FILLERS IN ACADEMIC DISCOURSE: AN ANALYSIS OF LECTURES FROM A PUBLIC UNIVERSITY IN GHANA

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Abstract:
One way of ensuring fluency in lesson delivery for students to follow its flow in the classroom is through the use of fillers. This study examines the use of fillers in lectures in a public university in Ghana. Specifically, it investigates the types of fillers used in the Ghanaian English-medium classroom and discusses the communicative functions the fillers perform. To achieve these, real-time lessons were recorded from 24 lecturers in the university. The data were subjected to orthographic transcription, categorization, and thematic analysis of fillers for their types and functions in the lessons. Results show that the lecturers used 51 unlexicalized and lexicalized fillers. The unlexicalized ones comprised um, er, and uh while the lexicalized types consisted of lengthened syllables, repetition, and single words. With respect to the communicative functions, the fillers were found to perform cognitive functions (stalling and hesitating), social functions (attention getting and feedback), and discourse-regulatory functions (as editing term and discourse closing). Based on these results, it is proposed that lecturers should understand the importance of fillers so as to use them to their benefit and that of their students.

Keywords: fillers, academic discourse, lectures, public university, Ghana

1. Introduction

This study examines the use of fillers in lectures in a public university in Ghana. In the classroom, teachers usually try to present their lessons such that learners would have no problem understanding them. This is because it is important for learners to have full grasp of the contents of the lesson in order to survive in the intellectual or academic environment. This survival largely depends on the learners' ability to pass their exams so as to move either to the next level, or to obtain a very good grade or class. In Ghana, English is used as the medium of instruction (EMI). This means that all classroom instructions (with the exception of French and Ghanaian languages classes) are delivered using English. This is especially evident in the universities. English language permeates

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all sectors of the country; as such, it is used as an official language. For one to use English effectively, one needs to have firm foundation in the language, starting from the school. According to Scarcella (2003, p. 9), students who undertake tasks in academic English engage in different activities including "*reading abstracts, getting down the key ideas from the lectures, and writing critiques and summaries, annotated bibliographies, cases studies, reports, research projects, expository essays*".

Before the student can perform the tasks outlined by Scarcella, teachers (in this case, lecturers) need to present their lessons in a clear and meaningful manner. Typically, in an EMI classroom, lecturers, through their delivery, must display a greater level of communicative competence (Hymes, 1972). In the view of Canale and Swain (1980), communicative competence constitutes a speaker's ability to show that he or she knows how to use the language. More specifically, Spitzberg (1988, p. 68) defines communicative competence as "*the ability to interact well with others*". In other words, the speaker must communicate with clarity, accuracy, coherence, effectiveness, and appropriateness. In addition, Friedrich (1994) suggests that the notion of communicative competence can be best understood as the ability by one to set realistic and appropriate communicative goals and to maximize achievement using knowledge of self, other, as well as the context. From these, it can be argued that one is said to be communicatively competent if that person is able to choose appropriate communicative behaviour so as to successfully accomplish his/her communicative goals without encountering any problems.

The concept of communicative competence is hinged on four main components: linguistic competence, sociolinguistic competence, discourse competence, and strategic competence (Canale & Swain, 1980). Linguistic competence deals with the speaker's ability to know the appropriate linguistic form (or words, sentences, or utterances) to use. It comprises knowing how to use the lexico-grammatical features of a language. Sociolinguistic competence deals with how to use the language appropriately within the speech community. In effect, one has to know the topic under discussion, the setting (who and who are present, the event), as well as the relationship between/among the people communicating. Discourse competence has to do with the speaker's ability to produce larger units of discourse to form a complete coherent whole as well as the ability to interpret these units. In other words, discourse competence deals with the ability to put words, phrases, and sentences together to create any speech event. Finally, strategic competence concerns itself with the speaker's ability to recognize and repair communication breakdowns, or to overcome any communication problems that might occur in the course of the interaction. Typically, speakers should have the ability to determine when s/he misunderstands or is misunderstood, what to say when being misunderstood, or when to compensate for and overcome any problems and when to bridge any gaps that may be present in their communicative skill.

From the discussion, it is argued that communicative competence is not about merely knowing the linguistic form to use, as many speakers think. Rather, it encompasses all that is considered appropriate within the speech community (Chaika, 2008; Holmes, 2013). This means that while the knowledge of the correct usage of rules,

vocabulary, and grammar is commendable, it is not adequate, as one needs to also have the knowledge of what to say, how to say it in relation to whom it is said to, the topic, the listener(s), how to prevent misunderstanding, and what the culture of the language permits. In the course of delivering a lecture, the lecturer would use the appropriate grammar and rules; however, s/he also needs to recognize that communication breakdowns are inevitable. As such, the lecturer would have to devise strategies for avoiding these breakdowns. For example, a lecturer may pause in the course of lesson delivery for different reasons. However, because the pause may signal different things or even cause a communication breakdown, a strategy the lecturer may use is to fill the pause with a filler. In this sense, filling becomes a communication strategy, an indication that the lecturer possesses strategic competence, whereby s/he uses them as collateral signals to manage the conversation (Clark, 1996; Clark & Fox Tree, 2002). As already indicated, this study investigates the use of fillers in lectures in a public university in Ghana. Specifically, it aims at examining the pragmatic functions that the fillers perform and how these functions contribute to lecturers' lesson delivery.

