



Code Switching in SMS Conversation: The Impact of Nonexistence of Physical and Geographic Setting in Texting

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ABSTRACT

The rapid changes and development of communication technologies have given birth to new forms, mediums, forums and genres. Code switching (CS) appears as a vital feature of communication held on these mediums as speakers don't find themselves restricted to a particular locality or code. The various modes of computer-mediated communication (CMC) have blurred the boundaries between spoken and written genres. This study is an attempt to investigate CS in the genre of SMS through Markedness Model. The study focusses the alternation of three codes in SMS genre and verbal communication of 50 university graduates: Pashto, Urdu and English. A corpus of 461 conversational text messages in pairs was obtained by maintaining its synchronicity, followed by 53 minutes audio-recorded talks of the same subjects. The impact of zero realization of the independent variable of communication (physical and geographic setting) was viewed on other dependent variables including interlocutors' background knowledge, topic and purpose. Findings show that the nonexistence of physical and geographic setting is a vital feature of SMS conversation that structures conversation in many ways resulting mainly into frequent switching of codes. The study concludes that the Markedness Model is inadequate to theorize CS in the genre of SMS. Finally, the study hints that other newly developed genres of CMC can be investigated with central focus on CS by future research into this area.

INTRODUCTION

The global tendencies have resulted in making most of the communities in the world as 'multilingual' including Pakistan. The linguistic repertoire of most of the Pakistanis include their native languages along with national and foreign language. According to Khan and Iqbal (2011),

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the sociolinguistic landscape is 'triglossic'. But the researchers have found traces that the linguistic varieties used for communication are not complementarily distributed. It thus fails the test of consistency when looked at parallel to the classical definition of diglossia (Ferguson, 1959). Multilingual's communication involves various linguistic choices that are shaped by vital social factors involving identity, level of education, social positions, ethnic identity, solidarity and interpersonal relationships. Several variables such as formality and status, social context, discussion's topic, interlocutor's influence, purpose drive communication. The functional aspect of language combined with scope of the topic and situation are also significant in shaping the process of communication (Holmes & Wilson, 2017).

In the context of SMS traffic, there has been a phenomenological increase in the country in the very recent past. The telecom sector has witnessed increased traffic that can be attributed to several reasons. The number of cell phone users has increased and also the competing cellular companies have been offering unrestricted SMS packages. The local market offers a variety of cell phones and packages that are affordable for people with low socio-economic profile. This has resulted in bringing the country's population among the leading nations depending on cellular communication (The Express Tribune, 2013). Besides, other aspects of SMS communication, the non-existence of physical and geographic setting appears as significant feature from linguistic perspective. This factor greatly encourages SMS users to mix codes confidently and frequently.

In a multilingual society like Pakistan, 'Code switching' (CS hereinafter) emerges as a convenient option for users to switch from one variety or language to another. The option becomes even more desirable when the default language of the cellular phones is English and the national and local languages exist at the peripheries. Thus, compulsion and desire mix to induce users to switch codes at a greater frequency. As rightly pointed out in the existing literature, code switching in conversation would involve the simultaneous use of more than one variety (Fishman, 1972; Hudson, 1996; Trudgill & Trudgill, 1974), but when looked at from the perspective of researchers, studies have been rare in the domain of interactive discourse. The literature reveals that most of the researchers have focused written genres of advertisements, newspapers and magazines e.g. (Rasul, 2009). This has been one reason of conducting this study to examine interactive discourse and to add literature. On yet another level, the review of literature identifies a bulk of recorded audio data for examining the dynamics of CS and very few have attended to email conversation, twitter, Facebook, SMS language, and other forms of social media (Aslam, Ahmad & Sajid, 2011; Hussain, 2013).

