Register Analysis of Iranian Students' Text Messages

Mahmood Maniati

Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

Amir Mashhadi

Department of English Language and Literature, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Saeed Khazaie[1]

Department of English Language, School of Management and Medical Information Sciences, Isfahan University of Medical Sciences, Isfahan, Iran

Abstract

The majority of mobile phone subscribers are able to receive both alphanumeric text and emoji signs through Short Messaging Service (SMS) transmissions, among other functions of mobile phones. The discourse of the SMS texts represents a kind of interaction, for the most part on the boundary between verbal and visual communication. Adopting Halliday's Socio-semiotic Model of Language, this study considered three register variables of filed, mode, and tenor in a text message corpus comprising 2440 SMS messages collected from 122 students at *Ahvaz Jundishapur University of Medical Sciences* to investigate how the discourse of SMS is affected by the sociolinguistic dimensions of the context of language use. To that end, SMS texts were analyzed and categorized in term of the social interaction that constituted the content of messages. The findings revealed that mobile text messaging is an asynchronous mode of communication which is characterized with particular register variables, and there are also pragmatic reasons in addition to the technical restrictions for the creation of this register and its users actively and selectively draw on the resources of spoken and written discourses in constructing the message.

Keywords: Corpus, SMS, Register analysis, Socio-semiotic Model of Language

---

[1] Corresponding author: saeed.khazaie@mng.mui.ac.ir

1. Introduction

Written and spoken discourses have been conventionally referred to as two basic forms of communication. However, with the emergence of novel communication technologies such as Short Messaging Service (SMS), Internet Relay Chat (IRC), Multiple Users Domains (MUD), the World Wide Web (WWW) and other Computer-Mediated Communication (CMC) systems the arrays of using the language have radically reconfigured, and the boundary between written and spoken discourses has become categorically blurred thanks to these digital technologies and their associated affordances. In Iran, it can now be apparently observed that the novel communication systems have progressively changed the possibilities of verbal interaction and have materially affected the way individuals communicate. Although exaggerations about the significance of technology in the lives of individuals may be dubious, the fact remains that, in many countries, the mobile phone is an altogether far more popular, widespread communication technology than other communication technologies. Like many earlier communication technologies, the mobile phone has now so penetrated in individuals' daily lives that it has brought about concerns about the nature and types of cultural, social and psychological effects it is likely to have. In view of that language and its context of use is no exception and seems to be affected by such revolutionary changes in the way individuals communicate via recent communication technologies. In effect, with the mobile phone technology becoming ubiquitous in Iran, the rise of questions about how individuals' use of language is changed by different communication functions provided by the technological variables seems rather reasonable.

The mobile phone, like any other social or cultural artifact, is indeed bound in the social context and the way individuals have come to use language in SMS is strongly attached with their social histories. The language

employed in text messaging has developed its own unique style as have email and chat-room languages before, and social networks are maintained through the use of the language. The components, characteristic features, and consequences of the use of text messaging are multifarious, and a variety of different disciplines are required in order to properly examine its complexity (Latif, Hussain, Saeed, Qureshi, & Maqsood, 2019).

The fact that only a miniature space is available to communicate has meant that the texter has to condense as much meaning as possible into a tiny message. This has leant to a skilled form of communication with arguably, almost as much expressiveness as verbal intercourse in the hands of the right person.

Along these lines, the discourse of SMS seems to be an underresearched line of inquiry that has not yet been thoroughly expounded in terms of different facets of social life. Introducing the college-level students' text messaging as a new register, this study endeavors to investigate this new register in terms of Halliday's *interpretation of language as a socio-semiotic structure*; that is to say, "interpreting language within a sociocultural context, in which the culture itself is interpreted in semiotic terms" (Halliday, 1987, p. 2).

2. Review of Literature
2.1 Iranian Youths' Use of Mobile Phones
During the recent few years the use of mobile phones has won a great popularity among Iranians. There are several reasons for the rapid spread of mobile telephony in Iran, including the marked reduction of fees for the subscription to mobile phone network after the emergence of nongovernmental service providers in Iran (Gooniband Shooshtari, Khazaie, & Mehrabi, 2013). In addition to the decrease of the subscription prices, these new operators provided their subscribers with novel mobile telephony

services and affordances such as GPRS and Multimedia Messaging Service (MMS) which were not already available for the Iranian users.

The next reason may be the great diffusion of the mobile devices which are mostly equipped by cameras, support and make available a high-speed transfer of different formats of video and audio files and finally contain exciting games serving as more legitimate alternative to personal digital devices such as MP3 players and cameras which serve only one single purpose (Jalilifar & Mashhadi, 2013).

