

**Workshop on Filled Pauses in Chinese, English, and Japanese**  
**December 12, 2014**  
**Institute of Linguistics, Academia Sinica**

**Programme**

9:10-9:40

**Phonetic characteristics of filled pauses in spontaneous Japanese: F0, formant frequency, and phonation**

**Kikuo Maekawa** (National Institute for Japanese Language and Linguistics)

9:40-10:10

**The relationship between boundary strength, subsequent clause length and the duration of silent and filled pauses at clause boundaries in Japanese**

**Michiko Watanabe** (National Institute for Japanese Language and Linguistics)

10:10-10:20 Break

10:20-11:00

**Some observations about Filled Pauses in English: A Multifaceted Approach**

**Ralph Rose** (Waseda University)

11:00-11:40

**Filled pauses in Chinese conversation**

**Shu-Chuan Tseng** (Academia Sinica)

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**Abstracts**

**Phonetic characteristics of filled pauses in spontaneous Japanese: F0, formant frequency, and phonation**

**Kikuo Maekawa** (National Institute for Japanese Language and Linguistics)

All languages have filled pauses (FP) of some sort: for example, “uh” and “um” in English, “na” and “naga” in Chinese, and “eh”, “etto”, “ano” and many others in Japanese. There are at least two independent reasons to study FPs. Firstly, FPs are very common in spontaneous speech. According to the morphological analysis of the Corpus of Spontaneous Japanese (CSJ), more than 6% of words in spontaneous monologues are classified as FP. In linguistic analysis, filled pauses (or FP) are generally regarded as peripheral or "useless" elements of language structure. Why, then, do Japanese speakers produce so many FPs in their academic presentations and public speech? Secondly, the place of FPs in the model of speech production is largely unknown. It is not easy to answer the questions like “Do FPs have specification of pitch, or are they underspecified?” or “Is there any articulatory difference between the vowels in FP and those in ordinary lexical items?” In this talk, recent results of corpus-based phonetic analyses regarding the place of FPs in speech production model will be presented. Although the results are preliminary at the current stage of the study, they suggest that (a) FPs are phonologically unspecified with respect to their F0 values, (b) there is systematic difference between the vowel articulation in FPs and lexical items, and, (c) there is systematic difference of phonation between the vowels of FPs and that of lexical items.

**The relationship between boundary strength, subsequent clause length and the duration of silent and filled pauses at clause boundaries in Japanese**

**Michiko Watanabe** (National Institute for Japanese Language and Linguistics)

Filled pauses (FPs) are claimed to occur when speakers have some difficulties and need extra time in on-line speech production. This study investigated whether the following two factors affect the duration of silent and filled pauses at clause boundaries, using "The Corpus of Spontaneous Japanese (CSJ)": 1) boundary strength and 2) subsequent clause length. First, whether pause durations increase with syntactic boundary strength, as is known in read speech, was examined. Second, whether subsequent clause length affects the pause duration at the boundary was investigated. Third, whether preceding silent pause duration affects the occurrence of FPs was examined. Results show both silent and filled pause durations increased with boundary strength and subsequent clause length, and that FPs occurred more frequently when the preceding silence was longer. These results suggest both boundary strength and subsequent clause length influence silent and filled pause durations at clause boundaries.

## **Some observations about Filled Pauses in English: A Multifaceted Approach**

**Ralph Rose** (Waseda University)

This presentation will focus on a wide range of observations of the use of filled pauses (FPs) in English ('uh'/'um'). First, results from the Corpus of Oral Presentations in English (COPE; an English counterpart to the presentation portion of the Corpus of Spontaneous Japanese) will be compared to those in the conversational speech found in the Santa Barbara Corpus (Du Bois et al 2000-2005), showing how the use of FPs varies between the two speech forms in numerous ways. Then, further observations from other contexts such as FPs in nonnative English speech (via the Cross-linguistic Corpus of Hesitation Phenomena; Rose 2013) as well as the use of FPs in written contexts such as Internet blogs will also be given. The presentation will conclude with thoughts about how these disparate observations converge.

## **Filled pauses in Chinese conversation**

**Shu-Chuan Tseng** (Academia Sinica)

This talk is concerned with the use of FPs in Chinese conversation. In the Taiwan Mandarin Conversational Corpus (TMC, Tseng 2013), 6,338 simple filled pauses (*uhn*, *uh*, *mhm*) including the lengthened version and 16,516 demonstrative filled pauses *nà* or *nàge* were produced, at ratios of 15.6 and 40.7 times per 1000 words for simple and demonstrative filled pauses, respectively. Location of FPs relative to prosodic phrasing will be examined to see whether different categories of FPs prefer particular prosodic positions. We will also present preliminary results of an acoustic-prosodic analysis as well as F0 contour shapes of simple and demonstrative filled pauses in a 3.5-hour data subset of the TMC.