The fast changes and development of communication technologies have given birth to new forms, mediums, forums and genres. Code switching (CS) appears as a vital feature of communication held on these mediums as speakers don't find themselves restricted to a particular locality or code. The various modes of computer-mediated communication (CMC) have blurred the boundaries between spoken and written genres (Hård Segerstad, 2005). Bridging the distinction between written and spoken language in terms of mode, interactivity, synchronicity, sequentiality and permanence, SMS genre is termed as "written speech" or "spoken writing" (Baron, 2002). Nonetheless, theorizing multilingualism or CS in the genre of SMS through application of models of CS, mostly dealing with spoken communication, poses some serious problems for researchers. The researchers have attempted to investigate CS in the

genre of SMS, as compared to verbal conversation, through the application of the widely used Markedness Model (Myers-Scotton, 1998). As evident, it tackles the problem of the nonexistence of a fundamental factor of physical and geographic setting in SMS communication by exploring its impact on shaping SMS conversation in general, and on switching codes in particular. The approach of the researchers is qualitative wherein the study takes into account the alternation of three codes in SMS and verbal communication of 50 university graduates: Pashto, Urdu and English. A corpus of 461 conversational text messages in pairs was obtained by maintaining its synchronicity, followed by 53 minutes audio-recorded talks of the same subjects. The framework for the analysis of data was derived from Markedness Model of CS. The significance of zero realization of the independent variable of communication (physical and geographic setting) was viewed in terms of its impact on other dependent variables of communication e.g. interlocutors' background knowledge, topic and purpose etc. The Findings reveal that the nonexistence of physical and geographic setting is a vital feature of SMS conversation that structures conversation in many ways resulting mainly, among other things, into frequent switching of codes. The Markedness Model appears inadequate to theorize CS in the genre of SMS- unlike verbal conversation. The study thus stands as a pioneering contribution in theorizing CS within the Markedness Model in the genre of SMS conversation. The study also contains robust information about understanding the structural features of SMS genre and strategies adopted by texters to account for the nonexistence of physical and geographic setting, different from their verbal conversation.

In other words, the study at hand analyzes the impact of the non-existence of physical and geographic setting in SMS communication of 50 Pashto native speakers in comparison to their verbal communication. The various models and theories of CS in spoken genres can be of limited value to written communication. The fact remains, that SMS conversation exists in written medium but has also similarities with spoken that would challenge researchers in a variety of ways. Several researchers categorize SMS conversation in the genre of "written speech" or "spoken writing" (Baron, 2002, p. 248). In other words, SMS exists as mediator between written and spoken form and would not strictly fall in either of the two media. According to Sebba (2012, p. 5-9), the dimensions of mode (spoken or written), synchronicity, interactivity, permanence and sequentiality are relevant for categorizing written and spoken mixed-language genres. In this regard, text-messaging and online chat overlap when analyzed based on the features of oral conversation. On the other hand, email messages, printed magazines and periodical and other web forums share fewer (Sebba, 2012, p. 11). The study illustrates the inefficacy of the existing models of CS by taking the widely-used Markedness Model as a touchstone for showing the impact of the non-existence of physical and geographic setting.

Aims and Objectives

The study is set with the following stated objectives:

- To evaluate the adequacy of Markedness Model of CS when applied to texting in comparison to verbal communication
- To bring forth the impact of the non-existence of physical and geographic setting in texting on CS as opposed to verbal communication within the framework of Markedness Model

LITERATURE REVIEW

Researchers generally have drawn extensively on the available theories of spoken CS in theorizing multilingualism. Several studies including Gumperz, 1982; Hymes & Gumperz, 1972 are the pioneers and classic attempts in this respect. When looked at from the vantage point of 1940s and 1950s, CS, for many was a sub-standard use of language. But in the 1980s, the view changed in favor of terming it a natural consequence of bilingualism and multilingualism. On its own, code switching consists of several sub-categories and it exists at inter-sentential and intra-sentential levels. It is also described as intra-word vs tag switching. Ghosh et al. (2016) are of the view that it is also possible to determine if code switching is related to competence or to an act of group identity. Several studies have been undertaken to explore and investigate these aspects. These diverse aspects have drawn the attention of researchers including Auer (1984) Gafaranga and Torras (2002) and Muysken and Muysken (2000).

With the advent of cellular technology in general and text messaging in particular, communication has expanded in its manner and mode. This has attracted the attention of researchers and has appealed to sociolinguists. Its investigation in the context of language and gender has also been frequent in the last three decades. Defined by spatial limitations, text messaging is regarded by many as a third species of communication (Yeh, 2004, pp. 31-32). 'Netspeak' is the term used by Crystal (2004) for computer-mediated communication (CMC). He is of the view that although written as it is, CMC is drawn towards the direction of speech. It contains features of both speech and writing but cannot be strictly categorized either way and therefore it needs to be treated as a third medium in addition to the two.

