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The Reduction and Simplification of English Grammar during Computer Mediated Communication in Pakistani Context

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ABSTRACT

Computer Mediated Communication (CMC) is proliferating like anything in our lives. Communication theorists have been exploring its various dimensions; however, CMC grammar appears to be a less attempted area. The concept of CMC grammar seems to be an emerging phenomenon in mediatedcommunication. To explore this phenomenon, the present study sets out to investigate the identified forms of CMC grammar of students at graduate level in Pakistan. A sample of 50 BS students was chosen to address the core research questions. The data was collected primarily from the verbal postings of the participants from facebook walls of selected students. To avoid superficiality, the study was backed by imperial findings and factual details. The study reveals that English Grammar is subject to reduction and simplification in computer mediated-communication. elements of reduction and simplification can be characterised by subject omission, copula deletion and absence of auxiliaries in progressive and interrogative situation. These features are so widespread that they are increasingly getting stable and intelligible across the board. The study speculates that ever- increasing proliferation of these features signposts a unique grammar which is the central investigation of this study.

Keywords: CMC, grammar, delition, omission, subject, copula, auxiliary

Introduction

The purpose of this exploratory study is to identify the syntactic forms of Computer-Mediated

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Communication (CMC) among users in Pakistan. The study presumes that the ubiquity of CMC forms suggests the proliferation of informal grammar, which can be characterized by its peculiar forms. Rafi (2018) defines linguistic simplification through linguistic topographies such as an increase in lexical and morphological transparency, loss of allomorphy and regularization of irregularities. Moreover, these practices represent the form that eventually provides a bed rock upon which segmental and structural derivations are carried out. Furthermore, Rafi (2018) explains linguistic complexity as an absolutely reverse viewpoint that contains a rise in linguistic opacity, increase in linguistic redundancy, and irregularization of regular forms.

According to Oxford Dictionary online (2017) grammar means the knowledge to arrange words in a systematic way to form a sentence. Text-based CMC has influenced the general patterns of natural languages, some noticeable features are usually observed in CMC grammar. Transformation in grammar is a natural consequence of language change. Presumably, there are some features which are more or less observed in all types of CMC discourse. There are several distinctive grammatical features which are closely observed in CMC grammar. The present study has come up with different emerging patterns such as: subject omission, copula deletion, absence of auxiliaries, one word response, and concord, unusual use of preposition, interrogative patterns, and syntactic arrangements. Some of the examples are discussed in the following passage to set a clear understanding for the subject.

Subject which is the core of a sentence and whole information revolves around it is observed missing for example, *am going, like it* etc. Likewise, copula carries important place in a sentence where it is required. Copula deletion is functional feature of several languages and African-American vernacular English is the prominent example of this type, e.g., *I going*. Instead of I am going. Similar to vernacular English CMC grammar gives vivid clear indication of copula deletion. e.g. *you crazy. He mad.* etc.

Another feature of CMC grammar is concord. Concord means, as Robertson (2001) says the agreement of connected words respect to their gender, number, person, or case. e.g., *He goes to Japan tomorrow*, here the verb *goes* is in the third person singular because its subject, the pronoun *He* is in the third person singular. In other words, the verb agrees with the subject in number and person. But CMC grammar is found free of these rules, for example, *She go*. In this example third person singular pronoun is the subject but verb used here is without *-es* inflection. In any language, agreement between subject and verb in a sentence is very important. In English when two nouns or pronouns are joined together by and the verb should be in plural, e.g., *John and I were in school together*. In the same way when two nouns refer to same person or thing, the verb is in the singular. e.g., *me and my friend are going on a party tonight*, but CMC holds some instances in reverse e.g., *bro! you and ali is gonna play a game with me*. While considering CMC grammar, it can be noticed that users don't follow these rules strictly. CMC has given clues of using verb in a different way. Verb is reversely made to agree with the noun near it instead of making it agree with its own subject: as *His knowledge of all the lessons are good*. The verb *are* in this sentence is wrongly used. The subject of the sentence is *knowledge* and not

lessons. The subject *knowledge* is singular. So, according to standard patterns of English, the verb too must be in the singular, that is, the verb should be *is* not *are*.

Research Question

The study seeks to investigate the following research question:

What are the forms of CMC grammar in Pakistani context among students at graduate level?

Significance of the study

Since the fast-rising recognition of cyber world, text based communication has become striking to scholarly attention. Subsequently, several researchers have promoted their scholarships in the field. Likewise, the present study contributes certain points which are realized after probing into the gaps in previous researches and adds some novice ideas in different dimensions. First, the research is significant as it describes the grammar form of CMC and data is collected from facebook. Previous researches such as Baron (2008, 2003, 2001), Crook (1985). Crystal, D. (2001, 1995), Herring (2013, 2011, 2011, 2008, 1996), Jacobs (2003) Ko (1996) and Lee (2002) have explored different modes such as emails, instant messages and SMS etc, but facebook has been less considered for data collection. Second, the present study gives a vivid and detailed description of grammar of CMC, whereas previous researches lack explicit view of grammar in the field rather they provide morphological and sociolinguistics view such as word formation and gender differences etc.

Research Objectives

Following are the research objectives:

- To investigate the grammar patterns of English used by the Pakistani students in CMC
- To discover the diversity in grammar between CMC form and Standard English

Literature Review

To begin with essentials of CMC, while defining CMC Baron (2002) suggested that as any natural language messaging which is transmitted and/or received via a computer connection is called computer mediated communication. Ko (1996) regards Computer mediated writing as a great advancement. Ko (1996) claims that computer mediated discourse as written (typed) medium but with a different language component. CMC as the combination of written and spoken medium, drove Murray (2002) to assert that CMC has linguistic features of both spoken and written languages. Leech, Deuchar and Hoogenraad (2006) add electronic communication using internet or in other words CMC is a fascinating merger of these both modes.

