Code-Switching in Pashto: An Analysis of Hesitation and Filled Pauses as a Consequence of CS

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Abstract

Spoken communication is characterized by a sizable portion of breathing and hesitation pauses and fillers. When used as a strategy, pauses and fillers appear to facilitate word selection and organization during speech. However, they are also a sign of disfluency, particularly when speakers imbed words and phrases from foreign language through code-switching (Tissi, 2006). The difficulty in selecting an appropriate foreign word, deciding its syntactic position and pronouncing it correctly result into a great deal of hesitation which is largely ignored in researching CS. The present study explores hesitation phenomenon in Pashto L1 bilinguals' communication. By recording and scanning the spontaneous communication obtained from 12 informants selected through the 'Social Network' sampling, the study examines hesitation as an essential phenomenon of CS. The qualitative analysis shows that hesitation markers are the signs of disfluency that are more manifested in participants' communication with switched elements from foreign (English) language. Finally, the study concludes that the incorporation of hesitation pauses and fillers are the essential features of bilingualism- both as a strategy and consequence of CS. The study brings forth a sizable, but mostly ignored portion of bilingual' speech by identifying and enlisting various types of pauses and fillers.

Keywords: Code-switching, disfluency markers, filled pauses, hesitation, Pashto

1. Introduction

On the surface, spoken language is thought to be carefully produced, words cautiously selected and uttered, just like it is presented in its written form. Those who are not able to communicate in an appropriate way are said to have some speech disorder. But this supposition is far removed from the underlying assumption of the actual nature of speech. Human speech is, after all, surprisingly disfluent, and marked by frequent restarts, stops, silences, hesitations and fillers like 'ers' and 'erms'. A sizeable portion of normal human speech (from 30 to 50 per cent) is occupied by these hesitation pauses and fillers (Clark & Foxtree, 2002). Though in some cases hesitations in speech may appear to be the result of some mental lapses, it is mostly the result of poor communication skills. The phenomenon of hesitation is an essential feature of spontaneous speech where it is forgivable and sometimes even unnoticed. It may more likely occur while communicating in foreign tongue, or embedding words of foreign language to one's own through 'code-switching' (Tissi, 2006).

Code-switching (CS hereafter) is the practice of moving back and forth between multiple languages, or between several dialects or registers of the same language. It is the concurrent use of more than one language, or language varieties in conversation in a manner consistent with the syntax and phonology of each variety. Multilingual often use elements of multiple languages in conversing with each other. Although most of the researchers focus on verbal CS, astonishingly, the abundant occurrence of fillers or disfluency markers found in the spontaneous conversation of multilingual speakers, especially while switching codes, has not received researchers' attention so far. The considerable hesitation experienced by the speakers while embedding linguistic items from foreign language into their native tongue has not been explored yet. The area of CS in spoken Pashto has been dealt by some researchers (e.g. Khan, 2015), who investigated the strategies Pashto speakers use in imbedding elements of foreign language (English) into their native tongue. Yet, a great deal of disfluency markers found with CS has been ignored. This study is likely to fill this gap by investigating the nature of hesitation as a phenomenon in relation to CS in the speech

of Pashto L1 speakers in their spontaneous communication. It holds that hesitation markers in CS are the signs of difficulty in selecting and pronouncing foreign words while switching the code from native to foreign language.

The study presents the comparative analysis by quantifying of various sorts of hesitation pauses and fillers produced in participants' communication in both situations i.e. holding conversations with switches made to foreign language and vice versa. It is followed by detailed analyses of pauses and fillers produced in CS only. The twelve respondents interviewed were the native speakers of Pashto with varying ages and the status of English is that of the foreign language in the context of the present study. The focus of the study is to:

- Explore the substantial use and patterns of hesitation pauses in Pashto L1 speakers' speech with CS as compared to their speech without CS, and,
- Examine the significance of the use of hesitation pauses both as a strategy and consequence of CS.

In order to address the above objectives of the study, the following two research questions (RQs) were formed:

RQ1: How is Pashto L1 speakers' speech with CS elements marked by hesitation pauses differently from their speech without CS?