A close look at communication through SMS reveals that it shares many similarities to CMC. It has also linguistic characteristics which are specific and specialized which contribute to its differentiated outlook from other written language varieties. They include but are not limited to lexical, syntactic, graphical and typographical features. Likewise, SMS communication may be closer to speech if looked at from the perspective of trending hybridization of written-spoken forms. SMS is also viewed as a discrete variety of written language in a bilingual context (Hussain, 2013). Some researchers recognize SMS as a situational variety of written language (Baron, 2002; Bodo, 2009; Crystal, 2004).

The frequent use of SMS for conveying information has several reasons. For instance, a majority of people opt for SMS as it is quick, short and smart (Barkhuus, 2005). It also costs less in terms of time and money (Mante & Pires, 2002). This economy of time, money and space makes it ideal for mobile users (Balakrishnan & Yeow, 2008; Hård Segerstad, 2005). Also, text messaging has an added advantage of conveying the message without disturbing the privacy, convenience and affordability of the respondents. In other words, voice or video call would require the recipient to attend the call instantly at the cost of compromising his/her own privacy and engagements while text messaging does not necessarily involve instant attention and can be replied to when convenient. Similarly, text survives in the cell phone of the recipient and can be accessed when desired. Likewise, text messaging becomes advantageous if a message is to be delivered without being heard by the people around that add to its feature of relative privacy in conversation.

(Bodomo, 2009).

Having established SMS or text messaging as viable, code switching increases its utility and facilitate senders and receivers. Although monolinguals may not be obstructed in the use of texting but the linguistic resources of bilingual and multilingual speakers are greater and they practice code switching to make their messages more effective, flexible and easy for the recipients. Language studies reveal that language users would prefer translation or discard it in particular situations depending upon the understanding and background of the recipients. They also decide when to borrow or to switch from one variety to another. Bilingual societies where English is the second or foreign language reveal the frequent use of English borrowings and switching code to English. One reason for this practice would be the expanded vocabulary and the exposure to English to advanced technological terms that users would miss in other languages (Hussain, 2013). The dominance of any variety would also have bearing upon the life-style, inclinations and tendencies among users. Local vernacular use is frequent among the less privileged and more isolated people while English and other advanced second or foreign languages are frequent among the educated. However, it is not desirable to draw a clear line as a mix of the two is an option the exercise of which may be at the discretion of the texter. It is noted that increased incidence of code switching, and the open use of abbreviations affords the messengers a chance to express and assert identities in new and novel ways. McIntosh (2010) holds that the insertion of the vernacular to mediate identities using technology has made the medium democratic and inclusive too.

METHODOLOGY AND THEORETICAL FRAMEWORK

The study is based on the data generated from graduates studying in 5 different universities. The sample size for the purpose consisted of 50 people and their selection had been subject to ‘Social Networking’ sampling technique. The criteria for their selection was based on several levels. First, they belonged to Pashtun ethnic groups that dominates most parts of the province of Khyber Pakhtunkhwa Pakistan. They shared Pashtu as their native language alongside their national language, Urdu and English being an official medium of communication and also medium of instruction at university level. In addition, their inclusion was also based on sharing the commonality of being permanent residents of Malakand which is a collection of 7 districts towards the north of the province. All of them were regular users of cellular phones and used to send and receive messages frequently. To make the study gender-representative, as many as 20 female graduates were included in the study beside the 30 male ones. Striking a balance between the two was challenging due to the overall gender-segregated outlook of the target community.

The findings of the study were based on two sets of primary data, the naturally occurring interactive conversation in pairs, and their audio-recorded conversation. A corpus of 42 communication chunks, consisting on 461 text messages, was obtained with due care to ensure the originality and synchronicity of the conversation by distinguishing the sent and received messages exchanged through the gadget of cellular mobile phones. To note, the participants had no prior information, nor had the researchers disclosed the objectives of the study. This was done only to allow them a free flowing experience of communication in a natural setting. Any hint would have made them conscious and liable to social desirability bias in their communication or code switching. Their total text messages formed 30,600 words; roughly the same number of

words was taken from their verbal conversation (53 minutes) to counterbalance the quantity of the two corpora. Text messages and chunks of audio-recorded conversation were collected upon the consensus of all the participants in pair conversation with his or her counterpart and group discussion later on. The selected data were restricted to interaction between and among the participants. Therefore, chunks including circulars, quotations, news, forwarded messages and jokes were discarded. The transcribed text messages and audio data were analyzed to reach at the desired results. Using the Markedness Model, both corpora were scanned for instances of CS and other factors of communication.