The final reason, and the one this study endeavors to investigate, is the SMS service of mobile phones. It can arguably be claimed that no other mobile phone affordances has ever received so much attention among the teens as the SMS (Hilliard, Kear, Donelan, & Heaney, 2020). SMS is nowadays the most popular means of communication that was developed as a novelty item rather than as a serious option for mobile phone users, a way to send short written messages, cheaply from mobile phone to mobile phone but it has quickly become popular around the world. SMS or text messages have indeed provided adolescents with a novel form of interaction that they have adopted and shaped to their own purposes in different communicative situations (López-Rúa, 2007).

2.2 The Youths' Preference for SMS

Although the mobile phone has a variety of applications and affordances for the youths and can be used as an alarm clock, a directory, a telephone with an answering machine, a portable music player, a personal organizer, a game device or even an up-to-date accessory, no other mobile phone applications has received so much attention among them as the SMS. The question here is why this new medium of communication has become so widespread among the youths or *Digital Natives*, as Prensky (2001) defines, and what specific

socio-psychological impacts it will have on the maintenance of different social networks.

As with the reason why SMS has become so popular especially among *Digital Natives*, Ling (2005, p. 335) believes that "it is relatively cheap and it is personal, it is a direct message from one person to another". In addition to the factors mentioned by Ling, Hashimoto (2002, p. 107) attributes the young individuals' preference for messaging to psychological phenomenon that he calls self-defense. *Sending messages*, he claims avoids the possibility of circumstances that could give rise to psychological shock such as when the receiver does not answer even when they are expected to be able to answer". Ylva (2002, p. 195) claims that text messaging supports *quiet interaction* making useful in public situations where you do not want everyone to listen what you are communicating. Moreover, the language used in peer-to-peer text messages of digital natives serves as a social territory and an indicator of group membership among them. This language, or more technically speaking register, which involves an enormous use of jargons or newly manufactured word items and spellings, underpins group membership within a small peer group and also serves to exclude those who are not competent with it. Given any register involves several sociolinguistic dimensions, this study also attempts to introduce an understanding of these dimensions under a Hallidayian framework. However, before dealing with this issue at length, a brief overview is given on the nature of and the studies conducted so far on the linguistic features of SMS discourse.

2.3 The Linguistic Features of SMS and Studies Conducted So Far

There are many factors contributing to the unique, and sometimes troublesome, nature of the language used in SMS communication. First of all is the notorious 160-character-limit of each message that exerts a great pressure on the senders to condense as much meaning as possible into a tiny

message (Shudong & Higgins, 2005). It is noteworthy that such restriction cannot always be considered as a drawback because SMS communication is for the most part an interaction between people who know each other and this allows them to skip the ritual openings and off-topic talks which are mostly present in phone conversations. Likewise, such shortening mechanisms in SMS language as abbreviation, clipping and initialization together with a few symbols in texting can be exploited to compensate for the text input limitation of SMS when texting the longer messages (López-Rúa, 2007).

Another difficulty is the irritating text entry on a mobile phone's limited size keyboard which makes the typing a short message to be time-consuming. This has also been taken care of by the mobile device manufacturers with the introduction of predictive typing technologies which suggest the probable word items when you enter the initial letters of a certain word. However, Eldridge and Grinter (2001) found minimal support for predictive typing technologies. The teenagers' common use of abbreviations and shorthand writing made it indeed barely usable in practice.

The language of text messages have been examined by several researchers from different perspectives including the linguistic features (e.g., Akbari, 2013; Chaka, 2015; Döring, 2002; Eldridge & Grinter, 2001; Hashim, Soopar, & Hamid, 2017; Hussein, Hao, Yan, & Everson, 2013; Ling, 2005; Partey, Addo-Danquah, Bonku, & Sarfo-Adu, 2018; Pérez-Sabater, 2015; Tagg & Asprey, 2017; Thurlow & Poff, 2013; Yusuf, Natsir, & Yusra, 2016).

Akbari (2013) found that there are several characteristic features including punctuation, omissions, consonant writing, graphical means and symbols, contractions, letter repetitions, loanwords, and letter-number homophones. By the same token, Hussain (2013) investigated SMS linguistic adaptations in six major categories (viz., lexical, syntactic, punctuation, space, code, and script adaptations in text messages). He found in the study

that linguistic adaptations in text messages are mostly made under certain principles/patterns. From Hussain's view, most intentional adaptations in text messages are caused by three major factors that are to be economical in the use of time and effort, to be creative/innovative in developing new language patterns, and to be rapid in SMS communication.