It has been established that fillers actually help in fluency, rather than hinder it, and its role in lesson delivery in the classroom cannot be overemphasized. Since there is always the need for one to use fillers at one point or the other in their speech without giving any impression of completion (Erten, 2014), it is necessary to understand how they are used and to document the communication functions they perform, especially in Ghanaian English. As students listen, they play an active role in the communicative event because they are responsible for interpreting whatever they hear. The fillers that teachers employ in these lessons help in avoiding misunderstanding. Although fillers are essential in showing the communicative competence of the teacher, there are occasions where their use attracts negativity because there is the tendency for it to decrease fluency. In fact, Dlugan (2011) observes that fillers can weaken the speaker's credibility and may show a lack of preparation. While these assumptions emanate from studies that other people have conducted, it is not possible to know the import of filler use in Ghanaian English, including the classroom. This is because there is no known study that outlines this, resulting in a gap in the literature that needs to be filled. An understanding of these features and their functions will enable us to determine how lecturers structure/package their talk in the classroom. This is also because specific contexts demand that fillers perform specific functions in discourse.

This study is therefore significant in that it allows us to determine the exact role fillers play in the classroom in Ghana. This includes their types, functions, as well as their importance. In order to achieve the objectives, the following questions guide the study:

1) What are the types of fillers used in the Ghanaian English-medium classroom?
2) What communicative functions do these types of fillers perform?

The next section presents a discussion of the conceptualization of fillers, followed by a discussion of the role of fillers in academic discourse in the third section. The fourth section focuses on the methodology adopted for the study with the discussion of results in the fifth section. The paper ends with the conclusion in the sixth section.

2. Fillers: Conceptualization

The elements under study in the present study have been assigned different names. For instance, Stenström (1994) and Tottie (2011) use the term *filled pauses* for these elements. The label *fillers* is used by Bortfeld et al (2001), and Clark & Fox Tree (2002). The term *hesitation disfluencies* is used by Corley & Stewart (2008). Other researchers like Corley et al (2007) assign the label *hesitations*, while Erard (2007) calls them *verbal blunders*. A look at the different terms used for these elements suggests that researcher assign these terms based on how they conceptualize these elements. In an earlier study, it can be argued that McClay & Osgood (1959) used *filled pauses* due to the fact that when people speak, they tend to leave gaps which are typically, silences or pauses. From their examination of *um* and *uh*, they found that people fill these pauses with certain items. And by that, they create filled pauses, rather than *fillers*. Through further studies, other researchers added to McClay & Osgood's work and also concluded that these elements are better described as filled pauses since they primarily fill pauses that may ordinarily be silences, and may end up disrupting the communication process.

In relation to *fillers*, Clark & Fox Tree, 2002 are of the view that they perform a special function in interactions. They argue that fillers are used as collateral signals to manage conversations (Clark, 1996). To them, fillers are used to fill any space that may be left within the interaction and that may create communication problems between the speaker and the listener. Most importantly, they suggest that speakers use fillers to signal minor or major delays (Clark & Fox Tree, 2002). It is important to note that the fact that speakers use fillers does not necessarily mean that they intend to delay. However, this delay may occur even as they search for a word, try to remember a word or expression, or to gain time during online verbal planning. This means that fillers are not necessarily for delay, but are used to show an indication that "there is more to come". While all the other terms used succinctly represent the researchers' ideas of what these elements represent, the term *fillers* is adopted in this study. It is significant to emphasize here that all of these terms connote similar ideas – they are used to fill some *space* within the utterance which would otherwise be left, with the ability to create problems in the communicative event. The term *fillers* is adopted for two main reasons: One, the simplistic nature of the term, and Two, the fact that they indicate speech production, helping to form ideas when speaking. Here, one realizes that fillers are an essential component of speech because once the speaker thinks of what to say, s/he is likely to produce a filler (Khojastehrad, 2012).

2.1. Fillers: What are they?
For different researchers, the meaning of the term *filler* is determined based on their understanding of what functions these elements perform. As a result, many scholars have many different definitions for what fillers are in the literature. For instance, Bygate (1987: 29) sees fillers as "*expressions like well, erm, you see, used in speech to fill in pauses*". This means that it is not always that speakers are able to say every word they wish to say

because they may forget some. When it happens like that, they would use such elements as fillers to *buy time* so as to remember what to say. Such words create delays, reflecting ideas such as *let me think*. This way, speakers are able to continue with the conversation during such *thinking* times (Richards & Schmidt, 2012). Stenström (1994: 222) also defines a filler as "*an empty item with uncertain discourse functions, except to fill a conversational gap*". From Stenström's definition one can argue that fillers are seen as having no semantic value, but being used only when a speaker needs time to think of what to say within the conversation. In the opinion of Baalen (2001: 7) fillers are "*sounds or words or phrases that could appear anywhere in the utterance and that could be deleted from the utterance without a change in content*". From Baalen's point of view, we see that fillers can be in and out of any utterance at any time, and there would be no problem in relation to the meaning of that utterance. This means that, according to Baalen, the presence or absence of fillers does not have any impact on the utterance within which it occurs.

Baalen's assertion suggests that fillers are meaningless, although this is not entirely true as they can be seen as both having meaning and performing important functions. For example, their most commonly identified function is for filling. This filling can be interpreted in different ways depending on what the speaker wishes it to be, as would be seen in this paper. It should be noted that fillers can be likened to morphemes. They have meaning depending on the specific functions they perform. Consequently, fillers should be seen as being significant in speech, if for nothing at all, for the fact that they *mean something* and *do something*.