While theorizing CS, MLF or Matrix Language Frame guides the approach of MM or Markedness Model. In MLF, code switching involves Matrix language which dominates the process and determines morphosyntactic structures too. Other language(s) would be identified as less active or detrimental to structural aspects and would be classes as embedded language(s). Markedness model encompasses rational choices available to the speakers regarding their rights and obligations in relation to the code they use. This phenomenon can be extended to other forms of written culture which have similarities toward their nature as interactive or conversation like including online chat or text messages. The rights and obligation (RO) set is a central theoretical construct used in the Markedness Model to measure the markedness of codes in a specific conversational setting in a community. There are factors that can be predicted as the same in communities in establishing the unmarked RO set in many interactional settings. These factors include age, occupation, sex, ethnic identity and socio-economic group (Myers-Scotton, 2005, pp. 79-80). This ability, however, is nurtured on the basis of membership of a community and the social experiences and interactions involved which in turn help accomplish two things. It is revealed that choices follow a multidimensional continuum from marked to unmarked and secondly, there is a realization that reception of the two will vary based on the discourse type generated. However, it necessitates exposure of the users in real life conversation to marked and unmarked codes. Such exposure would pave way for setting parameters and to analyze choices for their marked and unmarked nature (Myers-Scotton, 1998).

Language varieties have code choices which are regulated by social and psychological associations, and they provide basis for their analysis as marked or otherwise guided by the societal expectations. Thus, marked codes would imply that they are not expected in a social context while unmarked ones would match expectations (Myers-Scotton, 1995). At quantitative level, marked type would be less frequent while the unmarked would be more frequent in a given language variety (Myers-Scotton, 2002). The four types of CS in this model are in complimentary distribution. They are namely: (1) CS as the unmarked choice, (2) CS as a marked choice, (3) CS as a sequence of unmarked choices, and (4) CS as an exploratory choice. The virtuosity and deference maxims come as two more choices; they are auxiliary to the unmarked type (Myers-Scotton, 1992, p. 114). Finally, the Markedness Model identified seven functions of CS, namely: clarification, expansion, translation, humor, reprimand, expression of social status and identity.

ANALYSIS AND DISCUSSION

The analysis of the data revealed that the SMS conversation of the respondents was characterized by frequent code switching as compared to their verbal communication. As many as 15 chunks, ranging from 4 to 18 messages, of conversation were noted for the tendency of CS between English and Pashto. Text messages marked by English-Pashto were total 180 in number. In comparison, CS among the three languages was noted in 8 instances of varying length consisting of 87 messages. There were 3 chunks of 27 messages in which the code had been switched between Urdu and Pashto. More importantly, in none of the instance's participants held conversation using single code.

Participants' verbal communication was different both in terms of quality and quantity in terms of CS. In 11 communication chunks involving 32 respondents, the use of Urdu was almost negligible. English-Pashto CS, mostly of intersentential nature was found in 53 instances out of 90 in audio-recording of 103 minutes. The following two examples, first from texting and second from verbal communication, are cited for illustration.

Note: In the following examples, English words are written in regular text, Pashto words are shown bold and Urdu words are italicized, followed by English translation in regular text in the next line.

- [1] Hi! Sanga chal dai? kuch pata chala? what is the problem?
 Hi? How is the matter? Is anything found? What is the problem?
 [2] Da paki I think na dai pakar.
 I think it is not required.

The frequent use of three codes with varying patterns in texting can be assigned to the nature of SMS communication. Participants enjoyed greater liberty in using the code of their choice. Other studies have shown that the effect of shyness is minimum in texting (Barkhuus, 2005). Thus, participants used the combination of codes with confidence and were not bothered by issues of pronunciation. Moreover, awkward orthography was tolerated in texting and not taken care of, except in very formal text message.