RQ2: How do hesitation pauses appear both as a strategy and consequence of CS in Pashto L1 speakers' communication?

2. Background to the Study

As a common practice in Sociolinguistics, research into CS emphasizes social and linguistic variables that are crucially involved in preferring one language or variety over another in switching code. Social factors such as ethnic background, age, class, context, occupation and education indeed shape speakers' choice of a particular language. Speakers' choice, however, can be limited for switching code to language other than their native tongue when hindered by linguistic factor such as knowledge of semantic use, and grammatical or strategic competence in switching code to foreign language. Due to the vital role played by social or linguistic factors in CS, imbedding foreign words in both intersentencial and intrasentencial CS is not always easy and smooth. Whereas, hesitation pauses are an essential part of spontaneous speech and forms a sizable portion of it, these pauses can also be taken as indicators of difficulty in switching codes to foreign language in communication process. It is the latter assumption that provided the basis for the present study.

2.1. Importance and Frequency of Disfluency Markers in Speech

Human communication is carried out by using more than what has been explicitly defined as 'words' in the traditional sense. It includes gestures, juncture, change of tone, words of unprepared spoken language and a range of unintentional errors (Hartsuiker, Corley & Martensen, 2005). Any spontaneous speech contains disfluencies, false starts, repetitions, and hesitations that accompany the words planned and uttered by speakers. They vary according to the speaker's cognitive activity and a number of socio-linguistic variables (Tissi, 2006). The non-lexicalized fillers e.g. 'er' and 'erm' are found different in American English, British English and Spanish (Weiling, Grieve, Bouma, Fruehwald, Goleman & Liberman, 2016). The hesitation phenomena are not only used in spontaneous speech but also in carefully designed dialogues in movie scenes (Rosa & Rosa, 2013). Approximately 6% of words are affected by some form of disfluency (Clark &Fox Tree, 2002). Disfluencies may affect 5-10% of all words and one third of all utterances in natural speech (Shriberg, 1994). Silence and pauses collectively constitute forty to fifty per cent of the spontaneous utterance. They are of two types

i.e. breathing pauses and hesitation pauses of the "er. . ." and 'um' variety. Breathing pauses account for five per cent of a normal spontaneous utterance and come mostly on grammatical boundaries (Henderson, Goldman-Eisler & Skarbek, 1966). Formerly, hesitation pauses were considered as signs of disfluency, but later on, it was viewed as an important aspect of communication and attracted the linguists (Teiller, Stam, & Bigi, 2013).

2.2 Occurrence of Hesitation Pauses in Speech

Wang and Li (2014) define hesitation as a break during speaking or a period of silence that occurs between linguistic units of an utterance. Hesitation pauses are difficult to measure and researchers disagree upon the points of its occurrence and frequency. According to Boomer and Ditman (1962), they occur after the first word in a clause or sentence. Other researchers illustrate that hesitation pauses come just before the important lexical item in any utterance (Goldman-Eisler, 1972; Beattie &Butterworth, 1980). But a host of researchers do agree that hesitation pauses do not come on clause boundaries, but rather inside them. This point is indicative of the fact that planning speech overlaps clauses (Strangert, 2004).

2.3 The Taxonomy of Hesitation Pauses

Hesitation pauses and silences are studied now in a separate field of the 'temporal variables in speech'- with the pioneering contribution of Goldman-Eisler with her studies of speech rate and silent pauses (Griffiths, 1991). Following her lead, a number of researchers of this field have classified hesitation pauses into various types. Hesitation as a phenomenon takes the form of a variety of disfluent features; it results in slowing the transfer of lexicalized information in spontaneous speech. Researchers divide them into the following types:

2.3.1 False starts

As termed by Leech and Svartvik (1994), a false start occurs when a speaker utters few words, stops in the mid-sentence, and discards the first attempt at lexicalization. Such a start is usually followed by a revised attempt to lexicalize the same idea being discarded, or by silence.

2.3.2 Repeats

In repeat, a speaker iterates a lexical item in the mid of the same sentence in which it had already occurred. Repeats are further sub-divided into 'prospective repeats' that are produced to take time for speech planning, and 'retrospective repeats' to correct errors or recreate link with the item already uttered (Tissi, 2006).