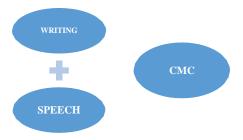


Figure 1. CMC Mode

Herring (2011) states that grammar in computer meditated communication (CMC) differs that electronic language, as a new and still evolving phenomenon, has not yet had time (nor attained the requisite social status) to become formalized in "rules;" rather, it exhibits patterns that vary according to technological and situational contexts. Herring (2011) claims that the set of features that characterize the grammar of electronic language is referred to henceforth as *e-grammar*, although the use of this term is not intended to imply that there is a single grammar for all varieties of computer-mediated language. Crystal (2001) has suggested the term "Net speak" to refer to CMC as a single language variety, but considerably observed substantiation points to e-grammar as skewed thoroughly across languages, contexts, users, and technological modes (e.g., Bieswanger, 2007; Herring, 2007; Johanyak, 1997).

Baron (2001) informs us in her paper that English speaking communities care immensely about dialect and grammatical rules and enjoy basking in the intricacy of their language. One particular set of skills these communities use is adapting their language according to the present situation giving the user a unique sense of self. According to Leech, Deuchar, and Hoogenrad (2006) mode interacts with medium and how language is transmitted; spoken and written. This study holds its own standing since past researchers say that CMC is closer to spoken while the study assumes the CMC grammar is dependent on pragmatic and sociolinguistic clues as opposed to full linguistic forms.

Many researchers have investigated the form of email in structural linguistic, and pragmatics but amongst them, Baron (2001) explains that exploring the realm of email is like the development of a pidgin or creole in terms of contact system approach. She explains to us that while the system has an identifiable grammar, diversity exists amongst users and usages. Further, Baron (2001) explores how email has a close relation with speech, writing or mix variety, linguistically. CMC is an evolving phenomenon making it harder to categorize under a single category.

Cho (2010) has studied linguistic features of email at workplace and memorandum at academic setting and later he claims that the number of internet users has increased for interpersonal communication. Cho's detailed analysis of grammatical structure becomes the real focus point of the present study, informing us that the omission of pronouns, articles, form of verb BE and THERE are noticeable.

Hard of Segarstad (2002) closely looked at the number of occurrences and subject matter of the messages but did not reveal any linguistic feature in his research. Baron (2004) in her

study investigated gender issues among college students while using instant messaging. Moreover, she has highlighted the linguistic variables such as arrangement of words, moves, communicative expansion, and lexical concerns; contractions, abbreviation of words of words and phrases as well as emoticons as paralinguistic notion. In Baron (2007), a comparative study of IM and SMS is found in which author has analyzed paralinguistic features such as punctuation use in innovative way. However, the main idea of conducting her study was to explore the differences between traditional mobile messaging and Instant Messaging and how mobile messaging influences instant messaging.

Aslam, Ahmad and Sajid (2011) have investigated the norms of spelling, capitalization, and punctuation features of IM. Considering this the orthographic data were examined by forming diverse categories of participants' essential spelling patterns. The data exemplified the abundant use of implicit writing system such as 'bz' for 'busy', 'wid' for 'with', 'u' for 'you' etc. The study summed up saying that due to several rapidly emerging ways of communication CMC has caused unique orthographic patterns of English language.

Randal's (2002) research has paid attention on emoticons, abbreviations, acronyms, contractions and casually used grammar in Instant Messaging. Moreover, Baron (2010) has investigated linguistics variables explicitly discourse scaffolding, lexical intricacies and gender differences. She also highlighted the grammatical categories under the umbrella of computational linguistics with codification and analysis. Baron's (2010) IM corpus advocates independent clause as the most prominent syntactic feature. Whereas, Taglimonte (2007) has figured out distribution of quantitative verbs, second person singular pronoun, future temporal reference and deontic modals by medium to understand the irregularity English usage among teen agers.

Thurlow and Poff (2011) have citied Durcheid (2002) who explored omission of auxiliary verbs, personal pronouns and functional categories of grammar widespread in Germany. Thurlow and poff (2011) have also acknowledged the work of Hard of Segestad (2002) which suggests the omission of subjective pronoun is the most frequent structural reduction in Swedish SMS. Durcheid's (2002) work has stated that texters usually take language free of context.

Ling (2004) studied Norwegian text messages (SMS) to find out how age and gender affect linguistic features. Thurlow (2003) has studied the effects of CMC on the language of youth and for it he took the mobile messages of youth as corpus of study. Shaban (2010) also collected SMS for his study to figure out typographical differences in terms of gender.

Herring (2011) states in her article that facebook endorses 3rd person present tense declarations by offering the predetermined prompt [Username] is for the user's own status updates. Moreover, Herring (2011) includes that this predetermined prompt furnishes mount to incoherent convention of 1st person pronoun and tense. Furthermore, mixed constructions are also expected on facebook for Herring (2011).

Werry's (1996) investigation on IRC indicates the analysis of prosodic features, conversation organization and abbreviations in his research. Hentchel (1998) explored prosody, lexicon, orthography and turn taking features of IRC. Whereas Pailillo (1999) exposed the use of local dialect and the exercising of Roman keyboard set to inscribe in Arabic through IRC. Rafi

(2017) has studied the identities and power relationship in digital discourse. He has measured the influence of bilingualism and multilingualism in diffusing and mixing the local identities in digital discourse.

Methodology

The research is based on qualitative method. In phase one, in order to maintain homogeneity, a separate account on facebook was generated in which almost two hundred students of BS Engineering Technology of a private university were added. Teaching at the university facilitated the researcher to invite her students on facebook which made an easy access of facebook profiles as well as familiarity with their educational and cultural background. Moreover, students were found true representative of the population because of two observable facts: major part of youth is more into using facebook and they were from mainstreams of the country.