- [3] Plz (=please) pa uni (=university) ki esar shy lg.
 Please stay for a while in the university.
 [4] Ch msg (=message) na dai rcv (=receive) shve nu rep (=reply) sanga ukam?
 How can I reply when the message is not received?
 [5] Bs dnt (=don't) wt (=wait), kafi late sho.
 Don't wait anymore, it's too late.

These findings are significant because the complimentary distribution of ML and IL in MLF Model appears inadequate here. According to MLF Model, the ML is the code that is used customarily in a greater quantity by the participants in conversation. Elements of other codes are imbedded in ML and are termed as IL (Imbedded language). Findings of this study reveal that neither of the codes, in texting can be assigned the status of ML. The second criterion of determining ML and IL is also not workable in texting. According to this criterion, ML provides

majority of the functional morphemes and markers of inflections. The above examples also illustrate the fact that CS mostly took the form of intra-sentential sort or occurred at phrase and clause level. Thus, each instance of CS in texting stood independently in single code with its own functional morphemes and didn't require functional morphemes of other codes.

Theorizing CS with respect to physical context and situation was also immaterial in texting. The classification of CS into either situational or metaphorical (Gumperz, 1982), or marked, unmarked and sequential unmarked in Markedness Model was found faulty. This is mainly because interlocutors in texting were not directly affected by physical setting and context while exchanging text messages. SMS conversation of participants was characterized by independence of interruptions and disruptions, contrary to their verbal conversation which was marked by frequent interruptions by other participants present in the setting and the phenomenon of turn-taking. The researchers observed the fact that physical setting and environment may shape the process of texting, not the product.

Talking about the Markedness Model as the main focus here, the RO set accounting for the Markedness of each code was different in SMS conversation due to the non-existence of physical and geographic setting. It included only relationship between interlocutors, topic, mood, purpose and tone of communication. It was therefore hard to strictly determine the markedness of codes and term a particular code as marked, unmarked and sequential unmarked due to the nonexistence of physical and geographic setting in SMS conversation.

The same factor of the nonexistence of physical setting in SMS communication further limited the classification of CS using the Markedness Model. It is exclusive of the other two types of CS i.e. virtuosity and exploratory CS. Text messaging went on between two participants (A and B), it did not allow for directly accommodating other participants(s) in communication. Accordingly, no virtuosity was found in participants' SMS communication. On the contrary, virtuosity was found in their verbal communication in several instances in which participants had switched codes to accommodate other speakers present in the immediate environment of communication. Similarly, no instance of exploratory CS was found because of the relationship among participants as friends, cousins, classmates, roommates and villagers. It was due to the reason that acquaintance with interlocutors was a prerequisite for holding SMS communication. Initiating conversation did not need knowing the linguistic proficiency of the person participating in SMS conversation. However, exploratory type of CS was also not found in verbal conversation due to the same degree of acquaintance among participants.

CONCLUSION

Apart from the frequent mixture of the three codes as an impact of the non-existence of physical setting, the RO set in SMS genre is differently established and mainly accounts for: age, social traits, education, cultural background, topic and function of conversation. CS in SMS communication is not directly shaped by factors: physical or environmental context, available time, accommodating other participants, direct intervention, turn-taking, distracters, and need for relative mastery over spoken fluency while switching codes. The Markedness Model is helpful to

the degree of understanding the differences between the nature, pattern, types, functions and factors involved in CS in SMS conversation as compared to the verbal one. Yet, it falls short of theorizing CS in SMS conversation due to its transient nature. Defining ML and IL among the three languages involved, categorizing types of CS and determining the markedness of codes are difficult to analyze due to the absence of physical setting in SMS communication. CS appeared as a dominant feature of SMS conversation wherein texter adhered to uniformity in that newly developed variety of SMS genre independent of physical or environmental context. The non-existence of physical and geographic setting is further significant from other aspects of SMS conversation. For instance, it is characterized by features like: the abandonment of colloquial and local linguistic forms, different in terms of pronunciation, grammar and vocabulary; tackling more than one topic parallel and simultaneously.

Investigating these aspects as shaped by the non-existence of physical and geographic setting in SMS genre are subject to further research in this direction. Determining the utility of other models of CS in researching these corpora is a wide area for future research. Moreover, other genres of CMC that have emerged recently are worth-considering for future research with central focus on the virtual context and amount, nature and pattern of CS.

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