Often, we tend to believe that because they frequently appear in speech, fillers create problems. In fact, this is expressed by Yule (2006: 242) that fillers are "*a break in the flow of speech*". This may be because their use shows that the speaker momentarily suspends the speech and thinks of what to say. However, we should remember that the flow of the speech can only be perceived if no words are produced at all. As already indicated, these words are produced as a strategy to compensate for any speech problems that the speaker may encounter. Thus, while they allow the speaker to *buy time*, they also allow the listener to realize that there is 'more to come'. In sum, fillers are not problematic elements; rather, they help to manage problems and to avoid problems in communication. While helping to manage communication problems, they also show the speaker's cognitive processing. After all, they are a common feature of natural speech, filling the gaps that occur during speech production. They therefore contribute immensely to speech and signal relations between the speaker, the listener, and the discourse (Biber et al., 2004).

2.2. Fillers in academic discourse

As this study relies solely on classroom interactions to identity how fillers are used in lecture delivery, it is imperative that their role is examined in order to guide the analysis of the data. The types of and functions that fillers perform in academic discourse have been identified in the literature to be very similar to those in conversation and other forms of spoken discourse. Rose (1998) categorizes fillers into two main groups; lexicalized and

unlexicalized fillers. Lexicalized fillers are those in the form of short phrases such as *sort of, you know, if you see what, or I mean*. This category is no different from that of Stenström (1994) who calls them verbal fillers with examples such as *well, I mean*, and *sort of*. This means that lexicalized fillers are not only single words but also phrases. From a combination of the two, it can be argued that lexicalized fillers can be in the form of simple words, phrases, and clauses. Unlexicalized fillers, on the other hand, are non-lexeme (non-word) filled pauses which speakers use to indicate hesitation while they think what to say next (Rose, 1998) cited in Andriani (2018: 20). Baalen (2001) lists examples of unlexicalized fillers as ehm, uh, err, ee, ah, and um.

Whether lexicalized or unlexicalized, Garcés-Conejos and Bou-Franch (2002: 91-92) are of the view that fillers perform three broad functions: a) a *cognitive* function, b) a *social* function, and c) a *discourse-regulatory* function. In performing the cognitive function, fillers are used by speakers to show that they are processing what they are saying. This appears to be the most common function of fillers. This is because it seems too obvious when someone is 'thinking online' or is engaged in online verbal planning than when s/he is using fillers for the other functions. In showing that one is processing their speech, speakers normally use expressions such as *I mean, erm, um*, or *uh*. Teachers use *I mean* to indicate that they are planning to modify what they have said.

In this sense, Rose (1998) observes that speakers can use fillers to stall, "*a complementary act which enables the speaker to prolong a conversational turn*" (Rose, 1998, p. 13) so that students do not interpret the silence as a completion. Another way fillers are used to perform cognitive functions is for hesitation. With this, Scheppers (2011, p. 22) argues that the last syllable of the word is lengthened as a way to "fill", to reflect temporary processing problems. Taken together, one realizes that fillers are used by any speaker (including teachers) "*when the thinking process cannot keep up with the speaking process*" (Goto, Itou, & Hayamizu, 1999, p. 227). Ultimately, the aim of the teacher is to aid the students in understanding the lesson. Thus, it has been found that knowing how to use fillers makes speakers feel relaxed and more comfortable when speaking (Santos et al., 2016: 195).

Fillers are also used to fulfill a social function. Here, they can be used to signal involvement, affect, or interest in whatever is being said (Garcés-Conejos & Bou-Franch, 2002). Consequently, Fox-Tree (2001) also observes that a speaker's use of *uh*, the counterpart of *um*, can be beneficial on listeners' ability to recognize words in upcoming speech. Fillers in this function can also serve as mitigating devices. For example, Baalen (2001) argues that utterances can be peppered with such elements to avoid hurting the feelings of the addressee or student. This way, she believes that the fillers become solidarity markers, showing politeness. This is because in order not to hurt someone's feelings, you necessarily need to protect that person's face in addition to using fillers such as *ehm, eer*, and *okay* to tone down any threatening effect of the utterance. Yet another example of the social function is the use of fillers for empathy. Here, Schachter et al (1991) indicate that lecturers can change a topic with fillers due to the complexity of the subject under discussion.

In fact, these authors opine that lecturers in the humanities tend to use more fillers than their science counterparts because of the nature of the subject matter. Here, their argument stems from the fact that sciences are more structured and factual and so there are fewer options available to such lecturers, resulting in using fewer *ums* and *uhs*. Lecturers can also use fillers to hold the attention of their students. This, Bublitz (1989) suggests, can be done with repetition in order to establish and maintain the continuous and smooth flow of the discourse. Ultimately, she argues, this ensures that students would comprehend the lesson. This is reechoed by Jordan (2001), who concludes that the use of fillers can be indicators to listeners to respond in order to convey to the speaker that they have received, understood, or misunderstood his/her message. In this sense, fillers such as *you know* can be produced to receive confirmation of this understanding. Thus, the lecturer would use fillers to check whether the students are paying attention to the lesson or not, acting as an invitation for them to be involved in it (Stenström, 1994).

The third function of fillers is that of discourse-regulation. According to Garcés-Conejos and Bou-Franch (2002), fillers can typically be used to ratify the assignment of speaker- and hearer-roles and contribute to the shaping of the discourse. In this respect, fillers are seen as fulfilling both interactional and structural functions within the ongoing discourse. With regard to the interactional function, they can be used to start an utterance, sustain it, or end it. Fillers are used as opening markers to begin an utterance. For example, Stevani, Sudarsono and Supardi (2018) found in their study of fillers in academic presentations that *okay* was used as an opening marker as in:

(1) S7: **Okay** ehm… the content validity is **the the** sentence in content validity is my mistake. (p. 6)

Here, they concluded that together with *right*, *well*, and *so*, *okay* performed the function of an opening frame marker. As interactional entities, fillers can be used as turn keepers to sustain the lecture. Here, elements such as *well* and *so* can be used in order to continue talking rather than relinquishing the floor. In all of its interactional functions, Biber et al (2004, p. 449) claim that fillers "*make an important contribution to the interactive character of speech, because they signal relations between speaker, hearer(s), and discourse*".