So far, however, not many studies have comprehensively dealt with how SMS affects our use of language except for few studies (Eldridge & Grinter, 2001; Ling, 2005) which are mostly (except Ling's study) dedicated to the use of syntactic and lexical reductions and short forms in SMS discourse. These studies, however, have not considered how the sociolinguistic dimensions of the SMS context modify our use of language; that is, how the interpersonal relations between the participants are maintained, what is happening, namely, the nature of the social action that is taking place, and finally what it is that the participants are expecting language to do for them in that situation.

Döring (2002) investigated the use of acronyms and abbreviations in SMS communication. Her research provides interesting data and observations on exactly how widespread language short forms are in text messaging. Döring contends that the technical restriction of 160 characters per message both permits and forces individuals to express themselves concisely and has driven the growth of an even more shortened language than that which occurred in virtual contexts before (Döring, 2002). The type, frequencies, and functions of short forms in text messages were studied through a body of 1,000 authentic text messages and questionnaire data from 124 student mobile phone users. Her analysis showed that abbreviations and acronyms fulfill a collective identity function whereby it requires a special shared knowledge to be able to understand the language and consequently be able to use it. The adept use of these personalized language short forms is an indicator of group

affiliation and a component of group identity. The language specific to SMS users often does not relate to standard language, and the mass media thus label SMS communication as the secret code of the youth or as the big SMS action against long sentences (Döring, 2002). These writing-linguistic standards, according to Döring, offer an enriched experience of psychosocial nearness between a text author and a text reader. For instance, one may make oneself brief without fear of being perceived as short-spoken. Moreover, one has to be brief not to go beyond the scope of the limited number of characters per message, seeing as each message sent is relatively expensive. In the long run, one tends to make oneself brief because text input is so cumbersome. Finally, seeing as most SMS communication is interpersonal communication between individuals who know each other, one can be brief, relying on pragmatic and shared background knowledge. Features that are characteristic of spoken language, such as dialectal words, interjections, and prosody are verbalized and spelled out in SMS.

Another interesting study is the work of Ling (2005) who examines the sociolinguistic aspects of SMS. His analysis showed that only about 6% of the messages he had collected contained any form of abbreviations. The data showed that teen-aged and young adult SMS users are the biggest users of abbreviations and that there is a rapid decline of use with age. Female SMS users also use abbreviations and emoticons significantly more than males. In effect, slightly more than 20% of 13-15 year old females employed abbreviations in the SMS messages examined here. Only 3.5% of the females in the 35-44 years old group did the same.

Ling (2005) took one step further and included an analysis of the themes in the messages. He found beliefs that when studying the different categories one can find socio-demographically based dissimilarities. Males, for instance, are slightly more prone to using short one-word answers in their SMS

messages. When it comes to using SMS messages to plan activities, males are more likely to use them for planning activities in the middle future as are older teens and young adults. Females, however, are more likely to use SMS to make plans for the immediate future. Females, and to a less significant degree, teens and young adults, were more likely to send *grooming* SMS messages. Along the same lines, females were more likely to send emotionally based grooming messages.

As indicated earlier, SMS retains both written and spoken language characteristics. As Hughes (1996) states, speech and writing usually take place in very different contexts. Written language is more prescribed than spoken language: authors have the chance to edit the written word items. SMS users make different word choices when writing than when speaking, as Biber (1998, p. 112) states, research indicates that "all informational discourse has a high lexical variety in contrast to interactive, affective types of discourse". By studying language variations and uses, much of the conventions of text messaging language, a blurring of written and spoken discourse, can be better understood. SMS is indeed unique with regards to language selection, more like a written form of speech, as Biber (1998) explains, in terms of its linguistic characteristics, stereotypical speech is interactive, and dependent on shared space, time, and background knowledge; stereotypical writing has the opposite features. Text messages, however, tend to be more akin with the former. Koritti's (1999) work examines how *reactive tokens* such as yeah I know, an acknowledgement that one is following what the other is saying, is very widespread in Internet Relay Chat (IRC) language. This feature of IRC is very common with SMS language. It shows how SMS language conventions resemble speech in many of its characteristic features. Like normal speech, text messages are structurally simple, fragmented, concrete, and conditional on situation-

dependent reference. Many parts of spoken speech are similarly eliminated through the process of abbreviation (Rintel & Pittam, 1997).

2.4 Register Studies

Register analyses, or studies dedicated to the contextual variations of language use, date back to pioneers such as Malinowski (1923) and Firth (1935) who worked on the effect of contextual factors on language use. Malinowski notes that "a statement, spoken in real life, is never detached from the situation in which it has been uttered… the utterance has no meaning except in the context of situation" (1923, p. 307). It is of note that he also puts emphasis on the functions of language associated with the social life of a speech community and the relation between language use and action (for him the use of language depends on the course of activity). At last, he attaches great importance to the context of culture both on the level of language use and on the level of interpretation.