2.3.3 Restarts

Restarts are found when a speaker utters few words and then repeats the same before saying next (Leech & Svartvik, 1994).

2.3.4 Self-corrections

Very often, one word is uttered and then immediately replaced by another word as retraction. This is called self-correction. These four types, namely 'false starts, 'restarts, 'repeats' and 'self-corrections' are sometime referred as 'repairs' (Leech & Svartvik, 1994).

2.3.5 Lengthening

In lengthening, a speaker prolongs the articulation of a word, particularly vowel sound (Clark, 1994).

2.3.6 Pauses

As one of the fundamental features of spontaneous speech, hesitation also takes the form of pauses. They include several types; some of them are the subject of the study of articulatory process and speech pathology. One such type is breathing pauses. Recording and measuring these pauses require special instruments (Wingate, 1987). An important type of pauses is the

one which occurs either after a complete speech act, sentence, clause, word or a significant grammatical boundary. These can be either silent or unfilled pauses (SP), or filled or voiced pauses (FP) (Leech & Svartvik, 1994). FP's can be realized by a number of phonetic but non-lexicalized combinations or communication fillers (Bortfeld, Leon, Bloom, Schober & Brennan, 2001).

2.3.7 Parenthetical Remarks

Watanabe and Rose (2012) put that parenthetical remarks are evident when a speaker utters a sequence of one or more words; this sequence is to be understood as a replacement with the aim of correction or explanation of the immediately preceding equivalent sequence. Parenthetical remarks are used in order to make the material clearer and easy to be understood by the listeners, through specifying or giving more simple words to describe it. Some typical parenthetical remarks in English include "I mean", "Well", "That is", etc.

2.4 Reasons and Functions of Disfluency Fillers

A number of researchers in the area of 'speech production' have assigned different reasons and functions to disfluency fillers. There are a large number of intertwined variables in the nature of pauses and the mechanism of words selection - either within the same language or going for another one. One possible explanation is provided by the 'spreading activation' or 'interactive activation' theory (Motley& MacKay, 1975). They remark that activation of phonetically and semantically similar words spread out and disperse in a chain reaction. Since the task of the speaker is to select the required word and to suppress the unwanted, this process is resulted in hesitation pauses. Silent and filled pauses function as devices to take time before an increase of information, while repeats and false starts come to temporise before a correction (Tannenbaum, William & Hillier, 1965). Some fillers take place in communication when speakers are uncertain (Smith & Clark, 1993; Brennan& Williams, 1995). Others consider them as the consequence of choices available to the speaker (Schachter, Christenfeld, Ravina & Bilous, 1991). Fillers also serve the function of facilitating understanding (Bortfeld et al., 2001); they also allow the listener to amend their predictions about what is being said next (Arnold, Tanenhaus, Altmann, and Fagnano,2004; Corley, MacGregor & Donaldson, 2007). They also help the listener in evaluating the speaker's confidence in what they are saying (Brennan& Williams, 1995). Speakers produce fillers when they experience a delay to the speech plan (Smith & Clark, 1993), and it may be the case that any plausible interruption to fluent speech will affect listeners in the same way as filler (Bailey & Ferreira, 2003; Brennan et al. 2001). Clark and Fox-Tree (2002) assert that fillers transmit interpersonal messages. Similarly, hesitation is by no means contradictory to fluency; it is an integral element of a good speech which is more error-free and of high-quality (Corrà, 1982). Some disfluency markers with a semantic function may be subject to inter-language effects (Schmidg & Fägersten, 2010). Bortfeld et al. (2001) argue that disfluency markers are not always the result of incompetence or difficulty in planning speech. They may be speakers' tools for continuity in communication or editing their own speech. Some disfluency markers such as um and uh have communicative value and are interpreted differently in different contexts (Abbas, Jawad & Muhi, 2018). Nevertheless, few researchers into SLA consider pauses and other hesitation phenomena to be one of the greatest impediments to intelligibility in communication in second language; they associate them with poor speech performance (Albrechtsen, Henriksen, & Faerch, 1980).