Turning to the discourse structural functions, fillers can be used as editing terms. Baalen (2001) intimates that speech errors can be corrected with fillers. In this sense, for example, in the course of teaching, a teacher may commit an error, but would use a filler such as *I mean*, *um*, and *huh* to show his/her awareness of the error and a subsequent attempt to correct it. Typically, *I mean* can be used for reformulation or rewording. Thus, the teacher who produces an utterance with some error may quickly preface the next utterance (which is equivalent to the previous one) with *I mean* to indicate that he/she is actually planning to modify whatever they have said. Apart from this, *I mean* can also be used to act as an information indicator. Here, teachers use this filler to communicate the main point of information.

Another discourse structuring function of fillers is responding. In such instances, teachers may use fillers to respond to a student's reaction about the lesson. This response may be in the form of acknowledgment, agreement, or a readiness to answer a question. Teachers may also use fillers to communicate to students that they are about to shift or change topic. Finally, just as fillers can be used as opening frames for utterances, they can also be used as closing frames. Here, words such as *right*, *ok*, and *well* can be used by the teacher to close the lesson, thereby structuring the talk.

3. Methodology

3.1. Population and sampling

The participants recruited for this study comprised of 24 lecturers in a public university in Ghana. These lecturers belong to 6 faculties within this university and had either a Master's degree or a doctoral degree. To have access to them, the deans of the faculties were written to for permission to contact their academic staff. Once the deans' offices informed the heads of the departments within the faculties, the lecturers were subsequently alerted by the heads. Every faculty within the university has at least four (4) academic departments. Once the lecturers were informed, they were contacted one after the other to see whether they were willing to take part. This led to a convenience sampling technique, where the researcher has to make do with what he/she has. What is most important is that there was one lecturer sampled from each department. Thus, the 4 lecturers are considered to be representative enough as all of them cannot be recorded considering time constraints.

3.2. Data collection and analysis

All the lecturers who were sampled scheduled their class times for the recording, which involved the entire class of lecturer and students. Here, a PZM pressure Crown microphone was connected to a DAT recorder and placed very close to the middle of the class. This was to ensure that quality sound files are obtained while also capturing all the speech that was produced in the classroom. Every recording session lasted two (2) hours, giving a total of 48 hours to be analyzed. After all the recordings were done, the sound files were played back for orthographic transcription. After transcribing the data, a total of 220,501 words were found in the corpus. Out of this, all occurrences of fillers were noted and counted. Following Rose (1998), the fillers were put into two (2) groups; lexicalized and unlexicalized types and their functions identified. The results of the data analysis are discussed in the section that follows.

4. Results and discussions

4.1. Types of fillers

As already indicated, all the fillers were counted according to types. In all, 51 unlexicalized and 177 lexicalized fillers were found in the data. This is presented in Table 1.

Table 1: Filler types found in data

Type	Frequency	Percentage
Unlexicalized fillers		
erm	25	10.9
er	25	10.9
uh	1	0.5
Lexicalized fillers		
Lengthened syllables	129	56.5
Repetitions	44	19.2
Single words	4	2.0
Total	**228**	**100**

The information in Table 1 is illustrated in Figure 1 as follows:
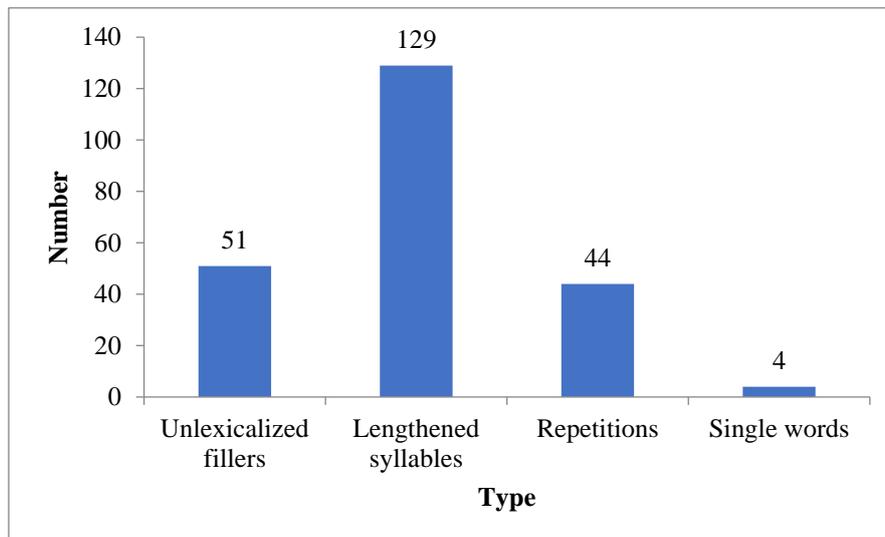
Figure 1: Filler types found in data

4.1.1 Unlexicalized fillers

According to Baalen (2001), Corley and Stewart (2008), and Rose (1998), unlexicalized fillers include vocalizations such as ehm, uh, err, ee, ah, erm, and um. From the data, the unlexicalized fillers were erm (25), er (25), and uh (1). These are illustrated in the following sentences:

(1) Now I have mentioned iron intake of pregnant women, I have mentioned the iron intake of **erm** children, of children after six months.