The context-of-situation concept was further elaborated by Firth, who studied meaning in terms of how language works in a context. He developed a series of variables which are always present in *the context of situation* with a view to a meaningful interaction; for example, the participants in a situation, the action taking place, and or the effect of that action. Firth also refers to the *restricted language*, "serving a circumscribed field of experience or action" and having "its own grammar and dictionary" (1957, p. 87). *Restricted languages* included such domains as *science, technology, politics, sport, so on*, or "a type of work associated with a single author or a type of speech with its appropriate style" (1968, p. 112). Each person is "in command of a constellation of restricted languages, but these are governed by the general language of the community" (1968, p. 207).

However, the term register was first suggested by Reid in 1956 with reference to the capacity of human language to adapt itself to different social

situations. The scholarly efforts of the researchers interested in this field resulted in different definitions and frameworks suggested by them. Despite the relevance of these theoretical insights and their potential to develop diverse methodological approaches to register variation, the general practice still tended to identify register with topic/discipline, genre or style, always relating the notion of register to the scale of formality, and most of the specific register theory along this period evolved under the functional systemic approach to register variation led by Halliday based on the three well-known parameters: *field* (topic or activities involved), *tenor* (participants' role relations) and *mode* (communication channels).

Following the functional-semantic tradition pursued by Firth, Halliday (1978, p. 64) finds the concept of register "a useful abstraction linking variations of language to variations of social context" and suggests "that there are three aspects in any situation that have linguistic consequences: field, mode, and tenor" (Eggins, 1994, p. 52). According to her, field refers to "what is happening to the nature of the social action that is taking place," mode concerns "what it is that the participants [of a transaction] are expecting language to do for them in that situation," and tenor has to do with who are taking part in the transaction as well as the "nature of the participants, their status and roles" (Hasan & Halliday, 1985, p. 12). These three register variables delineate the relationships between language function and language form. In other words, a register is constituted by "the linguistic features which are typically associated with a configuration of situational features-with particular values of the field, mode and tenor" (Halliday, 1976, p. 22). For example, the tenor of a text, which concerns the relationship between the addresser and the addressee, can "be analyzed in terms of basic distinctions such as polite-colloquial-intimate, on a scale of categories which range from formal to informal" (Hatim & Mason, 1990, p. 50). Similarly, the mode of an

interaction which manifests the nature of the language code being used can be distinguished in terms of, among other things, spoken and written.

Register studies have been the subject of the scholarly attention of a great diversity of language studies. These include linguistics (e.g., Halliday & Hassan, 1991), applied linguistics (e.g., Folarin, 1979; Love et al, 2019), sociolinguistics (e.g., Halliday, 1978; Stockwell, 2002), education (Rose, 2018), translation (Yang, 2019) and discourse analysis (e.g., Eggins & Martins, 1997; Ghadessy, 1988). Along with these studies, which have generally applied the Hallidayian framework, this study intends to employ this type of register analysis to the register of SMS discourse of college-level students.

3. Methodology
3.1 Data Collection
Three sources of data were used to obtain the material of this study, including a questionnaire soliciting students' habits and preferences of communicating by SMS. Most of the questions only required choosing one from a list of short answers: yes, no, daily, once a week, so on (viz., multiple choice items). Only a limited number of items required the informants to provide written justification for answers (i.e., open-ended items). The students were asked whether they have a mobile phone and how often they send or receive text messages. Of specific interest to this study was the question regarding which languages the informants claimed to use in everyday communication and which ones they claimed to use in their SMS. Given that one of the major aims of this study was to analyze how college-level students adapt their written language to text messages, they were asked whether they employ strategies such as emoticons and abbreviations in their SMS. They were also asked to give examples of these strategies from their own communication.

The second source of data involved the last 20 messages that the students had recently sent. According to Ling (2005), this approach has several advantages, but it also can have colored the data. There is an ethical and a methodological reason that we asked for the last messages sent as opposed to those received. Ethically, it is not possible for the researcher to ask for messages a respondent has received since implicitly one includes data from persons who have not given their consent to participate in the study. Methodically, one does know the background, demography or other characteristics of the sender for messages a respondent has received. Thus, it is not possible to analyze the materials in any meaningful way at a sociological level. Another weakness with the materials is that the messages are often taken out of their context in a sequence of messages sent to another person. Obviously, this can make interpretation difficult in some respects and it also eliminates the possibility to do any type of discourse analysis. Unfortunately, this limitation comes with the territory. As noted above, to do any type of data collection wherein one does not have the consent of the authors of the text is not ethically defensible. Given these various limitations, however, the corpus of messages is a relatively good reflection of SMS use among university students. It provides one with insight into the phenomena and the ability to generalize the results to a greater degree than in convenience samples.

