The Developmental Trajectory of Second Language Learners' Use of Hesitation Phenomena

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Introduction

Well, I'd break it up in stages, when I had a difficult youth. Uh 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, yeah in my teenage years, what I trace this to is a certain selfishness on my part, I was so obsessed with me, and you know 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 ...

And- and- and- and so that I think is my own failure.

Barack Obama (August, 2008); Saddleback Presidential Forum
Overview

• Hesitation phenomena
  – Overview
  – HP in L2 speech
• Crosslinguistic Corpus of Hesitation Phenomena
  – Description
  – Results
• HP Developmental Trajectory
• Accessing the CCHP
Overview of types of HP

• Long investigative history

• Types
  – Silent pauses (SP): longer than 0.3-1.0 sec
  – Filled pauses (FP): uh/um in English, e-to/ano- in Japanese
  – Lengthenings: prolongation of one or more syllables
  – Repeats/restarts: repetition of a sequence of words
  – False starts: beginning of an utterance that is abandoned
  – Self-corrections: a sequence of words that repairs an immediately preceding sequence
HP in L2 production

  - SP duration and rate: higher proficiency $\rightarrow$ shorter and fewer silent pauses
  - FP rate: higher proficiency $\rightarrow$ fewer filled pauses
  - Differences between read and spontaneous speech
- Related
  - Speech rate: higher proficiency $\rightarrow$ faster rate
HP in L2 production

- As a whole, work has been quite comprehensive.
- However, individual works are limited in that many do not take individual variation into account (cf., de Leeuw 2007).
- Gradually, more studies are including L1 observations.
  - Derwing et al (2009) and Cox and Baker-Smemoe (2012) observed that both speech rate and pause rate in L1 and L2 production are correlated.
- The current research is designed to contribute to greater understanding of the influence of L1 hesitation on L2 hesitation.
Research Questions

- What is the relationship between hesitation patterns in L1 and L2 speech?
- What is the developmental trajectory of HP use in L2?
Crosslinguistic Corpus of Hesitation Phenomena (CCHP)

- Participants: L2 learners of varying proficiency levels
- Elicitation tasks
  - Spontaneous speech: picture description, topic narrative
  - Reading aloud
  - Performed in both L1 and L2
- Demographic information: age, gender, L2 proficiency (standardized test scores, experience abroad, self-assessment)
- Annotation
  - Transcripts, HP, word & pause intervals
  - Two annotators, one checker
CCHP Results: Basic Statistics

- **Participants:** 25 Japanese L1, English L2 speakers
- **Full corpus**
  - 42,972 words
  - 8 hrs, 9 min
- **Spontaneous speech**
  - 27,416 words
  - 6 hrs, 12 min
- **Read speech**
  - 15,556 words
  - 1 hr, 57 min
- 11,091 silent pauses
- 2,404 filled pauses
- 1,080 self-corrections
- 309 repeats
CCHP Results: Analysis

- Used spontaneous speech data only.
- Extracted counts for speech rate, silent pauses, filled pauses, repeats, and self-corrections.
- Performed repeated measures ANOVA
  - (between) L2 Proficiency as numerical variable, estimated from test scores, experience abroad, self-assessment
  - (within) Language as categorical variable: Japanese, English
- Used $\alpha = 0.05$ for significance testing (marked with ⭐).
CCHP Results: Speech Rate

Consistent with Derwing et al (2009) and Cox and Baker-Smemoe (2012)
CCHP Results: Silent Pauses

Silent Pause Rate (per min)

Silent Pause Duration

Consistent with Derwing et al (2009) and Cox and Baker-Smemoe (2012)
CCHP Results: Filled Pauses

Filled Pause Rate (per min)

Filled Pause Rate (per word)

Interaction

L2 Competence

L2 Competence
CCHP Results: Repeats

Repeats are uncommon in Japanese (Fox et al 1996)
CCHP Results: Self-corrections

Self-correction Rate (per min)

- English
- Japanese

Self-correction Rate (per word)

- English
- Japanese

L2 Competence
CCHP Results: Other Repair Measures

Mean Num Repair Attempts

Mean Num Editing Terms
Summary

- Recent studies of L2 speech performance are taking L1 speech performance more and more into account.
- The Crosslinguistic Corpus of Hesitation Phenomena allows us to account for L1 factors in the study of L2 hesitation patterns.
- Results show that learners' use of filled pauses change with increased proficiency, independent of L1 speech factors.
- Results show that speakers at all proficiency levels use more repeats.
- Results suggest that other aspects of L2 hesitation use correlate with that of L1.
Assembling a larger (N=30), public version of the Crosslinguistic Corpus of Hesitation Phenomena is ongoing.

When complete, audio files and annotated transcripts will be available for free download.

Some files are already available for download: http://www.filledpause.com/chp/cchp
References


