Ministry of Higher Education

And scientific research

University of Al-Qadisiyah

College of Education

Department of English

Linguistic Innovation in Text Messaging

Submitted by

Mohammed Sahib Shanon   **Noura Ghanim Faris**

Supervised by

Asst. prof. Rajaa Mardan Flayih

2018

بسم الله الرحمن الرحيم

﴿ ويرفع الله الذين امنوا والذين اوتوا العلم درجات ﴾

صدق الله العلي العظيم

(المجادلة: 11)

In the name of Allah, Most Gracious, Most Merciful.

﴿ Allah will rise up, to (suitable) ranks (and degrees), those of you who believe and who have been granted (mystic) Knowledge. And Allah is well- acquainted with all ye do.﴾ (Ali Yusuf, The Meaning of The Noble Qur'an , 2006 :393). (Al Mujadilah :11)

Dedication

TO

Our Parents

Our Teachers

Our dearest Brothers and Sisters

And everyone supported us

ACKNOWLEDGEMENTS

Abstract

This study deals with linguistic innovation in text messaging. Text messaging is "asynchronous text-based technological meditated discourse that pursues simple sentences structure for communication ".

The study consists of two chapters: The first deals with the effect of computer-mediated communication invention on language. It focuses on texting as a distinctive genre.

The second highlights the linguistic innovation in text messaging. Finally, the conclusions sum up the findings of the study.

Content

section	subject	page
Chapter One: Text Messaging		
1.1	**Computer-Mediated Communication**	1
1.1.2	**The Effect of CMC Invention on Language**	3
1.1.3	**Linguistic Innovation in CMC**	4
1.2.1	**Texting: Definition**	6
1.2.2	**Texting as a Distinctive Genre**	7
Chapter Two: Linguistic innovation in text messaging		
2.1	**Omissions**	10
2.2	**Agreement**	11
2.3	**Abbreviations**	12
2.4	**Acronym**	12
2.5	**Shortening**	14
2.6	**The Use of Emoticons**	15
	Conclusions	17
	References	18

Chapter One

Text Messaging

1.1 Computer-Mediated Communication

As language evolves to meet the requirements of a digital era, one of the key areas in which innovation has been noted is in the world of computers. Computer-mediated communication, (henceforth CMC), strictly speaking, has been in existence since the very first digital computer was developed during World War II, and certainly since the first recorded emails in the early 1960s. Thurlow, Lengel, and Tomic, (2004: 4). Broadly, the field of computer-mediated communication may include any form of communication involving the use of technology, but as far as linguistics is concerned the term can perhaps be best defined as communication that takes place between two or more humans via the instrumentality of computers. Herring,(1996:1) or, even more specifically, human interpersonal communication through and about computers, usually with a focus on the Internet and the online world. (Thurlow, Lengel and Tomic,2004:14).

The term is sometimes used to encompass technology more broadly, however, and it is obvious that the increasing prominence of this technology in modern society has resulted in a number of communicative innovations in a variety of forms. In recent years, the integration of various existing forms into multimedia formats has enabled us to combine various types of media for the purpose of communication.(Bodomo, 2009, cited in Davies, 2010:6).

Previously, it would have been difficult if not impossible to seamlessly integrate text and images, or even audio and video features, into a piece of writing. Now, with the Internet, this is entirely possible.

1

And, as Bodomo subsequently notes, the inherent widespread connectivity of the Internet means that people from all around the world can contribute to or otherwise engage with the same dialogue at once, in a way that was previously impossible outside of telephone conversations, and which is substantially more flexible in an online world. Online language has, in the minds of many people, developed such a unique style that it requires new terminology that separates it from everyday language. There are several common terms that have become widely used to describe online language, including „Weblish," „nestling," „e-talk," „geek speak, and „netspeak,". Thurlow, Lengel, and Tomic,(2004:118). However, although these terms might appear to be harmless and perhaps even affectionate ways of describing language on the Internet, there has been debate as to whether these are in fact required.

Indeed, (Thurlow, Lengel, and Tomic) go as far as suggesting such terminology could be harmful, promoting the idea that online language is somehow vastly different from the language used elsewhere, which is not necessarily the case. Nevertheless, many linguists have indeed identified features that give the impression of a unique form of language.