In second phase, the students who were falling between eighteen to twenty years of age were shortlisted and fifty out of them were randomly selected whose walls were visible to the researcher for collection of data to examine the grammar form. The participants belong to the same university and the same domain of study, therefore the element of familiarity with each other was observed which allowed them to be opened. In order to fulfil ethical demand, participants were taken into confidence that their data will be manipulated neither for any subjective evaluation nor personal judgments.

In third phase, participants' walls were viewed in detail and it was realised that three varieties are prevalent: English, Urdu and a blend of English-Urdu which gave much diversity to the data. In order to narrow down the study, only English variety was focused and first six most recent instances were gathered from the walls of the participants without making them conscious. However, gathering six utterances is found a reasonable score for the realization of recurrent linguistics blueprint of each participant.

In fourth phase, each participant was given a pseudo name through alphabets and data were arranged according to their pseudo name and number of occurrence of instances. The total utterances gathered to see the form of CMC grammar were three hundred. Consequently sample size extrapolates to enhance the general validity. Data were arranged in tabular form according to the patterns.

Data Analysis and Discussion

The analysis is based on collection of comparable data in which patterns of interaction are observed. The collection of data for this research are a bringing together of things that have been noticed to be similar in some sense in order to explicate the ways in which they are similar and the ways in which they differ so as to understand how similarities and differences are orderly and meaningful. Since the first part of this investigation was based on form of CMC grammar, so prime focus of the first part of data analysis along with discussion is based onto CMC and how it differs from Standard English. While observing collected data (in the form of appendix 1), all the utterances are distributed in certain categories. On the basis of this observation, all the

distributed categories are assembled in tables systematically. First column of each table reports about the participants with their pseudo names, whereas second and third column give accounts of CMC form and form of Standard English respectively.

Subject omission is the first feature of CMC form which is observed very frequently. Generally, noun or pronoun is the subject of a sentence or an independent clause. Subject is the one who performs an action that can be physical or mental and remaining part of the sentence or clause provides information about the subject. The following table 1 gives evidence of this naturally emerging pattern in CMC environment.

Table 1. Pronoun as Subject Omission

Part.	CMC Form of Grammar	Standard Form of Grammar
A4	love u my all sweet frnds	I love you m friends
E4	m not serious	I am not serious
F4	can ask u sumthin???????	Can i ask you something?
G1	hmnnn lykd it	i liked it
Н3	anhaaan got ur point	I got your point
H2	: had a gr8 time at UCP	I had a great fun at UCP
K1	Have fun in uni	I have fun in university
Q1	have seen other pics	I have seen other pictures
T1	Like it.	I like it
U2	Missed that event.	I missed that event.
V1	m going	I am going.
V5	m playing	I am playing.
W1	don't like it	I don't like it.
W2	wanna place in ur heart	I want place in your heart
AA1	dont wana go out!!	I don't want to go out.
TT5	Lv u Frnds	I love you my friends
WW3	try to come in this semester :(I try to come in this semester

There are seventeen out of three hundred utterances in left column of the above shown table which clearly indicate the examples of subject omission. Usually in declarative sentences such omission is restricted in Standard English (shown in right column of the table). Quirk, Greenbaum Leech and Svartvik (2010) have determined the expectation of such deletion in generally spoken English as phonologically phenomenon. Secondly after considering the syntactic patterns and context of their occurrences, it is observed that all the subject omission cases belong to first person pronoun *I*; for instance *K1*: have fun in university and *T1*: like it. These examples are also shown through tree diagram exposed below with the comparison of Standard English

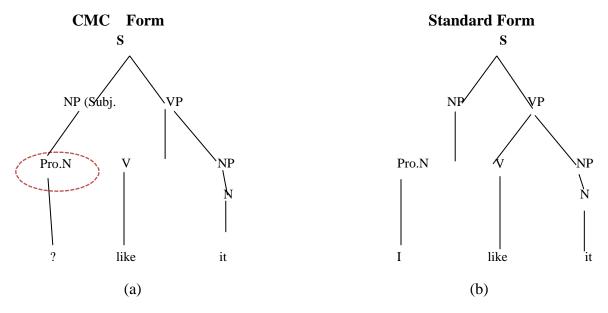


Figure 2. Pronoun as Subject Omission

The figure 2 (a) and 2 (b) both expose the difference in terms of structures. (a) Figure is the representation of CMC form and (b) is the representation of Standard form of English. The first NP which further extended itself to pronoun, has indicated with Pro. N is empty slot in (a) whereas in (b), the gap is filled with the subject and first person Pronoun *I*. Another example is structurally depicted through tree in the followings, in which subject is found missing.

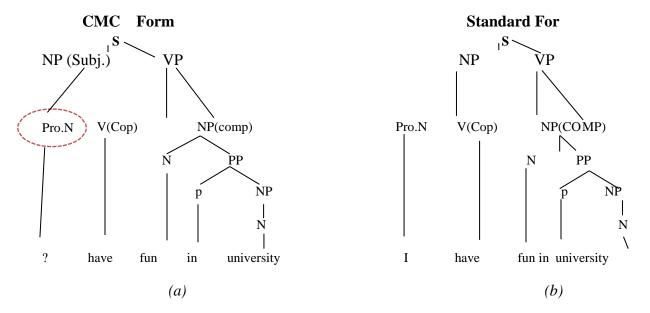


Figure 3. Pronoun as Subject Omission

Though Figure 3 is structurally from Figure 2 but both indicate pronoun as subject omission and expected subject is first person pronoun *I*. because it refers to the individual who refers to have fun in university.

Moreover, the collected data reports that subject omission is the most frequent feature which naturally occurs in CMC. Since the table 1 gives clue of the cases of subject omission only but it can be observed in later part of this chapter that subject omission in other combination is projected too.

