

Phonological Factors in Short Message Service (SMS) of Telugu Native Speakers: A Pilot Study

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Abstract

Short Message Service (SMS) is a transmission of short text messages to and from mobile phones, handheld devices, fax machines, landline telephones or IP addresses. SMS has become an integral part of everyday communication in many countries today. Within the emerging field of new media sociolinguistics, SMS language is viewed as a resource for endless creativity, reflexive practice, social intervention, resistance, and play. SMS language is characterized by abbreviations and acronyms and reflects a collective identity function because these adaptations require a special shared knowledge to understand the language and use it later. Text-messaging in bi/multilingual settings exhibit an additional feature of code mixing. In the context of India, a vast majority of college students use texting on their mobile phones. Since most of them have restricted competence in using English, it would be interesting to see how they communicate using SMS language. This paper reports outcome of analysis of 360 text messages in English and Telugu languages exchanged by ten college students who are native speakers of Telugu. Details of the type of phonological level adaptations (e.g. vowel deletions, consonants deletions, geminate dropping, and punctuation errors etc., in English only messages and in code-mixed items) will be discussed in this paper along with implication of the results for language use practices in informal communication in a multilingual set-up.

Keywords: Telugu Native Speakers, SMS texts, Phonological factors, Linguistic adaptations

Introduction & Background

Short message service (SMS), first introduced commercially in 1995 refers to the transmission of short text messages between mobile phone users by typing messages on a keyboard then sending them. Today SMS has emerged as one of the major digital communication media, with an estimation of over one billion messages exchanged per day around the world” (Bomodo, 2010). Each short message can be up to 160 characters in length when English alphabets are used. Text messages are created on the touch screen or a small keypad of the mobile phone and read as text on the screen of the phone.

The terms ‘text messaging’ or just ‘texting’ refers to the brief typed messages sent using the Short Message Service (SMS) of mobile/cell phones, Personal Digital Assistants (PDAs), smart phones or web browsers (Thurlow and Poff, 2011). SMS communication allows for a reasonable use of short forms at syntactic and lexical levels which save character space as compared with using the full forms of words. Text messaging was broadly defined as asynchronous text based technological mediated discourse (Baron, 2005) that pursues simple sentences structure for communication.

Some previous studies dealing with syntactic and phonological aspects SMS are revived. Ong’onda, Matu, and Oloo (2011) reported a study on Syntactic Aspects in Text Messaging. In this study they focused online interactive media and text messaging. In order to determine how text messaging has resulted in a paradigm shift in the traditional uses of language, the authors also mainly focused on the syntactic characteristics of Kenyan text messages. The discussion in this study drew on Coupland’s Sociolinguistic theory because syntactic aspects of text messages are influenced by social factors. This theory not only aroused intense discussion within the paradigm on the nature of the discourse of Short Message Service but also steered the subsequent research theoretically and methodologically. The authors collected data from 40 University/college students who made up the primary group utilizing text messages through a questionnaire. The goal was to collect text messages that would reflect language (syntactic) variation in SMS. A total of 160 messages were collected and analyzed. It was observed that new syntactic structures have permeated into the linguistic continuum of Kenyan texters. Most of the texts were SMS based on sentence and word modifications. The messages were often compressed through omissions, abbreviations and contractions. It was also realized that SMS language is influenced by the constraints of the equipment itself.

Kul (2013) reported a study that dealt with the topic of phonology in text messages. In order to investigate the nature of letter deletions in text messages, Kul studied text messages from two angles; 1) Deleted items, 2) Retained elements. For e.g. Talking Vs Tlkin. Two parameters were considered by him; i) global and ii) local. The global one considered the word class, whereas the local one was divided into the position of consonants in words, and lexical stress assignment

for vowels. This study was based on 50 text messages. Drawing on his earlier study (Kul 2007), the author reported the following: Of the 96 words in 10 messages, 54 word tokens underwent reductions or letter deletions. (1) 58.3% of the words from the corpus are reduced e.g. knw / know, lv / love.

1. Words look as ‘man’, ‘one’, and ‘in’ were not reduced.
- 2) It was noted that while 59 vowels were deleted only 21 consonants got deleted.
- 3) A majority of the deleted vowels belonged to monosyllabic words in structured position. (e.g. frm/from).
- 4) All consonants regardless, of the position on a word, were retained about 11% of the time e.g. yaself/you(r)self.

Based on these results, the author concluded that phonology does affect the pattern of deletions in text messages. He also noted that vowels are deleted in structured position. Reductions in text messages seem to appear in lexical words rather than fraction words.

Some previous studies dealing with Code-switching and Code-mixing aspects of SMS are revived. Rabbani, R., Mushtaq, M (2012) reported a study on Gender Difference in Code-Switching and Code-Mixing in text Messages of undergraduate students from one of the University in Pakistan. The authors examined the frequency of code-switching and code-mixing used as the theories as a tool of analysis, and they examined in two variables, like male and female.