2.5 Hesitation Pauses in CS

There is scarcity of research into the tendency of hesitation in CS. Very few researchers have examined hesitation pauses and fillers in relation to CS. For instance, Hlavac (2011) puts that

bilingual speakers who about equally fluent in both languages produce CS utterances without hesitation pauses, restarts, repetitions and corrections etc. It suggests that intra-sentential code switching is not some random interference (Hlavac, 2011). He concludes that Hesitation phenomenon is more a consequence of CS than a strategy to facilitate it. On the whole, hesitation in CS has not attracted researchers who dealt with CS in general. The present study is a step in this direction.

3. Methodology

The study was carried out in Malakand Division, Khyber-Pakhtunkhwa Pakistan, a representative Pashto multilingual community. Respondents were selected via 'Social Network' sampling; they were Pashto native speakers with English language as compulsory subject during their 14 or 16 years of schooling. Their demographics are given in Table 1 below:

Table 3.1 Demographics of the Respondents

Number of Respondents	Age	Males	Females	Education	Linguistic Profile
12	22-35	08	04	14-16 years of schooling	Pashto-English-Urdu Multilinguals

Primary data were obtained by audio-recording the naturally occurring conversation of the respondents. Each respondent spoke for an average of approximately ten minutes. The subjects were informed that their speech samples were being gathered for research purpose before each interview. No mention was made to them of FP's as a specific target of the study to ensure that subjects may not become overly conscious of hesitation in their speech and possibly affect the data. The recording was rectified and the total duration of seventy-five minutes communication was obtained, by omitting the disruptions and unnecessary elements that formed 45 minutes. It was scanned and rewind several times for careful analysis. Subsequently, examples from the recording for illustrations were transcribed in the form of transliteration in English alphabets. For making clear distinction among CS utterances, hesitation pauses and fillers and Pashto words other than FP's, examples were composed in three different font styles. English words were written in italics, FP's in bold font, and other Pashto words without italicizing or bold (regular) fonts. English glossary for Pashto words was also given where necessary.

4. Results

Recording of the nine audio clips of twelve participants constituted the total duration of seventy-five minutes of communication. The average of 99% word per minute was recorded by scanning the total volume of their speech. The simple frequency counts of the occurrences of English words embedded into the communication of the subjects showed the use of the substantial amount of 24% English words in their communication. On the whole, subjects uttered 7425 words --both content and functional--, which include the use of 1800 English words. This amount of English words suggests that almost every fourth word in the speech of an average Pashto speaker was English. What is more important here, that the instances of hesitation pauses were larger in number than the instances of CS. Analysis of the E-recording showed that instances of hesitation pauses were occasioned 2250 times, as compared to occasions of CS which is 1500 times. It is important to mention here that the total number of recorded words (7425) was inclusive of filled pauses. Findings reveal that switching to English was not made smoothly for the participants; they confronted difficulty in switching code. The embedding of English words were marked by the hesitation pauses- both on pre-embedding and post-embedding positions. Only 305 switches were exclusive of any sort of hesitation pauses among

the total number of 1500 switches to English. Though lesser in number (1055 times), subjects showed the tendency to use hesitation pauses without changing the code to English. As instances of pauses constituted 41 per cent of the total recorded communication in present study, the results of this study are loosely in accordance with Henderson et al. (1966), who estimated that pauses and fillers of all sort constitute 40 to fifty per cent of a normal speaker's utterances. However, this study was exclusive of breathing pauses which usually constitute only 5 per cent of a normal communication.

Some English words, imbedded into Pashto, were sometimes marked by inflectional Pashto morphemes, mostly for plurality. Others were used more or less in their original forms by the subjects. Comparative analysis of the three varieties i.e. pauses recorded in switches to English words roughly used in their original form, assimilated English words inflected for plurality, and hesitation pauses experienced without switching codes also substantiates the fact that FP's are the result of difficulty in selecting and pronouncing English words during CS. The greatest number of FP's were occasioned in CS to uninflected English words (67%), medium average of FP's were recorded in assimilated English words (20%, and the lowest number of FP's were produced without switching code (13%). However, the below analyses are exclusive of assimilated English words that were inflected for plurality like "messeguna" = messages, "paguna" = pages, "leaderan" = leaders, and so on.