Another feature in this stream was the absence of *copula* in certain utterances where it is customarily found in Standard English. According to Oxford Advanced Learner Dictionary, copula is known as linking verb that connects subject with noun or adjective directly. Since there were three hundred utterances in corpora whereas eighteen out of them fall into the category of Copula Deletion as these are shown in following Table 2

Table 2. Copula Deletion

Part.	CMC Form of Grammar	Standard Form of Grammar
E1	yea I wid U	Yea i am with you
E3	examz over	Exams are over
E6	me bzzzzzzzzzz	I am busy
H6	momo n me both f9	Momo and I both are fine
L5	We close friend	We are close friends
L6	You beautiful	You are beautiful
M5	Girls very smart	Girls are very smart
M6	President assassinated by terrorists	President is assassinated by terrorists
Q5	i think paper little bit short	I think paper was little bit short
S3	Me happy.	I am happy
S5	Me confused	I am confused
S 6	Me not surprised	I am surprised
T3	Me amazed.	I am amazed
T5	I impressed.	I am impressed
FF3	Me fine	I am fine
KK1	You so qute	You are so cute
LL2	u wel cme.	You are welcome
RR1	u wlcm.	You are welcome

All the above mentioned cases of *copula deletion* are of *stative verb* which are used primarily to describe a state or situation e.g. as first instance in table *E1: yea i with u* and last *RR1: u wlcm* whereas Standard English usually carries copula of stative form which are *am* and *are* in the following cases: *E1: yea I am with you* and in *RR1 you are welcome*.

Copula deletion in nine out of eighteen or in other words half utterances of this category is in first person environment which go for am and are whereas remaining half is in second and third person environment. See the following tree

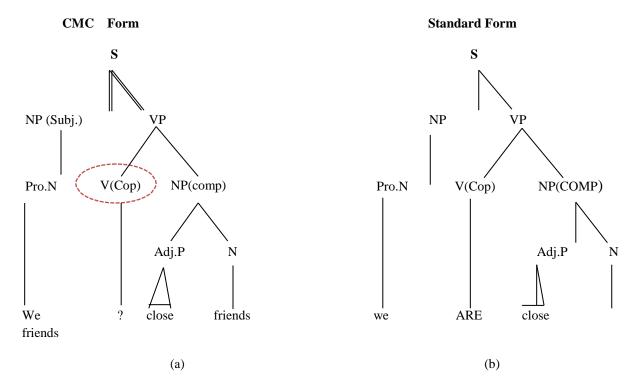


Figure 4. Copula Deletion

In the figure 4 (a) the absence of copula can be observed which is shown through a question mark. The expected copular form is shown in standard form Figure 4 (b).

The sub feature which is noticed while analysing first person singular narrative where copula is deleted that in most of the cases of this kind pronoun *me* has replaced the pronoun *I* e.g. *E6: me bzzzzzzzz, S3: me happy, S5: me confused, T3: me amazed, FF3 me fine* and one of negations *S6: me not surprised.* See the following tree analysis to have a clear idea of the structure

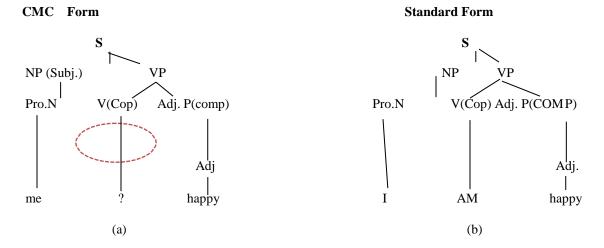


Figure 5. Copula Deletion

The analysis of this category shows the copula deletion from the structure is worth mentioning task where it contains predicate adjective and predicate nominal. Adjective and noun usually follow copulative verb which refer back to the subject known as predicate adjective and predicate nominative. Predicate adjective tells about the attribute of the subjects and predicate nominal tells about the situation or state of the subject. Generally copula helps to connect adjective or noun with its subject mainly because sentence cannot exist without verb and copula works as main verb in these kinds of sentences. On the contrary CMC grammar tells a different story. *Copula* is frequently deleted. On the other hand copula deletion in CMC environment seems comparable with African American Vernacular English. (AAVE). Labov (2001) stated in that AAVE does not use copula. Moreover he has added that it is not the only case, rather many languages such as Hebrew, Hungarian, Russian and many Creole languages of Caribbean carry this feature.

Since it is said in earlier part of this chapter that subject omission is the most occurring feature in CMC, it can be rightly said that deletion of copula is also found that much frequently. As it is reported before in the chapter that subject omission is observed in the combination of other components, yet a major part of the data clearly hints the reduction in the combination of subject and copula. See the table below:

Table 3. Pronoun as Subject and Copula Deletion

Part.	CMC Form of Grammar	Standard Form of Grammar
A5	I hope everyone fine.	I hope everyone is fine
B4	my fvrt plyr	He is my favourite player
C3	nice place	It is a nice player
C4	nice pic dear	DearThat is nice
C5	nice pics	These are nice pictures
D1	one of my favorite songs!	It is one of my favourite songs
D2	Awesome lyrics!!	These are awesome lyrics
E3	so happyy :D	I am so happy
F1	nothinG to dO!!!!!!!!	There is nothing to do
I3	lOST thE match	Pakistan lost the match
I6	nceee dp:)	It is a nice display picture
K2	No affense . but u r so stupid.	I have no offence
Y4	gonna light the fire	I was going to lit the fire
Z 6	more options	There are more options
AA1	in bed	He is in bed
AA2	at BBQ 2nite!! yummy environment!!	I was at BBQ 2nitethere was yummy environment
AA3	ahhh awsum plce n awsum tste	It is an awesome place and has an awesome taste.
DD5	sometimes nothing to say	Sometimes, there is nothing to say
JJ1	Sorry network problem	Sorry there is a network problem
LL1	very beautiful pictheR	It is a very beautiful picture
RR3	yr great pic	Yaar it is a great picture
SS2	busy these days	I am busy in these days
SS3	busy in mid	I am busy in mid
TT4	nice memories)	These are nice memories
VV1	nyc piccc	It is a nice picture
VV2	good idea	It is a good idea
VV4	owsome place!!!	It is an awesome place
VV5	vry nice	It is very nice
XX6	vry smart answer :-D:-	It is a very smart answer

The table shown above indicates that there are thirty-two utterances out of three hundred which carry the largely emerging pattern of Pronoun as subject and copula deletions. Followings are the three examples which can elaborate their structure and place.