In the next stage, the students forwarded text messages to the researchers' mobile phone during a period of time. The forwarded messages were transferred to be stored in a database, with the use of a serial cable between the phone and a computer. It was pointed out that they naturally had the choice of forwarding each and every message if they so chose, or of selecting messages that they felt comfortable sharing.

The third stage consisted of interviews with some of the informants who kept a diary and forwarded messages. The interviews were semi-structured, consisting of a number of questions to guide the talk and of free

associations and informal conversation in which the informants had the chance to comment and add remarks on both the research itself and about their own communication via mobile phones.

The corpus was stored in a machine readable format, and was later separated into two categories according to text font: messages written in Farsi alphabets, and those written in Latin alphabets.

3.2 Corpus

The text message corpus used for this study comprised 2440 messages collected from 122 students at *Ahvaz Jundishapur University of Medical Sciences* between January 2018 and September 2019.

4. Results and Discussion

Adopting a Hallidayan framework to deal with how the sociolinguistic dimensions of the context of SMS alter our use of language, this study considered three register variables of *filed*, *mode*, and *tenor* in the following with the purpose of elucidating specific values for each in the corpus data.

4.1 Field

What we say relates to a particular situation; words are not uttered independently of the context or situation. One of the determinants of the discourse is a social activity, already referred to as *field of discourse*. At the heart of defining the term is the issue of how general a concept this is, and what part the language is assigned within that particular social activity. This implies that there is more to the field of discourse than just the subject matter. Hence, a broader concept should be kept in mind – the one that is equally attentive to the affair being talked over and factors forming the communicative situation. That is to say *... what we are talking about* has to be seen as a special case of a more general concept, that of *what we are doing*, or *what is going on*, within which that language is playing a part (Halliday, 1978, pp. 221-222). As such, attention needs to be directed towards the principle of internal ordering of field, its instantiation, and what-

we-are-doing aspect. The actual term *field of discourse* is referred to and explained by Halliday in several ways, out of which three are presented below. It is defined as:

- ... the whole setting of relevant actions and events within which the language is functioning... (p. 33);
- ... the social action, in which the text is embedded (p. 110);
- … the social action: that which is going on, and has recognizable meaning in the social system; typically a complex of acts in some ordered configuration, and in which the text is playing some part, and including *subject-matter* as one special aspect (pp. 142-143).

The first and second definitions imply what the third one explicitly says; and that is the specification of field in terms of ascribing the order to a particular social activity. Social activities differ in the ratio of the actual language use. Some utilize language as a supportive means to achieve a certain goal; others are primarily language-oriented, with language being the goal; an exemplification might be the juxtaposition of a game of football and a discussion on this sports event, as illustrated by Halliday.

In football, the social action is the football itself, and any instructions or other verbal interaction among the players are part of this social action. In a discussion about a game of football, the social action is the discussion and the verbal interaction among the participants is the whole of this social action. Here the game constitutes a second order of *field*, one that is brought into being by that of the first order, the discussion, owing to its special nature as a type of social action that is itself defined by language. It is to this second-order field of discourse that we give the name of *subject-matter* (Halliday 1978, p. 144).

If an analogy is made with the discourse under study, *what we are talking about* is the subject matter that the texter focuses on. *What we are doing* or

Register Analysis …

what is going on within which that language is playing a part is hitting the keys on the mobile phone; the language, however, is not of secondary importance here, as in the game of football. In the focal social activity (typing) the language is a goal in itself, the only difference is the medium used for projecting the language. Hence, in the focal discourse the activity in which the participants are involved is talking, that is to say typing, about beauty tips, music, books, or acting. The second-order field of discourse is, for instance, getting ready for the prom night, performing music, writing books, or acting. Accordingly, these are, one at a time, the subject matter of the focal SMS, while the message itself is the first-order field.

In this regard, SMS texts were analyzed and categorized in term of the very social interaction that is taking place. Bearing this dimension in mind, the researchers found the following typology of SMS texts including several major categories that constitute the content of messages. The order in which these categories are introduced does not by any means represent the frequency of messages containing that content, namely, the first category was not found to be the most frequent one. Moreover, in so far as the language of SMS is highly structured and theme-focused, the addressor and the addressee had to stick to the topic.

Major Categories
-Human relations
This concerned the use of human relations (e.g., salutations, congratulations, invitations, jokes, etc.)

Ghadame no reside mobarak (congratulations on the newborn)

-Social
Messages in this category included all texts referring to social events and occasions, ethno-political news, so on.

Bazam gardo khak bazam tatili

-Current political issues

This type included messages depicting students' views on current news in the media.