4.1 Repeats

Repeats were the mostly frequently used strategy applied by the subjects in CS with the largest ratio (46%). Repeats were observed when subjects made switches to English compound words or phrases. Repeats occurred mostly were retrospective type i.e., that are used to correct errors or link the items. There were only 15 possible prospective repeats i.e. that were produced to take time for speech planning. On the whole, switches to English marked by repeats constitute 7 per cent of the total switches.

(01) ***Out form*** na wo, *out of form* na wo kho game ye nakaw.

(02) Che result rashi nu ***supply*** **DMC**, *pass DMC* ba darki.

(03) Parcha pa *over-**drive*** ham, na, pa *over-load* ham nawarky.

A very typical instance of repeats, which constitute 38% (the largest number of 680 instances of the total repeats) in making switches to English was observed in the communication of the majority of the respondents. It took the form of substituting the desired English word(s) with FP made of Pashto syllables in first attempt of uttering the sentence, and then mentioning the missing English word(s) after the sentence completion. It was observed that the substitution of English word by FP's was not deliberate, which is indicative of the fact that participants encountered difficulty in imbedding English words into Pashto sentences in their first attempt.

(04) Har yaw kas khpal **dagha** ky. *Try*.

(05) Cha pe desi kha **dagha** war-na-kra. *Comments*.

(06) Da di **agha dagha** pa khpal zai shta. *Value*.

Another strategy, similar to repeats, was the substitution of the desired English words by FP's in the first attempt of uttering the sentence, followed by the repetition of the unit of the same sentence starting from the missing English word, as illustrated in the below given examples.

(07) Mung tolo der **dagha** kaw... *Insist* kaw.

(08) Staso **dagha** ta ba pa tama yoo... *Call* ta ba pa tama yoo.

It was also observed that subjects sometimes produced gap-fillers without repetitions of picking up the desired words-- whether English or Pashto--, leaving those fillers open to listeners for

rendering. Their intention of using this sort of fillers and listeners' anticipation can be explored by a follow up interview by further research.

4.2 False Starts

False starts were observed when subjects had to start a sentence with an English word or switching to English had to be made immediately after first word. Interestingly, all the revised attempts followed took the form of replacing the FP segment with the required English word(s). Switches to English marked by false starts were found 195 in number which constitute 13 per cent of the total switches to English (1500).

(09) **Da che dai**...(1st attempt) da *fly-over* che dai da aghe na makhke chowk dai. (2nd attempt)

(10) **Dagha kho**.... (1st attempt) *Merit* kho da zal der high na dai. (2nd attempt)

(11) **De** ki kho gap na ye... (1st attempt) *Exam duty* ki kho gap lagawal na ye. (2nd attempt)

4.3 Reduplication

A unique kind of strategy of its nature used during switches made to English was found in this study. It was the reduplication of English words by using the syllabic reduplication strategy of Pashto. There occurred 35 instances of this tendency- as illustrated in the examples below.

(12) Ka sok charta *visit*-**misit** ky.

(13) Kala-na-kala ba warta agha *load*-**moad** ham kao pakhpala.

4.4 Lengthening

The phenomenon of lengthening was recorded both in Pashto words, directly affected by making switches to English, as well as, in English words. The neighbouring sounds of Pashto syllables, proceeding English words were marked by the tendency of lengthening. There occurred 180 instances of lengthening (12%) on the whole in making switches to English by the subjects. the authors excluded the lengthened fillers where they were not clearly distinguishable from instances of paralanguage. However, lengthening took other different forms. In about two-third (145) cases, subjects prolonged the vowel sounds of both Pashto and English words. Vowel and consonant sounds in Pashto syllables were lengthened just before the imbedded English word as a strategy to mark the occurrences of CS. On only 15 occasions they lengthened the consonants occurring just before English words. In ten cases they lengthened the unvoiced alveolar fricative sound [s] and bilabial semi-vowel sound [w] in a single instance. Lengthening the nasal bilabial [m] occurring in Pashto interrogative pronoun [kam], usually inserted as an FP for emphasis before English words, was recorded 15 times. In none of the occasion subjects lengthened Pashto syllables following the CS elements. Examples taken from each category are given below.