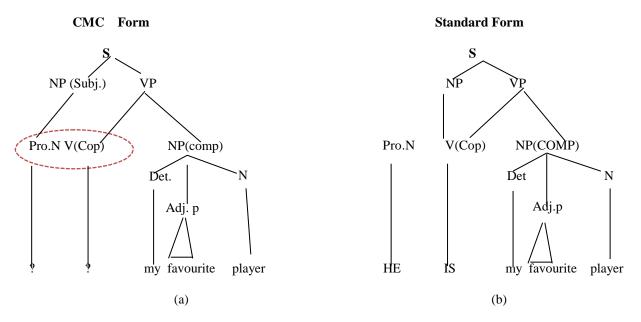


Figure 6. Pronoun as Subject and Copula Deletion

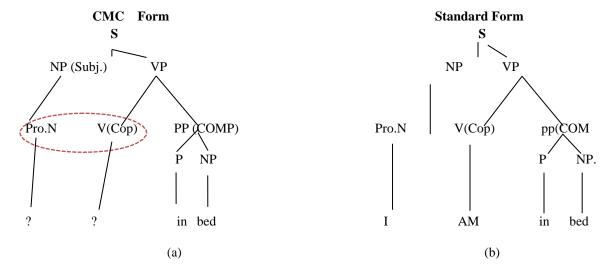


Figure 7. Pronoun as Subject and Copula Deletion

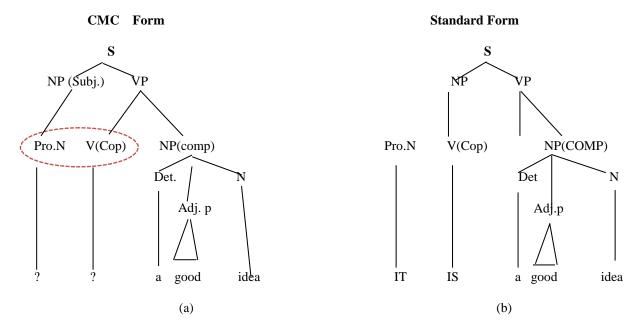


Figure 8. Pronoun as Subject and Copula Deletion

The examples B4: good player, AA1: in bed, and VV2: good idea are taken from the table 3 for tree analysis in order to show you the structure as in Figures 6, 7 and 8 respectively. The expected subject and copula in Figure 6 is *He* and *Is* whereas in Figure 7, subject is *I* and copula is *am*. As far as the subject in Figure 8 is concerned, it is expectedly non referential *It* and *Is* are copula. In these three above examples (a) subject and copula are deleted but in all the (b)s are highlighted with subject and copula as they are the necessary elements of standard form of English.

Another interesting feature which behaves differently in CMC environment is known as auxiliary. According to Aarts (1997) the verbs that function as helping verb and cannot occur independently are called auxiliary verbs. Auxiliary are used in different aspects. One aspect of auxiliary is progressive. Progressive as name itself indicates; a happening in progressive at a given time. Following tabular data illustrate the omission of progressive auxiliary.

Table 4. Absence of Progressive Auxiliaries

Part.	CMC Form of Grammar	Standard Form of Grammar
	Me doing	I am doing
F2	My Cuteeeeeee sis enjoying IN Mall Of Lhr	My cute sister is enjoying in the mall of Lahore
G6	lyf goin gr8	Life is going great
M2	We drinking juice	We are drinking Juice
M3	They enjoying party	They are enjoying party
N3	Me cooking food for u	I was cooking food for you
O1	car moving by itself in madina	Car is moving itself in Madina
R 6	Me going.	I am going
S6	Me not surprised	I was not surprised
X6	me w8ing 4r u	I am waiting for you
Z1	Me gonna lhr.	I am going to Lahore
CC3	Me playing	I am playing
DD2	Me going	I am going

DD4	Me doing	I am doing
FF2	Me going	I am going
JJ2	Me coming	I am coming
SS1	me going	I am going
XX2	darkness looking good	Darkness is looking good

The table 4 shows that eighteen utterances out of three hundred give clue of the absence of progressive auxiliary. The expected auxiliary which are absent in these utterances are the four different forms of BE. In three out of eighteen utterances, second person singular present *is*; nine out of eighteen are first person singular present form of auxiliary *am*; in two second person singular and plural and third person plural present auxiliary *are* and in only two first, second as well as third singular person past auxiliary *was* found missing. Following are the two utterances G6: lyf goin gr8 and N3: Me cooking food for u which are shown through tree diagram to have a glimpse of structural difference between standard form and CMC form:

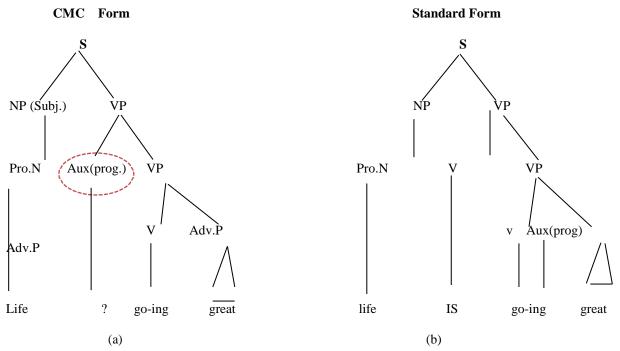


Figure 9. Absence of Progressive Auxiliaries

The above figure 9 (a) shows that the expected auxiliary Is as it is present in standard form (b) is missing and that omission is shown through question mark and here is one more tree diagram to have a clear idea in the following figure:

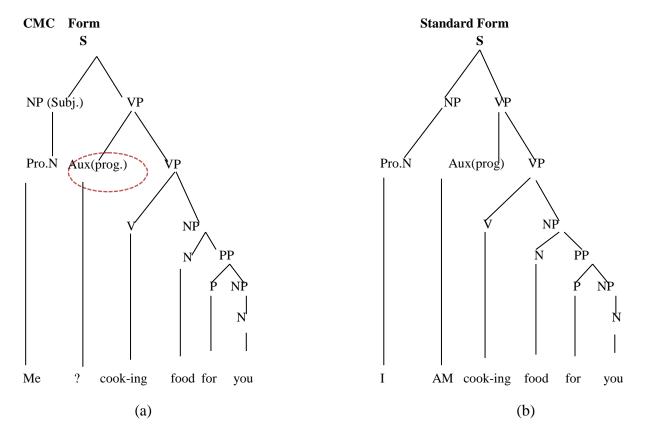


Figure 10. Absence of Progressive Auxiliaries

The Figure 10 (a) shows that first person auxiliary in progressive is missing as it is done bold in 10 (b) in order to highlight. Another distinguished feature noted in CMC environment while analysing progressive auxiliary behaviour that twelve out of eighteen utterances carry the subject *Me* along with omission of auxiliary instead of *I am*. The above Figure also indicates this phenomenon.

As it is mentioned before that deletion of pronoun as subject with different combination was expected to be discussed so the data gives indication that pronoun as subject along with progressive auxiliary found omitted in CMC environment too. There is a case in the following which illustrates data of this largely emerging pattern.

 Table 5. Pronoun as Subject and Progressive auxiliary Omission

Part.	CMC Form of Grammar	Standard Form of Grammar
A3	missing u alot	I am missing you a lot
B1	hey looking cute	You are looking cute
C2	looking soo nice dear	You are looking so nice dear!
D3	hey looking cute	Heyyou are looking cute
D4	looking so cool	You are looking so cool
E2	looking so cool	You are looking so cool
E4	just telling u the truth	I am just telling you the truth
E5	GettInG bOR!!!!!!!!!!!	I am getting bore
F1	nothinG to dO!!!!!!!!!	There is nothing to do
F3	luking so beautiful	You are looking so beautiful
G2	feelin so mch wknes	I am feeling so much weakness
G3	tokin 2 ma czn	I am talking to my cousin
G4	lukin nyc	You are looking nice
G5	lukin difrnt	You are looking different
H1	missing u sooooooo mch	I am missing you so much
H5	hating monday feeling	I am hating monday feeling
I1	now feeLing bettEr aftEr	Now i am feeling better after that
I4	not geTTing sleEp :(I am not getting asleep
I5	BoRINg LIFeeeE!!!!!	It is a boring life
I5	just siTting alOnee: (: (: (: (: (: (: (: (: (: (: (: (: (:	I am just sitting alone
J4	What doing?	What are you doing
J5	coming!	I am coming
R3	Leaving for Lahore	I am leaving for Lahore
R5	Please wait, coming there	Please wait I am coming there
S4	Just thinking	I am just thinking
U3	When coming back?	When are you coming back?
U6	using f.b	I am using facebook
V2	going fr wrk	I am going for work
V3	watching TV	He is watching TV
Y4	gonna light the fire	I was going to it the fire
DD5	sometimes nothing to say	Sometimes, there is nothing to say
DD6	When making y0ur ch0ices in life,	When you are making choices in life
FF6	Just kidding	I was just kidding
GG6	Just chatting	I was just chatting
QQ2	hiiiiiii nice luking yaaar	Hi you are looking nice yaar
TT2	BoRINg LIFeeeE!!!!! :(just siTting	It is a boring lifeI am sitting alone
	alOnee: (: (: (: (: (: (: (: (: (: (: (: (: (:	-
UU3	GOING NOW	I am going now
VV3	going home now	I am going home now
VV6	coming soon	It is coming soon
XX1	really missing u :-(:-(I am really missing you

The data in the above shown table indicates that there are forty utterances out of three hundred which fall into this category. It becomes the most vivid and loud emerging pattern in CMC.

Moreover, to see structural detail some of the utterances are taken for tree analysis as they are *FF6: just missing* and *XX1: really missing you*. See the Figures below.

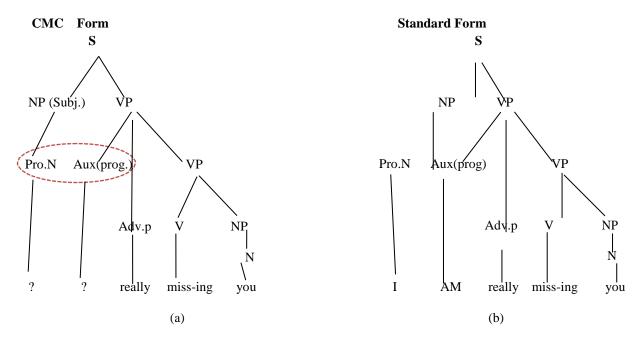


Figure 11. Pronoun as Subject and Progressive auxiliary Omission

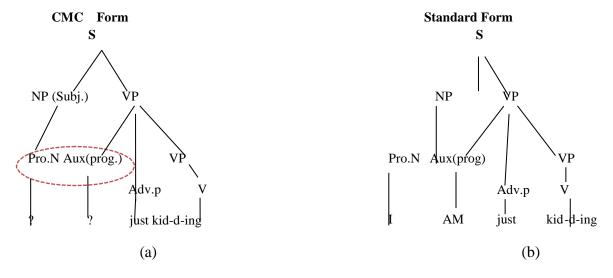


Figure 12. Pronoun as Subject and Progressive auxiliary Omission

The expected subject and copula in both Figures 11 and 12 are the same as they are *I* and *am* respectively and rest of constituents are at the same position as they are standard form of English shown in respective Figures (b).