(2) Watch too much fat especially the saturated ones, **er** that will give you the bad cholesterol.

(3) You remember I said **uh** we cited some alveolar laterals.

There were instances where one unlexicalized filler was followed by another unlexicalized filler in the data. This is seen in (4):

(4) when you are eating and somebody mentions some **erm er** poignant sights, and you say that no …

In another instance, the unlexicalized filler was followed by a clause as in (5):

(5) About what we call errors we also refer to them as **erm you know** we also refer to them as **erm you know** deviations.

4.1.2 Lexicalized fillers
As seen in Table 1, the lexicalized fillers found in the data are clauses, phrases, and single words. The single words comprise of lengthened syllables, repetitions, and lengthened syllables.

4.1.2.1 Lengthened syllables
Scheppers (2011, p. 22) notes that the last syllable of a word can be extended (or lengthened) as a way to "fill". He further observes that this is a type of a hesitative pause usually used to denote that the speaker is experiencing a temporary processing problem. Examples of lengthened syllables are shown as follows:

(6) Eat foods with adequate starch **a:nd** fats.

(7) You have not gone down to educate them on the benefit **o:f** it. Let me tell you people **who:** are saying that Ghanaian language should not be used as the medium of instruction.

(8) a lot green leafy vegetables [0.99] the::y contain vitamin C.

(9) There are **three:** concepts in that theory. We **ha:ve** experience [3.05] vision [1.81] **a:nd** the current situation.

(10) So we talked about efficient utilization **a::nd** [1.06] effective utilization, and

(11) **By**: [1.24] moderate concern for production and moderate concern for people.

From the examples, we see that the lengthened syllables appear in three (3) forms: the first is an occurrence of only the syllable. This is seen in (6) and (7). Example (8) and (9) show that there are situations where there is a pause immediately preceding the lengthening, while we see a pause following the lengthening as shown in example (10) and (11) respectively.

There were also instances where there were two or more lengthened syllables following one another in the data. Three examples are shown in (12), (13), and (14):

(12) If if **you:** if you cook your vegetables for so long you **mi:ght lo:se** some of the vitamin C.

(13) And so **thi:s** will **be:** a **leader:** who will be going.

(14) But if **people**: are **invo:lved** in the planning taken, then will claim ownership and make it work.

Here, we see single words following each other as in (12) and then phrases following each other as in (13) and (14). Finally, there are situations where we find lengthened syllables followed by unlexicalized fillers as in (15) or followed by a combination of unlexicalized fillers and a clause. Examples are illustrated in (16) and (17):

(15) **so** like I was saying if if **you: erm** if you eat your food just make sure that you have [0.76] some vitamin c foods added

(16) this person has concern **for: erm you know** production

(17) You find that you become liable to committing some wrongs **although: erm you know** the rules.

4.1.2.2 Repetitions

Genç, Mavaşoğlu and Bada (2010) observe that a speaker might use repetition as filler or repair in discourse. With regard to repetitions, there were 44 different expressions that were repeated. Some of these were words, some were short phrases, and others were clauses. Examples of repetitions in the data are seen in (18)-(21):

(18) You associate **some some** sounds to certain things.

(19) **It it** it **ma:kes** good sense to to know that if you eat a lot green leafy vegetables.

(20) So definitely we are going to have [1.72] **fi:ve five** [2.18]

(21) **Bloom's idea, Bloom's idea, Bloom's idea** of learning

4.1.2.3 Single words

In the analysis, only one single word, *what*, was used as a filler by the lecturers. To this end, Anton-Lee (2003) characterizes teacher talk as having different linguistic features including simple and short sentences, 'what' and tag questions. The filler *what* appears only four (4) times in the data as in (22) – (25):

(22) and to **what,** the social cultural environment.

(23) So, we live **what**, we say that our emotions are there when one in a while I get angry.

(24) And the complex is also connected to the **what**, the basis.

(25) So, we talked about **what**, efficient utilization and effective utilization

From the examples, we observe that there are many filler types found in the data, and each of them was used to perform a particular function. The next section focuses on the communicative functions of these fillers.

4.2 Communicative functions of the fillers in the lessons

Literature suggests that fillers can be used for different purposes depending on "*the situation of the speaker*" (Schiffrin, 1978: 154). From the analysis, the lecturers utilized fillers for functions such as stalling, word search, word replacement, self-repair, expansion, and evaluating. The functions are discussed following Garcés-Conejos and functions. These functions are discussed as follows:

4.2.1 Cognitive functions

As already indicated, Garcés-Conejos and Bou-Franch (2002) argue that fillers are used to perform three functions; cognitive, social, and discourse-regulatory. For cognitive functions, they note that speakers can use the fillers as they process what to say next. In this instance, fillers are used for stalling, hesitation, in order to hold the floor while speaking.

4.2.2.1 Stalling

The lecturers used some of the fillers to stall their speech. According to Dörnyei and Kormos (1998), one way of stalling is to hesitate. This is seen in (26) – (27):

(26) Sometimes it is **the the the the the erm** what is it?

(27) So **labour labour labour** unrest and the example I have given here.

In (26), we see that the lecturer starts talking but midway, he produces one word *the* and then repeats it three more times before continuing with the utterance. In fact, after the repetition, another filler pops up, albeit an unlexicalized one, followed by a question. The extract shows that right from the beginning, the lecturer has difficulty pronouncing the word(s) that he needs to pronounce. He therefore uses the repeated words to fill the gap in his presentation as he tries to remember what to say. This way, the repeated words become time creating devices (Stenström, 1994) for him to plan the next word. We see from the analysis that almost all fillers used for stalling are repetitions. It is also important to note that the lecturers used stalling to search for words. This is illustrated in (28):

(28) And say they are going to take **er er** ten cedis from every student.