(14) Tolo la ye **daaaa** *worning* warko che ma razy.

(15) Da zal ba **wasssss** *last try* ky pa test ki.

(16) Ma ta kho der *bent* ***toooo*** *earth* khkara sho.

(17) Sta *power* ***offffff*** *convincing* zama na kha dai.

(18) Da tolo che **kammmm** *objection* che di.

Note: in (17), the speaker mistakenly replaced the bilabial voiced fricative /V/ with its unvoiced counterpart /F/.

4.5 Pauses

Subject produced FP's consisting of a number of phonetic, non-lexicalized combinations as communication fillers before making switches to English words and phrases. The occurrences of fillers of ‘er’ and ‘erm’ variety were found 190 times (13%). All these instances were clearly distinguishable from the other strategies of lengthening Pashto morphemic syllables followed by English words. Another similar category of FP's includes the integration of non-lexical

lengthened filled pauses of 'umm' and 'urr' variety with in English words and phrases. Participants incorporated these FP's in English compound words, such as combination of adjective-noun or other two and more than two words combination. Instances of this pattern were recorded 20 times; they were distinguishable from the FP's that occurred between the two codes (Pashto and English) in inter-sentential CS. Examples of each category and sub-category are given below.

(19) Da makhkeni clerk *work* **erm** *experience* ti ham kam wo.

(20) Da yaqeenan der *hectic* **urm** *routine* ye bia.

4.6 Parenthetical Remarks

The boundary between the different types of FP's and proper content words of Pashto, occurring typically along with CS utterances, was sometime difficult to draw. The occurrence of such Pashto words accompanying English words can loosely be categorized as parenthetical remarks. They make 8% of the total FP's of all sorts and mostly served the functions of specifying the switches to English, confirming the accuracy and appropriateness of CS utterance. Some subjects found switching code from Pashto to English and vice versa difficult, and used these parenthetical remarks to maintain the continuity in their speech. The following words were clearly identified as parenthetical remarks in subjects' speech.

Table 2: A List of Pashto Parenthetical Remarks

No.	Parenthetical Remarks	English Version
01	Kana	Or not
02	Chedai / Chekamdai	That is / The one that is
03	Laka /	Like / For example
04	Sa wartawai	What it is called

(21) Asal ki *competitive Exams* **che kam di**, da tol da *writing game* dai.

(22) Ma ve **laka**, *I dont want to kill my time***kana**.

4.7 Restarts

There were total 75 restarts (5 %) in switches to English, evident mainly for emphatic purpose by the subjects. They repeated English words and phrases to emphasise their point being made, or to attract their interlocutors' attention.

(23) Kho serf ***white*** aw ***red color***, serf *white* aw *red color rate* na ghurzy.

Based on these analyses, this study holds that the phenomenon of hesitation pauses found in Pashto while making switches to English would consist the different types of hesitation markers (by excluding SP's) in the below given proportions.

Table 3: Proportion of All Categories of Hesitations and Pauses

No.	Category	Percentage
01	Repeats	46
02	False starts	13
03	Pauses	13
04	Lengthening	12
05	Parenthetical remarks	08
06	Restarts	05
07	Reduplication	03

The above given table shows the hesitation phenomena proportionately- resulted by CS from Pashto to English. It illustrates that hesitation took various forms in subjects' communication; proportion of each form of hesitation was loosely identical in the speech of each participant of

this study. The largest ratio of repeats (46%) among all types of FP's is indicative of the fact that switches to English was harder and could not be accomplished in first attempt mostly. Eventually, it took double effort and time on the part of the participants. False starts and pauses came in equal proportion (13%); both collectively constitute 26% of all FP's. It is worth-mentioning that the difficulty in making switches to English was encountered by all participants; it manifested differently in the speech of the subjects- either by taking the form of pause or false start. Instances of incorporating hesitation with CS utterance by lengthening the syllables of English words or individual sounds (both consonants and vowels),, or Pashto words syllables followed or preceded by CS utterances constitute 12% of the total FP's in switches to English. Parenthetical remarks recorded in the data form 08% of the total FP's. It is important to note here that all the parenthetical remarks, either before, in middle or after switches to English, were in Pashto. Cases of restarts were occasioned seventy-five times (05%) - mainly for emphatic purposes, not necessarily as signs of difficulty in CS. The strategy of reduplication, though in very few cases (03%), was observed as subjects' tendency to nativise English words by treating them the way similar to Pashto words.