Usually auxiliaries and copula behave differently in interrogative sentences. As the rest of the emerging patterns in CMC, interrogative mood are also found unique as compared to

Standard form of English. The following table shows the behaviour of auxiliaries and copula in interrogatives in CMC environment and also shows the set patterns of interrogatives of Standard form of English.

Table 6. Copula and Auxiliary behaviour in Interrogative

Part.	CMC Form of Grammar	Standard Form of Grammar
A2	How my new look frnds???????	Friends! How is my new look?
F6	u stil in hosp??????	Are you still in hospital?
J1	Where u been ?	Where have you been?
J2	Wt ya doin?	What are you doing?
L1	You coming????	Are you coming?
R4	Where U going?	Where are you going?
S 1	Where laptop?	Where is the laptop?
W6	I go???	Do I go?
AA5	how u doin n where u from?	How are you doing and where are you from?
DD5	I right??	Am I right?
MM3	wat da price of this car	What is the price of this car?
MM6	.u hv cam ??	Do you have cam?
NN3	wat u doing lhr	What are you doing in Lahore?
NN5	hmmm itx impossible???????	Hmnnn! Is it possible?
OO4	me fit nd u?	I am fit and what about you?
OO5	where u frm ??	Where are you from?
QQ5	ur family???	How is your family
RR6	What activities today	What are the activities today
SS6	U OK??????????	Are you ok?
WW4	umer its real picor not ???	Umer! Is it real picture or not?

The table shown above indicates that there are twenty interrogative utterances in which auxiliaries and copula have behaved differently. Interrogative sentences are normally used to ask questions. As there are two kinds of interrogative structures namely YES/NO interrogative and WH- interrogative. Utterances F6, L1, W6, DD5, MM6 and NN5 are referred to Yes/ No interrogatives because they elicit either Yes or No answers. Whereas utterances A2, J1, J2, R4, S1, AA5, MM3, NN3 and OO4 are referred as Wh- interrogatives open interrogatives because they elicit an infinite range of answers. The initial position in the clause and sentence is a general characteristic of WH- words. When their role is interrogative through the use of Wh words, the identification of the subject, object, compliment or an adverbial of a sentence can be asked Aarts (1995). There can be a variety of reasons and explanations in response to these questions e.g. A2: how my new look friends??, J2: what u doing? and S1: where laptop? The expected auxiliaries and copula are is, are and is respectively etc. These auxiliaries and copula are observed omitted. Yes/ No interrogatives in CMC are found syntactically different from Standard English Yes/ No interrogatives. In Standard English Yes/No interrogatives inversion of the subject with an auxiliary is displayed, L1: you coming?, DD5:I right?, MM6: you have cam and NN5: hmnnn. it possible? Do not exhibit any inversion rather auxiliary is omitted. Usually when a simple statement has a Copula, it directly follows the subject provisionally defined as the first or only

defined auxiliary and it has a crucial role in the formation of questions. By reversing the order of a subject and copula, statement can be changed into YES or NO question. but on the contrary CMC form as in *F6*: *u still in hospital? are is missing*. Similarly, if there is no copula in corresponding interrogative the verb Do is used as the Dummy auxiliary to perform the function of it e.g. *W6*: *i go?* which is expected to be as *do i go?* in standard form. Whereas in order to show interrogative mood, participants have used '?' Question mark.

The collected data from facebook walls has also given a clear indication another emerging pattern that is to say one word response. The data is shown in table below along with its expected complete form according to Standard English.

Table 7. One Word Response

Part.	CMC Form of Grammar	Standard Form of Grammar
J5	coming!	I am coming there
O3	Dangerous!	It is a dangerous dive
T2	Nice	The dress is nice
V6	lovely!!!	Baby is so lovely
X1	true	That is true
X3	Xlent!	It is an excellent work
BB6	Fi9	I am fine
KK2	CutE	She is a cute girl
KK6	Nice	It is nice picture
PP3	Nyc	It is nicely said
RR4	Oooosam	It is an awesome look
SS5	gr8	That sounds great
UU1	SUPERRRRRRRRRRRRRRRB!!!	It is superb idea
WW1	Awesome	It is an awesome place

Since three hundred utterances were collected. Fourteen out of them fall in the category of one word response. Thirteen utterances are based on adjective phrases and the remaining only instance *J5: coming* indicates that it is showing a kind of action which refers to verb phrase. It is observed that adjective phrases as in one word response O3, KK2, KK6, RR4, UU1 and WW1 are working as in attributive position whereas T2, V6, X1, X3, BB6 and SS5 take predicative position. However these utterances are written in its complete sentential form according to context from where they are gathered. To illustrate this point more vividly, the first one word response which is an adjective phrase *O3: Dangerous* is a comment on picture where a boy was diving in water. The possible comment in its full fledge sentence could be it is a dangerous dive.

It is observed and analysed so far that reduction and simplification are the hallmarks of CMC grammar form, but data give hints that there are some other features too. Inversion of syntactic components is one of them. The following table is based upon such syntactic arrangements.