برجام آخر چی میشه؟

-Romance

Senders of this message type expressed their feelings and emotions to their loved ones.

بین منو اون همه چیز تمام شده، غیر از اینکه که من هنوز دوسش دارم...

-Religious

Still another category of messages were those expressing congratulations and or condolences over religious occasions.

عید فطر بر فطرت پاکتان مبارک

-Superstitious

Messages of this type dealt with inviting others to practice some widely-held superstitions.

اگر دعای حضرت یونس را به ۱۰ نفر ارسال کنی سود کلانی خواهی یافت. اگر اینکار را نکنی تا ۳ روز دیگر حتما اتفاق بدی برای تو یا یکی از افراد خانواده تو پیش می آید.

-Ethical

These messages contained an ethical lesson for the receiver of the message.

ارزش هر کس، برابر است با ارزش آن چیزی که برایش ارزش قائل است

-Sports

Some messages provided sports news or expressed the senders' views on recent events of high interest to public.

Perspolis va sepahan chan chan?

-Answers

Messages of this type provided a reply to a question.

Bashe vasat miarameshoon

-Questions

A bulk of messages dealt with simple, short questions put on classmates.

Jozveha ro shohar dadi raft?

-Requests

Miay berim naderi? Ghabl az azoon bem ye tak bezan age khasti beri

-*Personal news*

<div dir="rtl">جزوه را خودم نوشته بودم</div>

-*Other*

It is definitely clear that different aspects of social and individual life have been objected to, confirmed or made fun of by means of these messages. In fact the topics of these messages reflect what a person is preoccupied with in the course of their daily life varying from sexual or romantic activities to the worship of God.

<div dir="rtl">حق نداری از کسی بپرسی روزه ای یا نه وقتی یازده ماه ازش نپرسیدی سیری یا گرسنه</div>

4.2 Mode

The written language in SMS is used and adapted according to the characteristics of the means of expression and its conditions on production (multi tap or predictive text entry on the tiny keypad of a mobile phone), situation (relation between communicators – most messages are sent between friends who already know each other well). It differs from the norms of traditional written language in that it is reduced and displays spoken language features. Overall, the mode of SMS has features of both spoken and written culture, but there are several elements that cause one to think that SMS is more like speaking than writing.

Syntactical and lexical reductions are characteristics of the language in SMS. The most common syntactical reduction is deletion of subject pronoun, which gives the messages an informal, telegraphic style, much like informal spoken language. The same pattern was reported in studies of text messaging in Germany (Döring, 2002). Several types of abbreviations exemplified lexical reductions. Traditional, established abbreviations were used, as well as new, innovative ones. These new types of abbreviations show similar

patterns to those used in chat rooms, and the use of these in SMS is probably a transfer from chat norms.

In this study, syntactical and lexical reductions, as well as graphical techniques are ways to reduce time, effort and keystrokes when producing text messages. One common example of syntactic reduction in our corpus was verbalization of nouns. For example, the noun *zang* means *bell* in Farsi, and when it is used with the verb *zadan* (to hit) together will mean 'to call'. However, in the following example, the word *zang* receives inflections and becomes a verb on its own: *Ba'adan bet mizangam*

Generally, it is claimed that short forms in SMS are almost always the products of economy function. However, contrary to this widely-held belief that the use of such abbreviations is due to the very short space provided for text messaging, the participants of this study mostly did this in order to show their membership to the social group of texters. For instance, one of the female participants of the study comments:

> I don't care how many characters it may take in a message. I mainly use these abbreviations because they are cool and because they are the routine ways of writing SMS (In Persian).

Accordingly, the specialized use of short forms is thus an indicator of belonging to a community (Sveningsson, 2001) and is a component of the group identity. Our analysis showed that abbreviations such as *B khial*, *2khtar*, *sa@* and *mer30* fulfill a collective identity function whereby it requires a special shared knowledge to be able to understand the language and consequently be able to use it. The use of these personalized language short forms is an indicator of group affiliation and a component of group identity.

Register Analysis …

4.3 Tenor

The linguistic characteristics of text messaging are not determined by the medium alone, but to a large extent by the characteristics of the communicators, their interpersonal relationships and their reasons for communicating. The tenor of a message involves the relative status of and the relationship between the sender and the receiver. In the discourse under study, for most part it is difficult to specify any of the personal characteristics of participants and to single out particular status-defining characteristics of interactants so that it can be focused on one social factor while at the same time neglecting others. However, it is generally held that SMS communication is primarily an interaction between people who know each other and this allows them to skip the ritual openings and off-topic talks which are mostly present in phone conversations. Of course, the female texters of this study were more inclined to use salutations and closings more frequently than others giving their messages a tone of being a formally constructed letter. In the corpus examined, the majority of the messages are addressed to specific individuals. Unlike writing that can be addressed to any reader who chances by, the vast majority of SMS messages are written with the intention of sending them to a single individual. Likewise, there is a high degree of personal disclosure in the SMS messages; that is, the sender and receiver have a high degree of insight into each other's lives.

