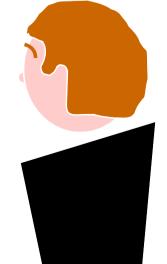
Listeners' sentence processing is sensitive to FPs.



- Arnold, Fagnano, and Tanenhaus (2003)
- Eye-tracking experiment
  - "Put the <u>yellow ball</u> in the <u>red box</u>."
    - "Now put the blue ball in the red box."
  - "Put the yellow ball in the red box."
    - "Now put the blue ball in the uh red box."

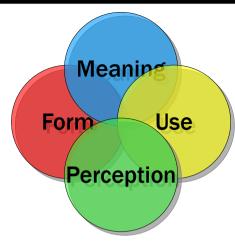


Eye-tracking experiment





- - Filled pauses have conventionalized phonetic forms.
  - Filled pauses carry no semantic meaning.
  - Filled pauses are used by speakers to manage interaction and minimize loss-of-face for interlocutors.
  - Filled pauses are used by listeners to make inferences about the speaker's state of mind.





# Lexical status of filled pauses

- Clark and Fox Tree (2002)
- **■** FPs are words
  - Part-of-speech
    - → Interjection (like well, oh)
  - Pronunciation
    - → /ə/, /ə:/,/əm/, /ə:m/
  - Meaning
    - → Uh "I've got a small processing problem." → short pause
    - → Um "I've got a larger processing problem." → long pause

#### Problems

- People don't seem to process them like words (filtering hypothesis: Lickley, 1995)
- Few adherents
- But, ...



# Lexical status of filled pauses

- **■** FPs in blog writings
  - Slashfilm.com: "Costume Test Photos from Tim Burton's Failed 'Superman Lives'"
    - → <u>Um. Wow.</u> Like I said above, if this wasn't Superman and maybe some new superhero with all those light up muscles and stuff, I'd be on board.



- FPs used intentionally
- Can we analyze these FPs in order to develop a clearer understanding of FPs in speech?

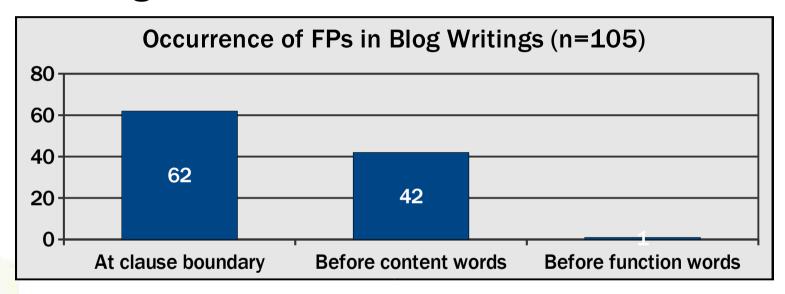




# Lexical status of filled pauses

#### Pilot Study

 105 recent blog posts from top 100 blogs (Wikio) containing "uh" or "um".



#### Possible explanation

- uh/um are words and speakers use them intentionally
- FPs before function words are unintentional (i.e. resulting from automatic cognitive processes)

# **Relation to fluency**

- Temporal variables which correlate with judgments of fluency.
  - Kormos and Dénes (2004)
    - → Speech rate
    - → Mean length of runs
    - → Phonation time ratio
    - → Pace (number of stressed words per minute)
  - Trofimovich and Baker (2006)
    - → Stress-timing
- No correlation between FPs and fluency

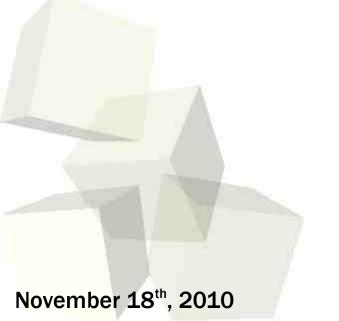


# Filled pauses in second language

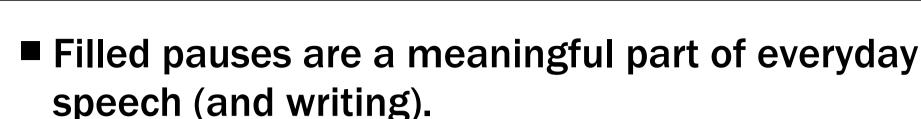
- **■** FPs may cause comprehension problems
  - For L2 listeners (Rose, 2008)
  - For native listeners (Voss, 1979)
- FPs may facilitate L2 comprehension
  - For higher-proficiency L2 speakers (Watanabe, 2008)
- FPs may facilitate interaction
  - Turn-taking
    - → For Japanese speakers of English, long response latency causes some confusion/anxiety in native English interlocutors (Nakai, 2002)
  - Politeness
- **■** Recommendations (from Rose, 2008)
  - Authentic teaching materials with FPs early in curriculum
  - Encourage students to use L2 forms



- - What is the best model of the cause of FPs in spontaneous speech?
  - How do listeners process FPs?
  - How do children learn to use FPs?
  - How do L2 learners come to use them like native speakers?
  - Can we facilitate this developmental process?



# **Summary**



- They are used in constructive ways by both hearers and speakers.
- Second language learners need to master the use of (filled) pausing strategies in order to improve their interactive and sociolinguistic skills.

Thank you very much!

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