POSITION OF HESITATION MARKERS IN EVERYDAY, INFORMAL CONVERSATION IN ENGLISH

Yusop Boonsuk[1], Eric A. Ambele[2], and Chamaiporn Buddharat[3,*]

Abstract

Research on hesitation has revealed that hesitation markers are generally considered to be predominantly used in spontaneous speech. This study investigates and reports on the frequency and distribution of hesitation markers (specifically, filled pauses, small words, and repeats) in everyday conversation in English. The study examines the position of hesitation markers, looking at their distribution across utterances, produced by young adult speakers (of 15-25 years). Data were collected from everyday, informal conversation transcripts from Crystal & Davy (1975). The study attaches particular relevance to the naturalness of the dataset, in that it has not been elicited in any way. All 15 conversational extracts were examined to gain thorough insight into the distribution of hesitation markers across syntactic utterances, for general overall dominant patterns in natural conversation. In identifying the frequency of hesitation markers used in the initial, middle and final positions of the conversational utterances, it was discovered that participants most frequently use hesitation markers in the middle of general conversational utterances, followed by the initial and final positions, respectively.

Keywords: hesitation markers, position, everyday conversation

[1]Dr. Yusop Boonsuk obtained a Ph.D in Applied Linguistics (English Language Teaching) from Southampton University, England. He is now working as an English lecturer in the Department of Western Languages, Faculty of Humanities and Social Sciences, Prince of Songkla University. His research interest focuses on World Englishes, English as a lingua franca, English as an international language, English language teaching, language beliefs, attitudes, and identity.

[2]Eric A. Ambele is currently a PhD candidate and adjunct lecturer at the Department of Languages, School of Liberal Arts, King Mongkut's University of Technology Thonburi. His research interest focuses on Discourse Analysis, World Englishes, Sociolinguistics, Intercultural Communication and Innovative Research Methodology.

[3,*]Assistant Professor Chamaiporn Buddharat is a Ph.D. candidate in the Department of Languages, School of Liberal Arts, King Mongkut's University of Technology Thonburi. She is now working as an English lecturer in the Faculty of Humanities and Social Sciences, Nakhon Si Thammarat Rajabhat University. Her research interest focuses on language choices, language maintenance, and language & identity. (Corresponding Author), Email: tortiew123@yahoo.com

INTRODUCTION

This research seeks to determine and report, the dominant position of occurrence of hesitation markers, such as, *uh, hmm, umm* in natural everyday informal conversation. Garmash (1999) defines hesitation markers as a set of tools with certain time duration that are used to solve oral discourse generation and reproduction problems, which can be both retrospective (e.g. correction of a produced discourse piece) and/or perspective (e.g. planning problems of the coming discourse piece). Khojastehrad (2012) defines hesitation as pauses of varying lengths, usually left unfilled. By extension, they situationally occur when discourse participants are deficient in word use, and thus struggle with cognitive planning. Native speakers of English are no exception to this phenomenon as they use fillers when they speak, including non-lexical fillers such as lengthening of sounds, quasi-lexical fillers, and repeating lexical items and fillers (Rieger, 2003). Several studies have examined this phenomenon from varied perspectives; consequently, the rationale for this study is to identify the frequency of hesitation markers used across different syntactic environments in conversational utterances and their functions in natural everyday informal interchange. This phenomenon can occur at either planning or cognition stages. It is a kind of communicative strategy that participants use in order to keep control of their speech. They use hesitation markers to help compensate for weakness in building and maintaining efficient communication, giving the speaker time to improve or make up for a breakdown in communication efficiency. In the following section the distribution of hesitation markers in previous research is examined.

Distribution of Hesitation Markers in Previous Studies

Although references to hesitation markers occur frequently in the literature of structural linguistics, very little research of the kind undertaken here has been carried out. In this section, a brief examination of important work will illustrate the customary treatment of hesitation in language description.