Moreover, the behavioral facet of SMS makes the language private rather than public. As the messages are meant for the addressee alone, the nature of the SMS messages are often in the form of greetings, invitations, congratulations, jokes, love letters or emergency call for help.

5. Conclusions

Many people are apprehensive of the SMS register thinking that technology is corrupting the language and the SMS culture is promoting illiteracy across the society. However, linguists believe that technology has fostered creativity among the young people using SMS for transmitting messages. SMS has ushered in a new stage in the evolution of the written language. Why do people use the register of SMS? Initially, it seems that it is only the size of the small screen of the mobile phone and its limited character space that prompted the evolution of the language of SMS. However, we believe mobile text messaging is an asynchronous mode of communication which is characterized with particular register variables, and there are also pragmatic reasons in addition to the technical restrictions for the creation of this register. The technical restrictions on production and perception conditions influence this particular means of expression. However, in our study we saw that although all users have the same type of limitations on message size, causing an advantageous side effect of being able to avoid awkward conversations and get straight to the point, the full message size was seldom used to its full advantage. Mean message length was 14.8 words, or 64 characters; well below the upper limit of 160 characters. Thus, there are some pragmatic reasons at work. We explained these pragmatic reasons based on Halliday's register framework. As we have seen, most messages are sent between friends who already know each other well. This relationship between communicators, and the accompanying shared background knowledge, allows communicators to be inexplicit, and use community-specific slangs and abbreviations. What emerges from this study is that although texting in some ways sits on the interface between spoken and written language, in other ways it differs markedly from other language varieties, and a more accurate way of describing text messaging is that its users actively and

selectively draw on the resources of spoken and written discourses in constructing the message.

References

Akbari, M. (2013). A preliminary linguistic analysis of Romanized Persian SMS messages. *Journal of Novel Applied Sciences*, *2*(8), 197-205.

Biber, D. (1998). *Variation across speech and writing*. Cambridge: Cambridge University Press.

Chaka, C. (2015). Textisms, grammatical features, and sentence types in the SMS and IM paragraphs of EFAL learners. *Journal of Language Learning*, *31*(3), 65-85.

Döring, N. (2002). SMS will be sent, abbreviations and acronyms in the short message service communication. *Muttersprache*, *112*(2), 97-114.

Eggins, S. (2004). *Introduction to systemic functional linguistics*. London: Pinter.

Eggins, S., & Martin, J. (1997). Genres and registers of discourse. In van Dijk (Ed.), *Discourse as structure and process* (pp. 230-256). London: Sage Publications.

Eldridge, M., & Grinter, R. (2001). *Studying text messaging in adolescents*. Paper presented to the workshop on mobile communications: *Understanding users, adoption and design at the conference on human factors in computing systems (CHI)*, Seattle, WA. Retrieved from http://cs.colorado.edu/~palen/chi_workshop/papers/EldridgeGrinter.pdf

Firth, J. R. (1935). *The technique of semantics*. Oxford: Oxford University Press.

Firth, J. R. (1957). *Papers in linguistics 1934-1951*. London: Oxford University Press.

Firth, J. R. (1968). *Selected papers of J.R. Firth 1952-1959*. London: Longman.

Folarin, B. (1979). Context, register and language varieties: A proposed model for the discussion of varieties of English in Nigeria. In E. Ubahakwe (Ed.), Varieties and Functions of English in Nigeria (pp.77-85). Ibadan: African University Press.

Ghadessy M. (1998). (Ed.). *Registers of written English*. London: Printer Publishers Limited.

Gooniband Shooshtari, Z., Khazaie, S., & Mehrabi, Kh. (2013). An investigation into the impact of shortened texting on Muslim learners' correspondence ability. *RALS, 4*(1), 20-45.

Grinter, R. E., & Eldridge, M. A. (2001). y do tngrs luv 2 txt msg?. In *ECSCW 2001* (pp. 219-238). Dordrecht: Springer.

Maniati, Mashhadi, & Khazaie

Halliday, M. A. K. (1978). *Language as social semiotic*. London: Edward Arnold.

Halliday, M. A. K., & Hassan, R. (1991). *Language, context and text: Aspects of language in a social semiotic perspective*. Oxford: Oxford University Press.

Hashim, F., Soopar, A. A., & Hamid, B. A. (2017). Linguistic features of Malaysian students' online communicative language in an academic setting: The case of Universiti Kebangsaan Malaysia. *Akademika*, *87*(1).