One general point that has been made on several occasions is that online communication appears to sit in between spoken and written forms of language: computer-mediated communication has not only expanded our conceptions about human communication by offering options that have previously been unavailable but also blurred the line between speech and writing.(Gong and Ooi, 2008, cited in Davies 2010:7).

1.1.2 The Effect of CMC Invention on Language

Language has evolved since the invention of CMC. The two well-known services, Twitter and SMS, which impose character limitation in the construction of messages have given an impact on language use. Users utilize many kinds of strategies to make sure that their message fits within the character limitation. In both types of CMC mentioned earlier, shortened forms of words are often employed; this means the messages are mostly constructed in shorthand. According to (Huddleston 2012 : 3), the use of shorthand „b/c‟ for „because‟ and „b4‟ for „before‟ have already been used in SMS previously but when Twitter emerged, they became more widely acknowledged and used. Hård af Segerstad, 2002(cited in Nabila,2014: 32) adds that users will tend to utilize lexical short forms and reduce the syntactic structure of a message; thus it will save keystrokes.

There have been many debates on whether it has contributed to the deterioration of languages or vice versa. Popular views state that language use has become poor in CMC as posited in several studies. Thurlow 2006 (cited in Nabila,2014: 32) has done a study investigating the media‟s perceptions of the use of CMC and found that they are mostly negative and discouraging, especially when it comes to its impact on language use.

To name a few negative quotations about the language used on CMC, it is stated that "if the already ingrained corruption of the English language is perpetuated, we will soon be a nation made up entirely of grammatical duffers". "Perspective: Mind Your Language", 2001 (cited in S. Johnson and A. Ensslin 2007: 76) and "Texting can be incredibly simple. You can fill your role of returning calls and keep in touch with people without any pressure to be creative or witty. We're talking about

language in its most stripped down kind of level", It is feared that CMC would encourage users to construct sentences that are full of errors and unintelligible and deformed (Thurlow, 2006, cited in Nabila,2014: 32).

1.1.3Linguistic Innovation in CMC

Despite the disadvantages of CMC on language use mentioned earlier, there are also the good sides of it. Users have their own reason for using certain characteristics and it enhances their ability to adapt to the language change in CMC Hård af Segerstad, 2002(cited in Nabila, 2014: 33).The media perceptions of how Instant messaging as contributed to the breakdown of the English Language are not always true.

According to Tagliamonte and Denis,(2008:12) in their findings, the use of shortened words and abbreviations is relatively small in Instant messaging; it does not appear that extensively as for how the media puts it. Instead, these features demonstrate the creativity of users to construct their messages, and most of the time what they want to deliver is successfully conveyed despite the non-standard forms of language that they use. Hence, rather than seeing it as degrading a language, it should be seen as users having an innovative and a good command of the language.

Another study by. Aziz et al, (2013:12886) have contradicted the belief that the use of non-standard forms online will put the future of Standard English in danger. They add that they are driven to use short forms which are used because of "the urgency of turn-taking and the ease of typing and the urge to save time and space". Moreover, since they already know standard spellings of words prior to abbreviating them, it is not a matter to be concerned with, whether it will affect their academic writing or not. In addition, concerning the language used on character-

limited, Twitter users are given the opportunity to play around with words to get them to fit into the constraint and it is really fun to do besides encouraging the users to be efficient in constructing a tweet Knapp, 2011,(cited in Nabila, 2014: 34). In this case, „language play‟ means users tend to manipulate linguistic forms in the act of communicating Jones, 2010 (cited in Nabila, 2014: 34). However, it is not always about form. creativity in the new media also involves wordplay (e.g. punning), type play (e.g. repetition) and sound play (e.g. accent stylization, letter-number homophones). (Thurlow, 2011:7).

Yet, creativity in utterances or writing may not only lie in the „language play‟, puns, metaphors or other rhetorical devices. According to Jones (2010) (cited in R. Rubdy and L. Alsagoff, 2013:172), "What may be „creative‟ may have more to do with the strategic way language is used, and what may be „created‟ may not be an inventive linguistic product, but rather a new way of dealing with a situation or a new set of social relationships." He further explains that linguistic innovations exist when writers code-mix and shift styles in their texts based on their social and cultural contexts. When it involves more than one language, this is termed as „bilingual creativity‟.