Previous studies on syntactic placement of hesitation markers produced in conversation, highlights the varied and contradictory views regarding the dominant position of hesitation markers. While Bard et al., (2001) argued that hesitation mostly occurs at the beginning of sentences, it is still unclear whether this claim is based on the function of the hesitation markers or the discourse genre and/or context of the discourse. In their study, Maclay and Osgood (1959) investigated the distribution pattern of hesitation markers across utterances within disimilar lexical categories, but they did not consider the learners sociolinguistic distinctions, such as, age, sex, occupation or language background. Their results revealed the occurrence of filled and unfilled pauses at any position within the syntactic structure. Worthy of note in their research is the more likely occurrence of filled pauses preceding function words or phrase boundaries. Unfilled pauses on the other hand occur before lexical words or within syntactic boundaries (Purvis, 2008). In a related

study, Anderson (2001) was particularly focused on the distribution of the English discourse marker: *like.* His focus was the functional distribution of this lexical unit. Like Maclay and Osgood (1959), Anderson (2011) focused more on the syntactic environment excluding sociological factors such as age and sex (Purvis, 2008). In contrast to the above studies, was that of Bailey and Ferreira (2003) whose psycholinguistic study considered the perception of short discourses. The findings revealed that listeners are more sensitive to short discourses. According to him, if filled pauses preceded the head noun of the second clause, then, the respondents tended to interpret the noun as a lexical unit starting with a new clause instead of the direct object of the previous clause. Rose (2008) asserted that in the case where a filled pause appears in a place that might be perceived as a discourse boundary, then listeners would consider it as a discourse boundary. This study therefore becomes even more relevant amidst previous studies, as it investigates the distribution of hesitation markers in natural conversation and settings across utterances. To contextualize the investigated phenomenon in this study, we will first review the concept of disfluencies, their function and the notion of hesitation as it relates to the overall objective of this study.

Disfluencies, Function and Hesitation

This section discusses disfluency, its function and relationship with the hesitation phenomenon. The discussion highlights and sheds light on the main research problem in this study.

Disfluencies are linguistic devices (strategies) which signal that speakers are under the construction of an utterance. Disfluencies represent a characteristic of cognitive load or burden, especially in spontaneous speech utterance management, as the speaker will need to search for what to say next in line with the previous discourse (Nicholson et al., 2003; Watson Todd, 2014). Menyhart (2003) defines speech disfluencies as interrupting the flow of speech without adding propositional content to an utterance. Spontaneous speech is replete with several kinds of disfluency phenomena, such as, hesitations, silent pauses, fillers, repetitions, grammatical errors, false starts, slips of the tongue, and self-corrections, to name a few. This situation prevails due to "disharmony between speech planning and execution" (Khojastejrad, 2012). Disfluencies, based on the different types mentioned above, serve different functions. For instance, some researchers consider pause fillers (e.g. *uh and um*) as indicative of turn taking. Clark et al. (2002) support this lexical role and state that its communicative function may be lost if not recognized.

Filled pauses can be used to control the discourse topic (Maclay & Osgood, 1959). It has been observed that when people talk in interactions, irrespective of their speech content, they commonly hesitate. Ford (1993, as cited in Watson Todd, 2014) asserted that up to a quarter of sentences produced in a conversation might be preceded by a filled pause. Previous findings claimed that *uh* and *um* are different from silent pauses. One school of thought says they are symptoms of production difficulties, while another

group says they are signals for the listener's comprehension (Fox Tree, 2002; Nicholson, 2007). In addition, Maclay & Osgood (1959) have nicely distinguished hesitation phenomena according to the different types in spontaneous conversation. They grouped hesitation into four types, namely repeats, false starts, filled pauses and unfilled pauses. However, the most noticeable of these (in contemporary research on hesitation phenomena), to even the novel linguist, are pauses (Bard et al., 2001; Arnold et al.'s, 2004; Nicholson, 2007), though not undermining the study of restarts, which Watson Todd (2014) described as the combination of repetition and false starts.