The authors collected data randomly, but they selected 21 males and 21 females, and their age range was 19-22 years. These messages analyzed by finding difference between the SMS’s sent by the male and female of the undergraduate students. The respondents those people from different cultures and speaking different languages interacting with each other. Language is not just a means of expressing or conveying meaning; it also offers a look into the culture of the speakers.

The main aim and objectives of the study insights gender differences are those that society associates with men and women were not necessary the outcomes of biological factors. The objective of the study is to ensure the frequency of code-switching and code-mixing between Urdu and English language among male and female undergraduate students in text messages or SMS. The study suggests that differences between male and female in several areas such as verbal ability, cognitive, aggression, helped support, emotions, and communication.

In this study the authors hypothesis is, these was a high frequency of code-switching and code-mixing between Urdu and English languages both among male and female students. Female students do more code-switching and code-mixing than male students in text messages. The methodology used as a scoring method. The data was collected from the students of Foundation University, the respondents were asked to forward three SMS each from their inbox to the researcher's cell phone. They were also told that the messages should not forwarded/pretyped messages.

The Code switching and code mixing between Urdu and English languages frequently takes place in SMS messages among university students. The code switching scores of the sample were, almost, normally distributed which means that boys and girls did not diverge in code switching scores. There is no difference between code mixing scores of boys and girls. This means that the second hypothesis was rejected.

Finally, the advent of new modes of communication like SMS over the past two decades has resulted in increased indulgence in code-switching and code mixing throughout Pakistan which also suggests that extensive code-switching and code mixing may lead to entirely novel linguistic varieties.

Objectives of the Present Study

In this paper the use and adaptation of written language to suit the conditions of text messaging via mobile phones – SMS (Short Message Service) – are analyzed with respect to Telugu and English. The main focus of the study is on phonological factors that influence written language in these circumstances;

Research Questions

1. What phonological factors have impact on SMS messages in Telugu and English?
2. Do Telugu speakers tend to use English extensively when sending SMS?
3. What is the nature of code switching patterns in SMS?

Methodology

SMS Texting is particularly popular among university students. The Language Use and Mobile Phone Questionnaire were prepared and administered to the informants. All the 10 respondents for the study were selected from undergraduate students from Osmania University. It was designed to gather information about the students SMS usage.

1. SMS comprehension task. (20 items 75% citation used to select the participant)
2. Language Use Questionnaire
3. Mobile Phone Use Questionnaire

Data Collection and Analysis

The database consists of 360 messages sent by 10 respondents. Each participant was asked to share SMS texts they sent for one week period from the data of interview. They provided details about language use in a questionnaire. I have analyzed them using mobile app, a software of Android Phone (App name is SMS Backup & Restore).

Results

The overall results are summarized in Table -1 below:

S.NO.	English Messages	Telugu Messages	English +Telugu Messages	Total No of Messages in the Study
1	100	160	100	360

Table -1: Type of SMS texts noted in this study

It can be seen that although all the participants are native speakers of Telugu, they mixed Telugu and English in their SMS texts. The deletions were confined mostly to English and not to Telugu.

Examples of Telugu SMS adaptations are listed in Table -2 below:

1) Vowel Deletions/Duration

S.No	Telugu SMS Text	Intended Telugu SMS text in Phonemic Transcriptions	Vowel deletions	Gloss
1	Avnu	a.wu.nu	[u] vowel deleted	Yes.
2	Nti	en.Ti	[e] vowel deleted	What?
3	Unnv	u.nnaa.wa ?	[a]vowel deleted/duration	Are you there?
4	Ikkadki	i.kka.Di.ki	[i] vowel deleted	Here
5	Epudostav	e.ppu.Doo.staa.wu	[o] vowel duration	When will you come?

2) Consonant Adaptations

i. Geminate deletions

S.No	Telugu SMS Text	Intended Telugu SMS text in Phonemic Transcriptions	Consonant deletions	Gloss
1	cheyi	ce.yyii	[y] Geminate dropped	do
2	Nv	nu.wwu	[w] consonant substituted and geminate deletion	you
3	Anav	a.nnaa.wu	[n] Geminate dropping	said
4	Vastunav	wa.stu.nnaa.wu	[n] Geminate dropping	coming
5	vochadu	wa.ccaa.Du	[c] Geminate dropping	came

Table – 3.