In this example, it is clearly observed that the lecturer had a momentary speech planning problem and the only way not to leave a gap (or silence) was to fill with the repeated unlexicalized filler *er*. In (28), the focus is on the repetition of the hesitation marker, rather than the marker itself. Again, (28) suggests that it is not only lexicalized repetitions that can be used for stalling, but unlexicalized repetitions can also perform such functions. Kharismawan (2017) also observes that a speaker uses fillers (in this case, to stall) when he is not certain about what choices to make in the next utterance. As can be seen from the example, with the stalling, his turn within the classroom became prolonged (Rose, 1998). Thus, such time creating devices serve as an aid for the lecturers to remember the rest of their utterances, while continuing with their lectures.

4.2.1.1 Hesitating

Tang (2015, p. 93), in her work, observes that "*hesitation does not hinder the aim of message delivery; instead, it facilitates the formulations of successful communications*". Hesitation is therefore used to show that the speaker has encountered a momentary coding problem in the communication. Examples of such use are seen in (29)-(31) produced by different lecturers:

(29) Now I have mentioned iron intake of pregnant women, I have mentioned the iron intake of **erm** children, of children after six months.

(30) You remember I said **uh** we cited some alveolar laterals.

(31) When you are eating and somebody mentions some **erm er** pungent sights, and you say that no.

From the examples, we see that the lecturers used the fillers to hesitate even as they tried to produce the appropriate words in their utterances. Stenström (1994) asserts that a mark of hesitation is one of the functions of fillers. This resonates with Matthei and Roeper (1983) who are of the view that speakers stop and think of what they intend to

say. Thus, hesitation helps the smooth flow of utterances and is a technique that speakers use in order to have successful communication. This also means that hesitation in utterances permits the speaker to look for appropriate words to use in utterances, serving as a communication strategy. In sum, both stalling and hesitating constitute the pragmatic functions of fillers that signal cognitive processing (Benus, 2013).

4.2.2 Social functions

According to Garcés-Conejos and Bou-Franch (2002), the social functions of fillers are to signal involvement, affect, or interest in whatever is being said. In this sense, fillers were used as attention getting devices (Stenström, 1994) and as feedback (Jordan, 2001).

4.2.2.1 Attention getting devices

According to Stenström (1994), speakers can check whether the listener is paying attention or not. Such was the use of the fillers erm, what, er, and uh: Examples (32)-(33) illustrate this:

(32) Yes madam! Yes madam! **Er:** Animwaa.

(33) and the complex is also connected to the **what**, the basis.

Example 37 is taken from an introductory linguistics class where the lecturer had already introduced the students to the articulation of consonants. In this case, he tries to review what had been done the previous week to make sure students understand before moving on with the new topic. Here, the lecturer starts and at a point, tries to remind students of the previous topic. In order to make sure everybody is listening, he uses 'yes madam, yes madam' to call a student. He then realizes that the person he is calling does not know that she is the one. Due to this, he decides to call her name after getting them all to focus on him. This way, he was sure that the students were listening to him, rather than turning their attention to something else. Example 38 is another way of getting the attention of the students. Here, the lecturer explains a concept in a creative arts class. As he starts talking, he realizes that there is a word that he needs to mention. However, before he mentions it, he tries to make sure everyone is listening with the use of the word *what*. My classroom observation during the recordings showed that the use of *what* made all the students turn their eyes towards the lecturer. With this, the lecturer has been able to invite the students to "*be involved in his lesson*" (Stenström, 1994, pp. 64-65).

4.2.2.2 Feedback device

Jordan (2001) opines that fillers can be used as a way of providing feedback. In fact, once a listener has been invited to be involved in the process, there is bound to be the provision of feedback. Examples are seen in (34)-(35) as follows:

(34) Students: Okay Sir, this is confusing.

Lecturer: It's confusing **eerh**? I said you associate **some some** sounds to certain things
Students: Yes sir.
Teacher: **Goo::d** let's move on.

(35) Student: Sir please, can you explain further?
Lecturer: Sometimes, it is **the the the the** the **erm**, what is it? connect it. **Erm** in analysis of poetry you may generate a point.
Students: Sure!
Lecturer: **Great great**, you've got it.

Example (34) is a lecture on Introduction to Phonetics while (35) is a lecture on Introduction to Literature. In each instance, the lecturers gave explanations to some concepts. However, some students indicated that they did not understand what the lecturers said. This necessitated repetitions of what was said previously, paving the way for better understanding. In (34), students gave feedback (Yes Sir) as a way of showing that they now follow the lecturer's teaching. This is followed by **goo::d** from the lecturer. In (35), some students produced the backchannel **sure** to indicate that they had understood the concept. Just as in (34), the lecturers' use of the repeated expression **great great** also serves as response to the students' show of understanding. We see from the examples that feedback was provided by both students and lecturers; however, this study focuses on the feedback from lecturers only. The findings here support Jordan (2001: 12) when he states that *"fillers can be the indicators used by the listeners as a response in order to tell the speaker that the message is received, understood, or unclear, so the speaker knows that the listeners are giving response to what he or she says"*.

4.2.3 Discourse-regulatory functions

Again, Garcés-Conejos and Bou-Franch (2002) identify the discourse-regulatory functions of fillers as being used to ratify the assignment of speaker- and hearer-roles and contribute to the shaping of discourse. Such functions identified in the data are fillers used as editing terms, for disclosing, self-repair, for word replacement, and for expanding the discourse.