According to Khojastehrad (2012), researchers have shown that the hesitation pause group is not homogeneous; the case of differences in the silent pause pattern compared with filled pauses is a clear example. Silent and other hesitation pauses indicate a speaker's anxiety more than filled pauses (Goldman-Eisler, 1961; Kasl & Mahl, 1965; Krause & Pilisuk, 1961; Mahl, 1956; Ragsdale, 1976). By extension, Rose (2008) asserted that with the above claim, it could be inferred that listeners who frequently judge hesitation negatively, do so on filled pauses, rather than on other hesitation pauses, or even on the interplay between filled pauses and hesitation pauses.

Managing Discourse

It is commonly believed by conversation analysts that filled pauses occur most often either at the 'discourse segment boundaries' or at the 'beginning of conversational turns'. Discourse structure generally ensues as a hierarchical structure with different levels, each containing an instance or two of the preceding level. To illustrate, Sinclair and Coulthard's model (1975, cited in Khojastehrad, 2012) defines five hierarchically arranged levels of spoken discourse structure: transaction, exchange, turn, move, and act. Cognitively, each level of representation has important characteristics, for example, the purpose of the discourse of each level in addition to general sequence mapping of the levels it contains (Rose, 2008). Normally, speakers plan their next discourse segment before crossing any particular discourse, irrespective of the hierarchy. More so, speakers must plan their next discourse segment, involving all the hierarchically lower level segments that it includes. Consequently, taking a new turn seems more involved than starting a new act. As a result, higher discourse boundaries that emerge in the higher levels of the hierarchy are expected to show greater language planning (Khojastehrad, 2012). Swerts (1998) first suggested the above claim in a comparative analysis on the emergence of filled pauses at 'strong' and 'weak' discourse boundaries. He found initial phrases preceded by a strong discourse boundary were more likely to have an initial pause rather than a middle pause or in some cases no filled pause at all. On the contrary, phrases after a weak discourse boundary have the lowest probability of containing an initial filled pause.

Producing Hesitation Disfluencies

In hesitation phenomena, for example, fillers are most likely to occur

towards the start of an utterance or phrase, probably as an outcome of the greater demand on the planning processes at these points (Barr, 2001). The view that cognitive load is a critical indicator of disfluency is bolstered by the way that disfluencies are found to happen all the more regularly before longer utterances (Oviatt, 1995; Shriberg, 1996), and when the topic is unfamiliar (Bortfeld et al., 2001; Merlo & Mansur, 2004). Cognitive load is likewise implicated when we examine hesitations on a word-by-word premise. Examinations of where disfluencies, e.g. fillers occur throughout utterances have established that they will probably happen before content words (Maclay & Osgood, 1959), such as, low-frequency colour names (Levelt, 1983). Be that as it may, Beattie and Butterworth (1979) reached an alternate conclusion when they explored the distributional properties of disfluencies over an arrangement of recordings of two-person conversations. They demonstrated that both low-frequency content words and those rated as contextually impossible were probably going to be preceded by hesitations such as fillers; when frequency was held constant, contextual likelihood still predicted disfluency. As opposed to attributing disfluency to psychological load, Beattie and Butterworth proposed that speakers might be aware of an element of choosing words with low contextual likelihood, and were more likely to be disfluent for this reason. Choice was also implicated in a study by Schachter et al. (1991) in which research in the natural sciences, social sciences, and humanities was recorded and analysed for numbers of fillers per minute. Disfluency varied between topics, with the natural sciences bringing about the least and the humanities the most frequent utilization of fillers. Nonetheless, when the instructors were interviewed on general topics, their rates of disfluency did not contrast. Schachter et al. (1991) credited the distinctions in addressing disfluency rates to the way that there were less linguistic choices in the sciences, making instructors hesitate less as they selected appropriate terms. They later corroborated their claims by measuring vocabulary size in lectures, learned articles, and topic-related journals (Schachter et al., 1994), showing that there were indeed fewer terms used in the sciences. Up to this point, we have been talking about cognitive load and choice as though they were distinctive, yet it is obviously the case that a higher number of options to choose from could result in an increased cognitive load. In a detailed experimental investigation, Oomen and Postma (2001) controlled discourse rate, using a task modified from Levelt (1983; see also Martin et al., 1989). Participants were required to describe the progress of a dot which moved either quickly or slowly over a set of pictures connected by a network of paths. Despite the fact that there was significant evidence of increased cognitive load at the faster speech rate (for instance, participants were more likely to exclude syntactically obligatory constituents), hesitation disfluencies demonstrated a fascinating pattern: Participants were more likely to repeat words, however no more likely to use fillers, for example, uh, in the fast conditions. Oomen and Postma recommend that the expansion in repetitions can be explained by Blackmer and Mitton's (1991) "autonomous restart