Online users having two languages can manipulate words through the use of code-switching or code mixing, sounds through the use of punctuations or rhyming words and graphics through the use of emoticons are engaged in creative interactions. (Fung and Carter,2007: 349)

1.2.1 Texting: Definition

Texting refers to the sending of short typed messages between mobile phones using the Short Message Service (SMS), a feature of most mobile phones since the late 1990s. In much of the European literature into texting, the term SMS is also used to describe both the medium and the messages. Kasesniemi and Rautianen,(2002:180). Short text messages system is a powerful medium of electronic communication, which is a fast, cheap and convenient way of transferring information from one mobile device to other in the range of 160 characteristics. Bertel et al,2012,(cited in Topolska, 2015:18). SMS makes communication faster, and people can interact with this technology on an everyday basis. Acker,2014,(cited in Topolska,2015:18) states that people started using SMS mainly because of the price. He claims that text messages are much cheaper than phone calls, and they are also very convenient medium in situations in which individuals are not able to have a face-to-face conversation.

What should be clearly mentioned is that SMS is not a tool for long descriptions, but it is rather short and to the point. Therefore, SMS is the shortest way of transmitting information; it is much quicker than verbal conversation or email communication. Soffer,(2010:387). Also, another main difference between SMS and email is with the regards to morality. Individuals tend to write to each other emails, however, through the text messaging they do not only write but also most likely speak to each other. SMS communication allows for a reasonable use of syntactic and lexical short forms, which save character space, or touches of the handset

keys, as compared with using the full forms of words. (Doring, 2002:7).

Text messaging is therefore broadly defined as asynchronous text-based technological mediated discourse Thurlow, 2003; Baron, 2005,(cited in Anashia 2011:2) that pursues simple sentences structure for communication. Texting reflects language change and innovation in language. Variation within text message depends on the particular use of SMS. (Ong̈onda,2009:3).

The dominant features in SMS language are the use of abbreviations, slang, syntactic reductions, asterisk emoting, emoticons, deletions of parts of speech, especially subject pronoun, preposition, articles, copula, auxiliary or modal verbs and contractions. The unique use of SMS language serves to tie the group together through the development of a common history. (Ling,2000:18).

1. 2.2 Texting as a Distinctive Genre

In her well-known paper on the language of email, Baron 1998 (cited in Herring, Stein and Virtanen, 2013:178) grapples with the idea that email might herald a new linguistic genre; her conclusion is that email language instead represents a creolizing blend of written and spoken discourse. Like email, and indeed most new media discourse, text-messages have much the same hybrid quality about them – both in terms of the speech-writing blend and in terms of their mixing of old and new linguistic varieties. As Rössler and Höflich, 2002(cited in Herring et al,2013: 178) put it, texting is „email on the move". In its transience and immediacy, however, texting is as much like instant messaging as it is like email and, for that matter, speech. In keeping with proposals

Herring˵s 2001(cited in Herring et al,2013: 178), therefore, it is inclined to view text on its own terms; whatever formal similarities it may bear to other CMC genres or modes, the linguistic and communicative practices of text-messages arise from a particular combination of technological affordances, contextual variables and interactional priorities. The kinds of orthographic choices that texters make in their messages are motivated primarily by pragmatic and communicative concerns. Once again, this is not to say that text messages are without character or distinction .for instance,

"safe Hi babe!Angie + Lucy had words last nite-stood
there arguing 4 ages, loads of people outside cabana.Bit
obvious they……weren't gonna fight tho cos they were
there 4 so long!I was a bit pissed (woh!) Good nite tho!Spk
2u lata xxBeckyxx"

Removed from its original technical context (i.e., transferring it from the small screen of the mobile phone), the extract above is somehow clearly a text message. How is this? Does this not imply a particular „language of texting"? Yes and no. While so much research focuses on the linguistic (and orthographic) *form* of texting, the defining feature of text messages is ultimately their sociable *function*.While a text-messages may well appear informational or content-focused, it will more often than not be serving a relational purpose – so much so, that this solitary function is a far more useful genre-defining feature of texting than, say, its length or the use of abbreviations, letter-number homophones, etc.. The golden rule of pragmatics is, of course, that form and function are mutually dependent. If the distinctive nature of texting is to be

pinpointed in any way, it must hinge on a *combination* of the following broadly defined but typical discursive features:

(a) the *comparatively* short length of text messages;

(b) the *relative* concentration of non-standard typographic markers; and

(c) their *predominantly* small-talk content and solidary orientation.