3) Syllable Adaptations

S. No	Telugu SMS Text	Intended Telugu SMS text in Phonemic Transcriptions	Syllable adaptations	Gloss
1	nen C1VC1	Nee.nu C1VVC1V	Two syllable word made into single syllable	I
2	avnu VC1C2V	a.wu.nu VC1VC2V	Three syllable word made into disyllable	Yes
3	telsa C1VC2C3V	te.lu.saa C1VC2VC3VV	Three syllable word made into disyllable	know
4	adgind VC1C2VC3C4	a.Di.gin.di VC1VC2VC3C4V	Four syllable word made into three syllable	asked
5	rep C1VC2	ree.pu C1VVC2V	Two syllable word made into mono syllable	tomorrow

Table-4: Examples of Telugu SMS in the present study

I observed the above phonological factors on SMS from Telugu native speakers of Telangana who are all undergraduate students of professional colleges. The observation, such as,

1. Vowel deletions/duration: when they are using SMS text, many of the participant deleting the vowel letter and they are not mentioning the vowel duration. I have given more examples in the table -2 also.

Ex: avnu for a.wu.nu [u] vowel deletion

2. Consonant adaptations (Geminate deletions): SMS users when they typing texts on the screen they are ignoring the typing geminating letters, but the receivers are able to understand what their intention in the text.

Ex: anav for a.nnaa.wu [n] Geminate dropping

3. Syllable adaptations: instead of using two syllable the SMS users typing only one syllabic word.

Ex: nen for nee.nu

Rep for ree.pu

Nta for en.ta etc.

The SMS messages involving code switching and code mixing are discussed below:

S. No	Code-Mixed SMS Texts (English & Telugu)	Intended word of Eng. & Tel. SMS Text in Phonemic transcription	Translated in English
1	PH matram cheyaku	phon.ma.tram.ce.ya.ku?	Don't make a phone call
2	TV chustunanu	TV. cu.stu.nnaa.nu.	I am watching on Television
3	chala thanx	caa.laa.tyanx!	very much thank you
4	Wht cheppu?	waat.cep.pu?	Tell me what?
5	cal Cheyi	kaal.cee.yyii.	Make a Call
6	rum ki ra	ruum.ki.raa	You come to the room
7	gudn8 beta	Gud.nyt.be.Taa	Good night my dear son
8	Balnc Ledu	Ba.len.su.lee.du	No Balance
9	Clas lo unna	Kla.su.lo.unnaa.	I am in class

Table-5: Examples of code-mixing and code-switching in English and Telugu SMS in the present study.

Finally, some comments about punctuation in the SMS texts.

The SMS texters while using the SMS text in English or Telugu, they are not focusing the on the punctuations, Eg. Cal---Call, gudn8---Good night, 5n—fine and also using numbers in the words' phonological aspects, we can observe above example.

Comments on the Phonological Adaptations

In order to determine the extent of the phonological information in the orthographic form, the full, reconstructed representation was compared with to the text message version. The data

shown in the table also illustrate the fact that vowels are more likely to be deleted: more than twice as many vowels have been deleted in comparison to consonants.

Table-6. Proportion of Deleted English Vowels to Consonants

S. No	SMS Word	Deleted Vowel(s)	Deleted Consonant(s)	English Word
1	PH	O E	N	Phone
2	TV	E E I I O	L S N	Television
3	Thanx	-----	Added - -X Deleted-- ks	T h a n ks
4	Wht	A	-----	what
5	Cal	-----	L	call
6	Gudn8	O O I	G H T	Good night
7	clas	-----	S	class
8	Lv	O E	-----	love
9	Hrt	H U	-----	hurt
10	frm	O	-----	from

The above table-5 showed the deleted vowels and consonants which are bold in capital letters from the data.

In polysyllabic words, were employed and consequently, the vowels are numbered as: Vowel 1 if it was the vowel of first syllable, Vowel 2 if it was the vowel of the second syllable and Vowel 3 if it was the vowel of the third syllable. The numbers are calculated against the total number of the deleted vowels in the data. One can see that deleted vowels in monosyllabic words constitute as much as 20 of the deleted vowels (lv-love, hrt-hurt, frm-from).

Discussion and Conclusion

The study aimed at preliminary analysis of the linguistic properties in text messages. Therefore, the results offer a tentative explanation of the influence of phonology on the medium. First, the results show that phonology apparently affects the pattern of deletions in text messages. The semiotic figure-and-ground principle (Dressler 1996) is in force since consonants are likely to be preserved and vowels are likely to be deleted, whereas final consonants in unstressed position are likely to be preserved. Text messages appear to reduce lexical words rather than function words, contrary to Prediction. Further research could take up the problems which were not addressed by the present study. First, a larger corpus would allow gaining a further insight into the

nature of deletions. Since the results of this study are based on a small sample size, certain caution should be taken when making any generalized conclusions. Therefore, the described analysis will be expanded to a bigger database. Beside more detailed further work on the issue of deletions may take into consideration gathering of data from other languages. phonology, and the issue of silent letters carrying the functional load calls for more research as the texter must make a decision which letter should be deleted. Finally, the constraints on deletions (how much, which classes of sounds) will constitute another angle from which deletions in text messages can be viewed.

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