capacity". If the cognitive processes that results in a phonetic plan fails to keep up with articulation, the articulation of the existing phonetic plan is restarted, causing words to be articulated more than once. Notwithstanding, the use of fillers does not have all the earmarks of being liable to a default methodology, for example, this one. In fact, cognitive load alone does not appear to explain their production. In a review intended to investigate the issue of choice further, Schnadt and Corley used a variant of Oomen and Postma's (2001) network task, in which the speech rate remained constant, but the items pictured at the nodes of the network varied. Each picture either had one or had several potential names, and the lexical frequency of the (most likely) name was either high or low.

Schnadt and Corley found that hesitation phenomena, for example, prolongations and fillers increased in the words just before differently named or low-frequency items. In a second experiment, participants finished a naming task during which they were exposed to the preferred name of each picture before doing the network task itself. This was intended to reduce choice when describing the networks. In spite of the fact that the general pattern of results remained the same, with more hesitation disfluency for difficult-to-name items, in this experiment the numbers of fillers didn't increase for multiple-named pictures, presumably because participants already had a name in mind. Schnadt and Corley concluded that fillers will probably occur wherever the speaker has a choice of what to name a picture, maybe in the light of the fact that the speaker anticipates a longer delay in these circumstances, consistent with a proposal by Smith and Clark (1993). The evidence above suggests that disfluencies may not really be automatic (i.e. part of an underlying mechanism) in their connection to an increased cognitive load. Some of them – prominently, fillers – may be a part of the speaker's expressive armory. In a detailed investigation of the conditions under which disfluency occurs, Bortfeld et al. (2001) analyzed a recorded collection of task-oriented dialogs. Among other factors, they found that the roles participants played (of either describing images or attempting to find the images that matched the descriptions) greatly influenced the number of disfluencies, and particularly fillers, produced, regardless of utterance length or complexity.

RESEARCH OBJECTIVE AND RESEARCH QUESTIONS

This section presents the research objective and research questions used in this study.

Research Objectives

Investigating the distribution of hesitation markers across syntactic utterances has seemingly received less attention than other perspectives from which the hesitation phenomenon has been investigated. It is therefore of interest to examine the frequency of the different types of hesitation used in natural everyday informal conversations and why, and the dominant occurrence position of hesitation markers in this discourse type, to be able to ascertain the role it plays in natural everyday informal

interchange. It should be noted that this study does not only provide a clearer classification of the different hesitation markers that discourse participants employ in everyday conversation, but it is also concerned with the distribution of observed hesitation markers across produced syntactic utterances, and the functions they play at each discourse segment in order to ascertain the overall occurrence distribution pattern in everyday conversation.

Research Questions

In order to reach the aims mentioned above, two research questions were determined:

1. How frequent do filled pauses, small words and repeats occur in everyday general conversation utterances?
2. In which syntactic position do they dominantly occur and why?

RESEARCH METHODOLOGY

The Corpus

In order to investigate the pragmatic hesitation markers employed in everyday general conversation, this study uses the detailed transcription of 'natural everyday informal conversation' provided in Crystal & Davy (1975). The study attaches particular relevance to the naturalness of the data, in that it has not been elicited in any way; thus, it was chosen as the corpus for analysis in this study. Watson Todd (2014) asserted that although dated, this remains one of the most readily available, highly detailed sets of transcriptions of naturally occurring conversation; it has been extensively used with more than 50 citations in the past four years.