Key qualifications here are „combination", „comparatively", „relative" and

„predominantly"; none of these generic and stylistic features is sufficient individually to characterize texting. Compared with a formal letter or an academic essay they are most likely shorter (constrained in part by the mechanical affordance of a 160 character limit), contain more language play and are more chatty.

This obvious distinction starts to fall away, however, when compared with greeting card messages, fridge-door notes, and so on. Increasingly, with the convergence of new (and old) media, the technological boundaries and generic distinctiveness of instant messaging, texting, emailing are becoming blurred. Notable examples of this are to be found in micro-blogging (e.g. *Twitter* and status updates on *Facebook* – see, C. Lee, forthcoming) as well as the multifunctionality of smart-phones (e.g. *BlackBerry*) and, to some extent, Apple"s *iPhone*. These changes serve to remind us that, like language in general, the language of text messaging is constantly changing. No sooner have scholars had the chance to pinpoint the character of new media language than the media change again.

.

Chapter Two

Linguistic Innovation in Text Messaging

2.1 Omissions

Syntactic variations are found as reflected in the omission of pronouns and auxiliary verbs:

1."Callin u aint picking up. Pls sms me tha eck address &details Gdevenin."

(Iam calling you and you are not picking up. Please text me the Electoral Commission of Kenya address and details. Good evening.)

2."Eva known a fln smootha thn sheets of silk? eva flt the caress of silver feathers. miss u."

(Have you ever known a feeling smoother than sheets of silk?)

(Have you ever felt the caress of silver feathers? I miss you.)

From the above messages, it is apparent that interlocutors omit personal pronouns" I am" and the auxiliary verbs "have you" of the text message that they created which leads to syntactic variation. Users omitted pronouns and auxiliary verbs as a means of condensing the structure of language in order to save space. Users also omitted the object which is a paramount part of a transitive verb get :

3."Hi, hope u had a great day. Imagine sikupata…."

(Hi, hope you had a great day. Imagine I did not get…)

The verb get is a transitive verb that needs an object in a sentence to make sense yet its object has been deleted. Moreover, in terms of omission, the " to infinitive " was omitted in order to save time and space in the text messages that are created. An infinitive is a combination of the particle to and a verb. The word "to" also can be omitted yet it should accompany the verb come to form the to-infinitive to come, that is, in order for it to function as an adverb:

4." I wud like u cum tiz wkka thursade den Friday we go out"

(I would like you to come this week on Thursday, and then Friday we go out.)

2.2 Agreement

A grammatical agreement between the lexemes is used in the sentence structures they created. Drawing from the sociolinguistic theory, co-occurrence relationships between units may constitute the basis for defining a linguistic variable.

The violation of grammatical agreements between lexemes in terms of number, tense, person and gender is considered as a linguistic variation. For example :

1."Baby av u maliza meeting, aki av mis u vibaya and am alone and bored. Pls kuja "(Baby have you finish(ed) meeting, really (i) have mis(sed) you badly and am alone and bored. Please come.).

This example violates the aspect of tense which has a distinct function of marking time relations. Therefore presupposes that the sender is talking about a past activity.

In the example below the verb "finish" and "miss it" ought to be in past tense" finished" and "missed" to meet the standard norms of English language:

2."Aki am sori I embarrass u pls 4giv me. Ni understand."
(Really am sorry, I embarrass(ed) you please forgive me. Understand me.).

Past time seems to be the marked number of the pair in that it especially excludes the present moment (Palmer, 1999:212).
The verb "embarrass" ought to be "embarrassed" that is in past tense as deduced from the pragmatic act of asking for forgiveness. Nevertheless, the sender of the message intentionally ignores the tense-aspect that should be observed to indicate time relations in a sentence.