4.8 Grammatical Categorization of FP's in Pashto

Most of the FP's were consisted of Pashto referring expressions, deixes and demonstrative, and interrogative pronouns. Some FP's took the form of question tags. Interestingly, most of them were produced just as sign of hesitation, not for the role they usually perform in traditional sense in communication. It was found that Pashto deictic expressions like "da", "agha", "dagha", "de" etc, meaning this, that and it respectively, were produced as fillers, not for making references to directions and points in time. Similarly, tags like "kana", "tek da" and "humm" usually meant to elicit response or demand confirmation from listeners, were not uttered for the roles assigned to them. They were instead produced as hesitation pauses in CS.

5. Discussion and Conclusion

It can safely be argued on the basis of these findings that Pashto L1 speakers produced hesitation pauses and fillers while switching code from Pashto to English as signs of disfluency markers- since the ratio of the production of FP's accompanying CS utterances is considerably greater than the FP's in holding communication in Pashto without switching code to English. The FP's produced without switching code to English can be termed as fluency markers as a strategy to avoid disruption in communication. Subjects encountered difficulty only in selecting the appropriate words during switching code to English and thus produced FP's and hesitation pauses in their first attempt. It is worth-noticing that they had no such difficulty in selecting the position of English words at syntax level. The appropriate positions for English words were filled by FP's and replaced by the desired English words in their second or subsequent attempts. Pronouncing correctly the English words appeared another challenge before participants which is mostly accomplished by inserting FP's before, after or with in English words and phrases to eas themselves. Since English was a foreign language to all the participants, they were not very confident and thus willing to repeat English words once used by them. Consequently, hesitation pauses and fillers also performed the role of pronouns in order to avoid repetitions of English words once introduced into communication through CS i.e. subjects used FP's to refer to the English words previously mentioned. This replacement of English words by FP's as demonstrative pronouns also indicates that subjects found the use of FP's easier than repeating English words. The integration of FP's to English compound words hints the subjects' tendency to nativize English words in their communication. Investigating the pauses during CS caused by difficulty in pronouncing foreign words may yield significant results. In doing this, distinction

can be drawn between the nature and ratio of hesitation pauses produced during pronunciation of comparatively difficult English words, as well as, pauses occurring with easier English words. Moreover, producing FP's in switching code to English in the way similar to producing FP's in communicating throughout in Pashto without switching code can be treated as indicators of subjects' strategic competence in imbedding English words into Pashto.

As all the participants had roughly the same linguistic proficiency, they were cognisant of the difficulty they confront in getting English words if introduced suddenly to them. Therefore, the study holds that hesitation pauses produced during CS in communication are in some measure the result of the anticipation on speaker's part of being unintelligible by the interlocutors. Therefore, hesitation pauses are partly the result of the attempt to avoid confusion and to facilitate not only the speakers but also the listeners. Yet, identifying each type of hesitation pause with obvious purpose is subject to further research.

By adopting the similar approach, measuring the silent pauses (SP's) and their comparative analysis produced during communication with CS utterance, and without CS utterance may further explore the nature of hesitation phenomenon in CS.

There is also a good deal of shared implicit knowledge among the participants as evident from the use of fillers with no semantic value e.g. ‘dagha’, followed by no clarification or elaboration by the users (speakers). Though an apparent consensus was viewed among participants regarding the use of such fillers, there is possibility of relative mismatch between the meaning and intention of non-lexicalized fillers with mere phonetic value when comprehension of both the listeners and speakers are compared. Lastly, this study was exclusive of viewing the direct impact of social variables on the use of hesitation pauses. Investigating the correlation between the nature and frequency of hesitation pauses and linguistic and social factors e.g., factors affecting communication, and social traits of speakers such as age, gender, education etc, is a wide area open for future research.

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