Hashiomoto, Y. (2002). The spread of cellular phones and their influence on young people in Japan. In S. D. Kim (Ed.), *The social and cultural impact/meaning of mobile communication* (pp. 101-112). Korea: School of Communication Hallym University.

Hatim, B., & Mason, I. (1990). *Discourse and the translator*. London: Longman.

Hilliard, J., Kear, K., Donelan, H., & Heaney, C. (2020). Students' experiences of anxiety in an assessed, online, collaborative project. *Computers & Education*, *143*, 103675.

Hughes, R. (1996). *English in speech and writing: Investigating language and literature.* London: Routledge.

Hussain, M. N. (2013). *Language of text messages: A corpus based linguistic analysis of SMS in Pakistan* (Doctoral dissertation). International Islamic University Islamabad.

Jalilifar, A. R., & Mashhadi, A. (2013). Current trends in research on mobile phones in language learning. *Journal of Research in Applied Linguistics, 4(2),* 110-127.

Kortti, H. (1999). Internet relay chat and the conventions of spoken English. Retrieved from http://student.oulu.fi/~hkortti/proseminar-final.html

Latif, M. Z., Hussain, I., Saeed, R., Qureshi, M. A., & Maqsood, U. (2019). Use of smart phones and social media in medical education: Trends, advantages, challenges and barriers. *Acta Informatica Medica*, *27*(2), 133.

Ling, R. (2005). The socio-linguistics of SMS: an analysis of SMS use by a random sample of Norwegians. In R. Ling & P. Pedersen (Eds.) *Mobile communications: Renegotiation of the social sphere*, (pp. 335-349). London: Springer.

López-Rúa, P. (2007). Teaching L2 vocabulary through SMS language: Some didactic guidelines. *Elia: Applied English Linguistics Studies, 7*, 165-188.

Love, R., Brezina, V., McEnery, T., Hawtin, A., Hardie, A., & Dembry, C. (2019). Functional variation in the Spoken BNC2014 and the potential for register analysis. *Register Studies*, *1*(2), 296-317.

Malinowski, B. (1923). The problem of meaning in primitive languages. In C. K. Ogden & I. A. Richards (Eds.), *The Meaning of meaning* (pp. 296-336). London: Routledge and Kegan Paul.

Osisanwo, W. (1997). A linguistic analysis of English medium soccer commentary on radio. *Stylistics in Theory and Practice. Ilorin: paragon Books*, 70-92.

Partey, F. A., Addo-Danquah, R. G., Bonku, L. K., & Sarfo-Adu, K. (2018). Investigating unconventional abbreviations in SMS texts. *International Journal of Applied Linguistics and English Literature*, *7*(4), 25-32.

Pérez-Sabater, C. (2015). Discovering language variation in WhatsApp text interactions. *Semiannual journal of linguistics, philology and translation*, *31*(1), 113-126.

Prensky, M. (2001). Digital natives, digital immigrants. *On the horizon*, *9*(5).

Rintel, E. S., & Pittam, J. (1997). Strangers in a strange land interaction management on internet relay chat. *Human Communication Research*, *23*(4), 507-534.

Rose, D. (2018). Pedagogic register analysis: mapping choices in teaching and learning. *Functional Linguistics*, *5*(1), 3.

Shudong, W., & Higgins, M. (2005, November). Limitations of mobile phone learning. *Proceedings of the IEEE International Workshop on Wireless and Mobile Technologies in Education* (pp. 179-181), IEEE Press.

Stockwell, P. (2002). *Sociolinguistics*. London and New York: Routledge.

Sveningsson, M. (2001). *Creating a sense of community: Experiences from a Swedish web chat* (Doctoral dissertation). Linköpings University.

Tagg, C., & Asprey, E. (2017). *Messaging in the Midlands: Exploring digital literacy repertoires in a superdiverse region*. IRiS Working Paper Series16. Retrieved from birmingham.ac.uk/Documents/college-social-sciences/social-policy/iris/2017/IRiS-WP-16-2017.pdf

Thurlow, C., & Poff, M. (2013). Text messaging. *Pragmatics of Computer-Mediated Communication*, *94*.

Yang, N. (2019). The application of register analysis into translation quality assessment. *Theory and Practice in Language Studies*, *9*(12), 1550-1554.

Ylva, H. (2002). *Use and adaptation of written language to the conditions of computer-mediated communication.* Sweden: Göteborg University.

Yusuf, Y. Q., Natsir, Y., & Yusra, S. R. (2016). (. _.)/dont 4get 2 txt me plz! Linguistic and discoursal features of short message service by female texters. *3L: Language, Linguistics, Literature*, *22*(1).