The discussion above shows that violation of grammatical agreement in text messages is a clear indication of the emergence of a new sub-genre. It is apparent that users are aware of the English grammatical rules such as the use of pronouns, articles, the to-infinitive among others but they rebel against them. Rebellion is due to

„underground communication." Users, therefore, decide to be non-official by manipulating their grammatical knowledge.

Violation of grammatical agreement results to a unique language with its own norms hence making the structure of the language compressed

2.3 Abbreviations

The use of abbreviations in sentences also indicated syntactic variation. Few text messages had abbreviated phrases. An abbreviated phrase is a phrase that has been compressed by omitting letters or by using only the first letter of each word. An abbreviated phrase is shorter than its full form. Users form abbreviation such as "gudmo" which has two words good and morning. Good drop the vowel <o> and replaces it with the grapheme <u> which entails the pronunciation of the word "Good Morning", on the other hand, sever ring. Abbreviated phrases appear to be motivated by the challenge of the small screen and the limited character space and by the ease of turn and fluidity of social interaction. Thurlow,(2003:43). Moreover, abbreviations are easily understood by SMS members thus fulfilling a collective identity function.

2.4 Acronym

An acronym may be defined as a sequence constructed of the initials such as in NATO, OK, BBC. However, acronyms are not confined exclusively to initials. Sobkowiak (1991),(cited in *Kul* 2007:8) claims that "letters, syllables and other chunks of words are cut out, rearranged and assembled to create a heretofore nonexisting word or sequence. Moreover, as Ronneberger-Sibold, (1990:2) points out, the diversity of acronyms is truly impressive. She also defines their purpose: "they serve to form new lexemes without internal morphological structure […]

unhampered by the constraints of the normal word formation rules" . Sobkowiak, (1991), (cited in *Kul* 2007:8) points to the fact that the manipulation is executed on purpose as it is easier and shorter to use the initials AIDS instead of a longish phrase "Acquired Immunity Deficiency Syndrome". Moreover, metaphonology is utilized which is evident in the fact that usually an acronym is designed in order to resemble a great extent the regular lexical items.

The acronyms used in text messages could be exemplified as follows: ATB (all the best), BBFN (bye bye for now), BBL (I will be back later), CMI (call me), HAND (have a nice day), PLS (please), THNQ (thank you). According to Graeme Diamond, an editor in the New Words group at Oxford University Press, the phrase most likely to gain official sanction is LOL (Laughing Out Loud). The abundance of acronyms used with reference to SMS is captured by those publications that are devoted to explaining their meanings. *Kul* (2007:9)

If one visits websites dedicated to text messages, attached will one find a glossary containing the acronyms, should a mobile phone user need any assistance in decoding them. Some of those acronyms overlap with those used a long time ago in mail messages such as IMHO (in my humble opinion), ASAP, FYI (for your information) or the prime example of LOL (laughing out loud) and, LMHO (laughing my head off). Their familiarity can facilitate the process of construing the meaning, some of those acronyms are so frequent that the recognition is instant and poses no major difficulties.

However, text messages do not always adopt the existing, well-established internet acronyms. Crystal (2001) notes that the creativity evinces in formations capturing whole sentences or phrases instead of words. There is no denying that those new acronyms must manipulate the sentences which are frequently used or are typical for the context,

like ",,have a nice day" (HAND) or " ,,bye bye for now"(BBFN). Crystal (2001:85-6) notes that "tiny screens have motivated a whole new genre of abbreviated forms. The acronyms are no longer restricted to sentences or phrases but can be a sentence – length".

2.5 Shortening

A. Clippings and Contractions

One of the ways that are used to shorten a message is clipping and contracting some words by cutting the beginning, middle or ending of the words. Examples of the participants" tweets are shown below.

1-" Body *temp* [temperature] 39ºC is no joke. My body is burning up."

2-" Shall I depart now sleep at rnr or just depart around 4 am? Problem is I can't sleep *even tho* [eventhough] I'm quite sleepy."

3-"when I ask my parents a simple "yes" or "no" *Q* [question] and I will get a lecture."