Crystal & Davy (1975) did a detailed transcription of 15 natural everyday conversations, taking into account intonation, organisation, pause marking, and pitch movement. The extracts were taken from a series of conversations on varied occasions and topics, involving speakers (mostly young adults of 15-25 years) from varied backgrounds, occupations and contexts (Crystal & Davy, 1975). The conversation transcripts were based on different topics. This study examines all 15 of these conversational extracts to be able to gain insight into the distribution of hesitation markers across syntactic environments, for the general overall patterns in natural conversation. The conversational extracts selected for analysis here include: (1) Talking about football, (2) Bonfire night (3) News reporting, (4) A driving incident, (5) Living in London, (6) Farm holiday, (7) Sex education in schools, (8) Christmas habits, (9) Losing a tooth, (10) Country life, (11) Family grouping, (12) Pigs, (13) Channel crossing, (14) Mice, and (15) Sex films. The hesitation markers used in the conversations (by frequency count) were identified and then grouped them according to filled pauses *(e.g. er, erm, m),* small words *(e.g. well, I think, I mean etc.)*, and repeats *(e.g. repeated word/phrases)*.

It is worth noting that not every instance of occurrence of pragmatic markers like *'I think'* functions as a hesitation strategy. We therefore needed to thoroughly go through the corpus several times to ensure that the analysed data actually functioned as hesitation

markers in the positions where they occurred in the conversations. For instance, some researchers argue that pause fillers (e.g. *'uh' and 'um'*) could also indicate turn taking.

RESULTS

This section presents the results of the analysed data from the transcripts, regarding the distribution of hesitation markers across utterances produced in different syntactic environments in the conversations. For this purpose, each group of hesitation markers was studied separately to find out where they most commonly occur in a sentence: initial, middle or final position. The summary of the results is presented in the following tables for each hesitation marker, and in addition in a figure clearly depicting the frequency count.

Filled Pauses (FPs)

Uh and *um* have long been called filled pauses in contrast to silent pauses (see GoldmanEisler, 1968; Maclay & Osgood, 1959). The unstated assumption is that they are pauses (not words) that are filled with sound (not silence). Nevertheless, it has long been recognized that *uh* and *um* are not on a par with silent pauses. In one view, they are symptoms of certain problems in speaking. In a second view, they are non-linguistic signals for dealing with certain problems in speaking. And in a third view, they are linguistic signals – in particular, words of English. If *uh* and *um* are words, as we will argue, it is may be misleading to call them filled pauses. However, in this paper we will call them fillers.

A filled pause is a conventional (*er, erm and m* as used in the data for this study; represented as *uh, um* in current research) sound or word used mostly in spontaneous speech to stall for time and fill the gaps in utterances.

For example:

> *You/KNOW/. And/ yet erm. When my mother was ALIVE/she used to. erm be so WORRIED/because erm she ...you know. Er crisis ... (News Reporting Conversation, 85)*

Filled pauses have mostly been studied based on their categorization as either non-lexical or lexical. Some researchers have measured pause length by the ear only with little accuracy, while others using sophisticated equipment to measure pause length with greater accuracy; still, others have measured with nearly inconceivable accuracy following the speaker's own rhythm. This was all considered in the recording of the conversation transcriptions used in this study.

Table 1: Distribution of filled pauses

Hesitation strategy	Initial	Medial	Final
Filled Pauses	14	116	8

Based on the findings obtained from the analysis of the conversation transcriptions data, the discourse participants used filled pauses in all positions of their utterances produced in the conversations (Table 1 above), however, the distribution frequency is higher in the middle position (116) compared to the initial (14) and final (8) positions. This shows that speakers tend to use filled pauses more in the middle of their conversation than in other syntactic positions. The use of this hesitation marker at these positions in general conversation play different functional roles as revealed in this study. The use of filled pauses at the initial position conforms to what most researchers hypothesize, that this pause occurs in such a position because the speaker is making a linguistic decision requiring extra processing time. For the medial position, filled pauses serve an important function in helping a speaker hold a conversational turn. When a speaker appears to have finished an idea and wishes to continue speaking although his/her subsequent utterance is not yet prepared, he/she utters a filled pause in order to keep control of the conversational ball. Lastly, filled pauses are used at the final position in conversation to indicate to the interlocutor to take turn in the conversational discourse.