4.2.3.1 Editing term

One discourse-regulatory function performed by the fillers found in the data is its use as an editing term (Baalen, 2001; Pamolango, 2015; Shriberg, 2001). According to Shriberg (2001), an editing term is the optional portion of the utterance which could include speech words (i.e. specific words to spontaneous speech). Examples (36)-(37) are used to show as follows:

(36) who define what is BAD **er** what is good

(37) writing might be because **they find, they found** themselves.

In the two instances, two lecturers from two different faculties are delivering their lessons. Along the line, they produce these utterances as part of their delivery. In (36) we notice that the lecturer appears to use a word *bad*, however, she realizes that she has not produced the appropriate word. As such, she quickly indicates that there is an error by producing a filler *er* before proceeding with the appropriate word *good*. A similar instance is found in (37), where the lecturer also produces the expression *writing might be because they find*. Even before he finishes his utterance, the lecturer realizes that he has made a mistake by producing the wrong form. With this, he quickly corrects himself by using the right form *they found* to project the time of occurrence of the event. In both (36) and (37), it can be argued that the lecturers' use of *er good* and *they found* is synonymous to using *I mean*, one of the prototypical markers for editing discourse (Levelt, 1989). As these lecturers edited these sections of their speech, they actually ended up repairing the entire utterance, helping the facilitate communication between them and their students.

4.2.3.2 Discourse closing

Another function of fillers in this category is discourse closing. Here, Raclaw (2008) notes that conversational closing entails various methods that speakers use to complete an interaction. Thornbury & Slade (2006) also argue that opening and closing interactions are some of the many ways by which individuals can start, maintain, or break a social relationship. These views suggest that even in the classroom, discourse opening and closing are important features that cannot be simply overlooked. Examples (38)-(40) are instances of the use of fillers to close topics or sub-topics within the lecture:

(38) The relief agency supplied Ghana with a lot of yellow corn to be used in the production of kenkey, **you know**.

(39) I said that it is not always that we use complex writing in the art. Sometimes, we need to use simple writing in order to achieve a particular effect. I believe it is clear now, **yes**.

(40) **Anyway**, we have finished with today's lecture.

In all three utterances, we notice that the lecturers bring their turns to a close by using the fillers *you know*, *right*, and *anyway*. For instance, in (38), the lecturer provides information as part of his lecture. This was after he had given a short background to the discussion concerning the role of the relief agency and how they ended up helping Ghana out of a famine situation in the early 1980s. According to Fox Tree (2007), *you know* is used as a way of asking a listener to make inferences about the conversation. Also, Erman (2001) observes that *you know* is used to confirm the understanding of the listener. Looking at (38), we notice that even as *you know* was used to close the turn, the lecturer

used it as a way of making sure that the students were able to connect this particular information to what had been said already concerning the work of the relief agency. In essence, using *you know* was to activate shared knowledge between the lecturer and his students.

In Examples (39) and (40), we see some other lecturers using the fillers *yes* and *anyway*. In (39), prior to this turn, a student had asked the lecturer to explain certain concepts to him. With this, the lecturer did the explanation and then ended his turn by using *yes*. In this sense, *yes* has been used as a frame marker to close the discourse. The word *yes* has been described among other things, as a responsive or initiatory marker (Wouk, 1998). In (39), *yes* is seen as an initiatory marker because although it closes the lecturer's turn, it also denotes a request for acceptance or agreement from the students, albeit in a declarative form. Thus, the lecturer had initiated a move for the acceptance of his response or for the student to agree with him, all in a bid to show understanding.

The filler *anyway* in (40) has also been used to close the discourse. Although it is located utterance-initial, it still serves the function of closing the lecturer's turn. Stenström (1994, p. 64) notes that *anyway* is one of the discourse organizers that "*looks both ways*". This means that it can appear at the initial position or the final position of a structure and still perform the function for which the speaker intends it to. In (40), the lecturer actually indicated that they had reached the end of the lesson with explicit information (that is, the verbal content matches the actual action). As such, we see here that both the use of the utterance and the filler suggests that the class has ended. In short, *anyway* was used to close the lesson and to show discourse discontinuity. This point is supported by Stenström (2009) who indicates that *anyway* can be used when there is nothing more to say.

5. The importance of fillers in the university classroom

From the discussion, we see that the use of fillers is an important aspect of communication that cannot be neglected. This is because as the analysis show, lecturers use fillers in different forms and for varied communicative functions. For example, while some of them use the fillers to show that they may be encountering momentary online coding difficulties, others used them to draw the attention of their students, while others also used them to help organize the structuring of their lessons. From these types and functions, it can be argued that fillers are important communicative strategies whose presence helps lecturers to regulate their own utterances. This idea falls neatly in line with the assertion by Garcés-Conejos & Bou-Franch (2002), Khojastehrad (2012), and Stenström (1994) that, it is part of natural speech that speakers use fillers when they are talking. As such, during speech production, there would be continuous checking and re-checking of utterances through stalling, hesitating, or editing. Another important aspect of the use of fillers is that fact that they can be used to get students' attention during lectures. We recall that in examples (36), the lecturers used *er* and *what* to get their students to focus their attention on them rather than doing other things. This is supported

by Stenström (1994) who indicates that fillers can be used to ensure that all students are involved in his lesson.