Most clipped and contracted words in the data involve the removal of the second part of the words e.g. ,,mil" for "million" and ,,min" for a "minute". This strategy not only saves the participants" time to type their message, but it also saves the space needed to construct a tweet within the parameter of Twitter and text messages.

B. Non-Standard Spelling

Users tend to modify the spelling of a word as one of the strategies to shorten a message. According to Crystal (2008), the modification of spelling in making a word shorter and less complex does not demonstrate that a user is uneducated (as cited in NABILA,2014:68). Examples of non-standard spelling are ,,wud" for ,,would" and ,,shud" for ,,should". Most users opt to use standard spellings, they either shorten the words by modifying vowels or consonants, or both. simplification of vowels are

found in the words *would* (i.e. *wud*), *should* (i.e. *shud*) and *too* (i.e. *to*), whereas simplification of consonant was found in the word *going* (i.e. *goin*). Other items that saw the modifications of both vowels and consonants are the words *breakfast* (i.e. *bekfes*), *because* (i.e. *bcoz*) and *those* (i.e. *does*). However, the word" *evaaaaa"* that stands for*ever* has the deletion of the two final consonants „e‟ and „r‟ at the back of the word that is replaced with repeatd „a‟. This is believed to be used to emphasize the word or the meaning of the sentence. Other examples that are meant to show emphasis are illustrated in the tweets below.

-I'm not married and i don't need to be reminded every single day that I'm not and I *wud* [would] really need to.

 1-"Went to settle this thing for nothing. I *shud* [should] just have been at home doing my work."

 2-"just *bcoz* [because] a girl talks to you. doesn't mean she likes you."

2.6 The Use of Emoticons

In face-to-face interactions, nonverbal behaviour communicates quite a lot about intent.Those behaviours such as facial expressions, the placement of head and shoulders, the use of hands can deliver information, regulate the interaction, and express feelings and intimacy. In online communication, emoticons may be used to help achieve the same thing by serving as"nonverbal surrogates". (Derks, Bos, and Grumbkow, 2008: 843).

Emoticons are "graphic representations of facial expressions". Walther and D‟Addario,(2001: 324), Which deliver emotional rather than task-oriented information . and index a user‟s effective stance. Most emoticons are well known and commonly recognized symbols among

users of EMC. They often act as substitutes or surrogates for nonverbal cues, which are usually absent in text-based EMC. Sometimes they are used as a compliment to a text message. Smiling is a common human reaction mostly used to indicate happiness, hence it is not surprising that it has found a symbolic representation in EMC in the form of emoticons and smileys. There are two types of smileys, the icon (or emoji), which pictorially represents a smiling human face and keystroke-based symbolic emoticons such as **:-)**.

They have the same impact in terms of how a message is interpreted. However, some argue that the emoji smiley has a stronger impact on the personal mood of the viewer than a keystroke-based emoticon this may be due to the wide range of emoji icons now possible in EMC, or because emoji is a more realistic portrayal of human expressions.

Conclusion

Language is changed as anything in our life that is changing. Such a change can be either syntactically, semantically, or phonologically. That change can be utilized in developing the way of communication, and effect even the number of letters that can be used in a word or a sentence.

There is a belief that the use of non-standard forms online will put the future of Standard English in danger. on the other hand, it is believed " the use of shortened words and abbreviations is limited to the media. Instead, these features demonstrate the creativity of users to construct their messages, and most of the time what they want to deliver is successfully conveyed despite the non-standard forms of language that they use. Hence, rather than seeing it as degrading a language, it should be seen as users having an innovative and a good command of the language". And this innovation doesn't affect the formal language of research

Moreover, the language used in texting is somewhat more proper and closely related to the traditional written language. It has the qualities of being complete and clear which are essential in getting a message delivered clearly. Texting can be incredibly simple. "You can fill your role of returning calls and keep in touch with people without any pressure to be creative or witty. We're talking about language in its most stripped down kind of level".

References

Bethan Davies (2010) The Language of Twitter: Linguistic innovation and character limitation in short messaging. Leed, UK University of Leeds.

Crystal, D. (2001). Language and the internet. Cambridge: CUP.

Derks, D., Bos, A. E. R., & Grumbkow, J. V. (2008). Emoticons in computer-mediated communication: Social motives and social context. CyberPsychology & Behavior, 11(1).