Small Words

Small words are words or phrases that mark hesitation in spontaneous speech. They include *'well', 'I think', 'I mean', 'you know', 'you see' etc.* Although small words may have fairly minimal lexical content, they can also play a vital strategic syntactic role in spontaneous speech.

According to the summary data in table 2 above, the frequency count of small words in the middle position is considerably higher (116) than the initial (63) and final (15) positions, which implies that participants in conversations tend to use words and phrases like *''well',' I think', 'I mean', 'you know'* in the middle of their utterances. The dominant occurrence of this marker in the middle position is the same as that obtained for filled pauses (in 3.1 above). As revealed in the analysed data, small words like '*you know'* appear in the conversation at all positions in participants utterances, serving dissimilar purposes as noted in 3.1.

Table 2: Distribution of small words

Hesitation strategy	Initial	Medial	Final
Small words	63	116	15

For example:
(initial position): *You know/. and/ yet erm. When my mother was Alive/-*
You/know/I think we ought to go OUT this evening/.
(medial position): small words at this position may occur in both statements and questions; it always occurs at a point of major grammatical juncture, as in
It was/CLEAR you know/that he/wasn't going to DO it
The passages/EXITS/ are planned/in such a way that everybody could get
out/youknow/
-after that disaster/you know
(final position): here, small words usually occur in statements, as in
He/won't want you to ring him up, you KNOW/
This er--/this highlights it/and they sort of…you know/this. Because. I suppose is ALRIGHT

Repeats

Repeats are immediate repetition of a sequence of one or more words. In analyzing the data for this study, repetition at the beginning of a word (i.e., stammering) was not counted in this category as the cause is usually regarded as localized to articulatory problems rather than the broader language production process.

For example:
The LAST/two or three world cup/world cup/ you KNOW/tournaments
He's watched football in every/on every league

Based on the findings illustrated in table 3, the distribution pattern of repeats produced by the participants in the conversations chosen for this study, indicates that repeats are mainly found in the middle of the sentences (33), while the initial position is recorded as the second most frequent position of this hesitation marker with the frequency of 21. The findings reveal that the least possible position of producing repeats is at the end of utterances with zero occurrence.

Table 3: Distribution of Repeats

Hesitation strategy	Initial	Medial	Final
Repeats	21	33	00

DISCUSSIONS AND CONCLUSION

The overall purpose of this study was to investigate the distribution pattern of hesitation markers used in natural everyday general conversations. The results of this study clearly show the dominant occurrence position of the identified hesitation markers (filled pauses, small words and repeats) in the middle of utterances. Contrary to previous claims that hesitation mostly occurs at the beginning of clauses or phrases, probably due to higher planning process demands at this juncture, the present study reveals a seemingly different result. The results of the present study confirm Khojastehrad's (2012) findings on the dominant occurrence of hesitation markers in the middle position in oral discourse. The speakers demonstrated a pattern of using hesitation markers that are fairly consistent across syntactic environments irrespective of the discourse topic in natural everyday general conversations. This also confirms the findings of Maclay & Osgood (1959).

Based on the analysis of the conversation transcriptions, the overall (sum total) highest frequency of the examined hesitation markers in this study (265 times) belong to the middle position. This is considerably higher compared to the initial position (98 times) and final position (23 times). The big difference between the distribution frequencies of the middle and initial positions could be interpreted such that speakers, during everyday general conversations, do not struggle much with the planning process at the beginning of the utterance. This is to say that the participants did not very much, at the beginning of their speech, attempt to plan the next words to say. Considering they think and speak at the same time, there is bound to be an increase in the use of these hesitation markers in the middle of their sentences. Moreover, the distribution results of hesitation as an emerging position in general conversation reveals whether participants suddenly end their conversational turns as a result of hesitation in thinking about what best to say next or the appropriate word(s) to use. For example, it was observed in the conversation transcripts that some speakers hesitated about their next coming utterances, and when they could not decide on what to say next in relevance to the conversation, they ended their turn. The distribution pattern in this analysis, highlights the positioning of general hesitation markers in natural everyday general conversations.

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