According to researchers such as Chafe (1979), Clark and Wasow (1998), and Veilleux et al (2007), fluent speakers use fillers in predictable syntactic and discourse locations. For instance, Watanabe (2002) found results similarly to Chafe (1979) that, most fillers occur most frequently at the beginning of major discourse boundaries and intonational units while decreasing in number, relative to the size of discourse units. Also, they were found to be least frequent at the beginning of sentences and within words. In addition to their occurrence, fillers help in many aspects of the comprehension process. For example, Corley, MacGregor and Donaldson (2007), Flowerdew and Tauroza (1995), and Fraundorf and Watson (2011) argue that their presence aids listeners in comprehension and recall. Again, they have been found to give listeners time to adjust to self-correction (Brennan & Schober, 2001), provide cues about how to segment the stream of speech (Bailey & Ferreira, 2003), and signal the complexity of upcoming information (Watanabe et al, 2008).

Fillers can also be used by lecturers to interact with their students in order to ensure a sense of belongingness. This is attested to by Clark and Fox Tree (2002) that students get to feel that they are part of the class and are considered an important part of it. For example, a lecturer who often calls the attention of students is one who is seen as managing his/her class well. This way, that lecturer is seen as an instructional leader (McLeod, Fisher, & Hoover, 2003). Hence, if students realize that their lecturer keeps monitoring their involvement in the lesson, they would believe that they are actually part of the process. Eventually, this leads to efficient utilization of class time and effective teaching and learning. One other importance of using fillers in the university classroom is the ability to help lecturers manage communication breakdown in speech and to continue with the flow of the lesson. Walsh (2006) believes that the classroom is *dynamic* because a series of events take place among teachers, learners, discourses, settings, and learning materials. Therefore, fillers enable teachers to ensure effective teaching and learning through the interaction that take place.

Classroom teaching in its various forms is the most commonly used method for transferring knowledge. To improve students' comprehension at all levels, especially the university, lecturers use fillers to convey their lessons. These help both students and lecturers to send and receive feedback. Although some researchers have described fillers as "*lexically empty item with uncertain discourse functions, except to fill a conversational gap*" (Stenström, 1994, p. 222), the current study has revealed that they are in fact, not empty, but have significant pragmatic value that cannot be overlooked as far as strategic competence goes. In essence, fillers are used as a means of negotiation between students and lecturers, and this eventually fosters learners' "*opportunities to participate and consequently to learn*" (Walsh, 2002, p. 5).

6. Pedagogical implications

The analysis in this study has revealed that lecturers use fillers as a communication strategy in lesson delivery. Thus, it can be argued that the findings of this research point to some pedagogical implications. Although the lecturers used fillers, it is not clear whether they actually understand their functions. This is because most teachers use fillers without really realising that they have done so. Sometimes, as already indicated, some people think that using fillers means that the speakers are not fluent. However, contrary to this view, research, and indeed, results of the present study, have shown that they rather help in maintaining fluency (e.g. Arciuli et al, 2010). Consequently, they form an integral part of the speech process, and are a characteristic of spoken language (Maekawa et al, 2000), showing how important they are in one's ability to sound natural when speaking.

Looking at the importance of fillers, it is necessary to argue here that teachers, irrespective of their subjects of specialization, need to be enlightened about the use of fillers in their lessons. It is believed that once teachers become aware of the importance and functions of these fillers, they are very likely to adopt their use as a communicative strategy when teaching. McCarthy (1998) rightly points out that teachers, and in this sense, lecturers, need to deploy a wide variety of strategies to make students aware of the different ways they can show hesitation or how they can incorporate meaning to what they want to say with words. Furthermore, Santos et al (2016) note that if teachers are to encourage their learners to confidently increase their level of involvement in a conversation, it is important to make them aware that fillers can fulfil essential functions in their development of oral skills. These skills are deemed necessary in everyday interactions when using language in the classroom and/or in real contexts. It is therefore worth mentioning that teaching students to use fillers, one of the communication strategies, to perform the three essential functions of fillers, is very important. In addition, the teaching of fillers should be included in the curriculum for teachers to know that they are important and thus form part of the items students are to learn in school.

7. Conclusion

Using a mini-corpus of 220,501 words from transcribed lectures of 24 lecturers in a public university in Ghana, the present study investigated lecturers' use of fillers in lesson delivery. Following Rose (1998), two categories of fillers; lexicalized and unlexicalized types were identified. In addition, functions of fillers according to Garcés-Conejos and Bou-Franch (2002) were identified as cognitive, social, and discourse-regulation. Regarding the types, the fillers were found to consist of unlexicalized fillers (erm, er, and uh) and lexicalized fillers (lengthened syllables, repetitions, and single words). There were instances where combined fillers were found in the data. These mostly consisted of an lexicalized filler (such as lengthened syllables) followed by an unlexicalized filler (such as erm); an unlexicalized filler (such as erm) and a lexicalized filler (such as the

clause *you know*), or a lexicalized filler (e.g. repetition) followed by an unlexicalized filler (such as erm) and another lexicalized filler (such as the clause you know). The analysis of the functions also revealed that the fillers were used for among other things, stalling, hesitating, and for getting students' attention. Others are as feedback devices, as an editing term, and for discourse closing.

Based on the results, it is argued that fillers are an important aspect of speech, especially in showing how fluent a speaker is. It is necessary to note that as already indicated, although the lecturers used these fillers in their lessons, it is not clear whether they know or even understand what these elements do in discourse. It is based on this that it has been proposed that lecturers should be made aware of their importance in order for them to appropriately use them for to their benefit and that of their students. In the view of Clark and Fox Tree (2002), there is enough evidence that suggests that fillers are actual words and are used by speakers for varied specific reasons, similarly to other words and linguistic structures. In conclusion, it is necessary to stress that it is important for lecturers to deploy fillers as elements that make meaning and utilize them in the classroom to aid in lesson comprehension.

Conflict of Interest Statement
The author declares no conflicts of interests.

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