Doring, N. (2002). Abbreviations and acronyms in SMS communication. Available at: https://www.researchgate.net/publication/292502559_Short_message_is_being_sent_Abbreviations_and_acronyms_in_SMS_communication. Retrieved march,15,2018

F.R. Palmer(1999) The English Verb. Routledge, Abingdon, UK

Fung, L., & Carter, R. (2007). New varieties, new creativities: ICQ and English-Cantonese e-discourse. Language and Literature, 16(4).

Gunilla Huddleston (2012). How the Challenges of Multilingual Tweeting are Being Overcome. Language Connect, Retrieved jan.15, 2018, from https://www.languageconnect.net/blog/education-and-training/how-the-challenges-of-multilingual-tweeting-are-being-overcome/ .

Herring, S.C. (1996) Computer-Mediated Communication: Linguistic, Social and Cross-Cultural Perspectives. Amsterdam: John Benjamins.

Kasesniemi, E. L., & Rautiainen, P. (2002). Mobile Culture of children and teenagers in Finland. In J. Katz & M. Aakhus, (Eds.), Perpetual contact: Mobile Communication, Private Talk, andPublic Performance). Cambridge: Cambridge University Press.

Ling, R. (2000). We will be reached: The use of mobile telephony among Norwegian youth. Information Technology and people. https://www.emeraldinsight.com/doi/abs/10.1108/09593840010339844 .

Małgorzata Kul (2007) Metaphonology in Text Messages. The School of English, Poznań University, Poznań, Poland.
https://repozytorium.amu.edu.pl/bitstream/10593/4109/1/Metaphonology%20in%20text%20messages%202007%20a.pdf *.*

Marchand, H. (1969). The categories and types of present-day English word formation. Alabama: University of Alabama Press.

Nancy Anashia Ong'onda (2011). Syntactic Aspects in Text Messaging . Maseno University, Maseno, Kenya,1.

Noor Aqsa Nabila(2014) LANGUAGE USE ON TWITTER AMONG MALAYSIAN L2 SPEAKERS. Kuala Lumpur: University of Malaya.

Rani Rubdy, Lubna Alsagoff (2013). the Global-Local Interface and Hybridity: Exploring Language and Identity. Bristol, London, UK.

Ronneberger-Sibold, E. (1990). Phonotactics and prosodic properties of 'short words' in German and French. (Paper prepared for the 25th International Conference on Polish-English Contrastive Linguistics, Rydzyna, December 6-8, 1990.)

Sally Johnson, Astrid Ensslin(2007) Language in the Media: Representations, Identities, Ideologies. London, UK

Shazia Aziz, Maria Shamim, Muhammad Faisal Aziz & Priya Avais. (2013). The Impact of Texting/SMS Language on Academic Writing of Students- What do we need to panic about? Elixir Ling. & Trans, 55.

Ong'onda, N. A (2009). Short message discourse: A sociolinguistic approach to Kenyan text messages. Unpublished M.A. thesis, Maseno University
.
Soffer, O. (2010). "Silence Orality": Toward a Conceptualization of the Digital Oral Features in CMC and SMS Texts. Communication Theory, 20,

Susan Herring, Dieter Stein, Tuija Virtanen (2013).Pragmatics of Computer-Mediated Communication. Berlin, New York.

Tagliamonte, S. A. & Denis, D. (2008). Linguistic ruin? LOL! Instant messaging and teen language. American Speech, 83(1).

Thurlow, C., Lengel, L.B. and Tomic, A. (2004) Computer-mediated communication: social interaction and the Internet. London: Sage.

Thurlow, C. (2011). Determined creativity: Language play in new media discourses. In R. Jones (ed.). Discourse and Creativity. London: Pearson. Retrieved from http://centaur.reading.ac.uk/66524/2/CH01.pdf .

Walther, J. B., & D'Addario, K. P. (2001). The impacts of emoticons on message interpretation in computer-mediated communication. Social Science Computer Review, 19(3).

Zuzana Topolska (2015). The Influence of Text Messaging Systems on Interpersonal Communication. SUNY Empire State College.new york state, USA.