Table 8. Odd Syntactic Arrangement

Part.	CMC Form of Grammar	Standard Form of Grammar
J1	Stupid question asking	You are asking stupid question
J2	so nice ur dress	Your dress is so nice
M1	I reach yesterday home	I reached home yesterday
O4	masjid nabawi umbrella roof open	Umbrella opens of roof of masjid Nabwi
P4	so naice is ur dress	Your dress is so nice
W3	just for a min w8	Just wait for a minute
EE3	she still is unexplored!;)	She is still unexplored

The table 8 indicates that seven out of three hundred utterances fall in the category of odd syntactic arrangement. To show their structural form and what could be expected out of these structures, two utterances are taken into consideration for tree analysis. See the figures below:

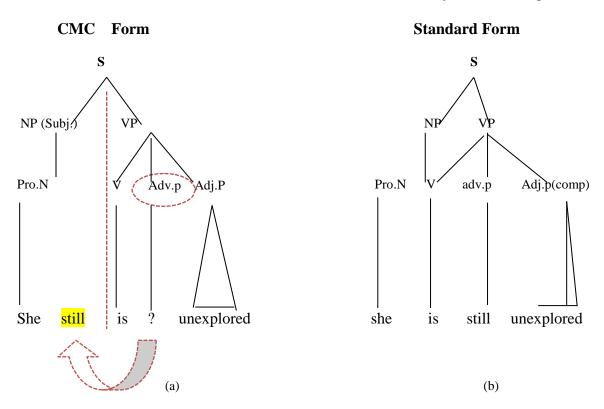


Figure 13. Odd Syntactic Arrangement

This structural analysis is done of instance EE1: she still is in hospital. The participant has inversed the adverbial phrase from the middle position of copula to the middle of pronoun and copula verb. Though adverb has potential to switch from one place to some other specific place still they are restricted. The adverb in this sentence still has capacity to occur at the beginning of the sentence. As it could be *still she is unexplored*. This Instance is similar to M1: *she came yesterday home*. The possible place of adverbial phrase *yesterday* was either in the beginning of the sentence or at last but not between verb and object according to the rule of standard form of English. There is one more construction for tree analysis in the following figure:

CMC Form **Standard Form** Adv.P Adi.p ΝP V(Cop) NP(comp) Poss. Pro N V(Cop) Adj.p(comp) poss.pro int Ady.p dress dress so nice (b)

Figure 14. Odd Syntactic Arrangement

The Figure 14 is based on instance P4. The analysis shows that this is the case of inversion between adjective and adverbial phrase on one hand and noun phrase on the other. According to the rule the noun phrase your dress will be at first position or at the place of subject whereas adverbial phrase and adjective will be at the end after verb to make a compliment as shown in Figure (b).

However, it is stated above that there are only seven instances which are falling in this category and still each case seems different. Therefore it is hard to announce that this category can be announced as an emergence of CMC pattern. Probably it is due to the limitation of data size or it might be language errors on the part of participants as they do not belong to native background.

There are two more categories which fall in the same controversy namely; concord and use of preposition. The table based on concord is given below to illustrate the data regarding that along with the standard form.

Table 9. Concord

Part.	CMC Form of Grammar	Standard Form of Grammar
A6	this iz make by me	This is made by me
B6	hows u?	How are you?
C6	r u lyk it?????	Do you like it?
D6	WHR DO U LIVED????????	Where do you live?
F5	u wz the one of them	You were one of them
H4	she like it	She likes it
J6	He go to school now	He goes to school now
L2	Have u go????	Have you gone?
M1	I reach yesterday home	I reached home yesterday
N5	Will saw you later	I will see you later
N6	Had you knows??	Do you know?
P3	thanks moazzam for share.	Thank you moazzam for sharing
P5	i,m often sy 2 arsaln teach me and i,m again 4gt it	I often say to arslan to teach me and i again forgot it
T4	Please not disturb.	Please do not disturb

QQ3	i'm call u back later	I'll call you back later
RR5	u not understand my prob	You don't understand my problem
SS4	u is going to take TEA	You are going to take tea

The table shows that there are seventeen utterances out of three hundred utterances which fall in the category of concord. Concord deals with the agreement in subject and verb in grammar. As per the data is found, it provides the vivid clues of violation of concord. In A6: this is make by me. It is a passive form of sentence and it the verb make demands tense inflection here as it is shown in standard form made. Inflection encodes grammatical properties of the verb in terms of tense. The tense inflection in verbs deals with semantic notion of time. There are some examples in the table 4.9 which demands -s and -es endings of the verbs e.g. H4: she like it and J6: He go to school no. The -s, and -es endings on the verb like and go refer to as third person singular ending of the present tense. There is always an agreement in third person singular form. In some cases, unusual auxiliary is used e.g. C6: r you like it??? And SS4: you is going to take tea. The regular auxiliaries in these utterances are do instead of are and are instead of is. Some utterances indicate irregular use of verb form e.g. L2: Had u go??? And N5: will saw you later. The expected forms of verb are gone instead of go and see instead of saw. However it seems all the utterances which fall in the category have different agreement issues and to call it as an emerging pattern will not be just.

As it is mentioned above that use of preposition seems a confusing case but before discussing it, there is the table given below to illustrate this category:

Table 10. Use of Preposition

Part.	CMC Form of Grammar	Standard Form of Grammar
N2	Its cheaper go to holidays	It is cheaper to go on holidays
N4	Take care yourself	Take care of yourself
P6	I have no mood to snd it any one	I have no mood to send it to anyone
CC4	I m going university	I am going to university
MM5	u r waiting that	You are waiting for that
NN2	I m lhr nw	I am at Lahore now
SS2	busy these days	I am busy in these days

The table shows that there are seven utterances, which indicate irregular use of preposition in CMC environment. The regular use of prepositions is also shown in the table. Six out of these seven utterances have omitted the prepositions as in N4, P6, CC4, MM5, NN2 and SS2 of, to to, for, at and in respectively. There is only one instance found where irregular preposition is used along with one preposition omission as N2: its cheaper go to holidays instead of its cheaper to go on holiday. Since a limited number of preposition omission is found therefore it is hard to decide whether it is making a pattern on CMC or not.

The data analysis regarding form of the CMC demonstrates that there are some crystal clear patterns which are unique but at the same time they are the part of some informal discourse as well. However, omission of pronoun as subject, copula deletion, absence of progressive auxiliaries in declarative as well as interrogative mood as well as one word message are the

largely, naturally occurring patterns in CMC environment specifically on facebook. Whereas some other categories such as syntactic arrangement or in other words order, use of prepositions and concords have certain reservations. Firstly, the data that is found in the case of syntactic arrangement and use of preposition are limited in number so a large number of data is needed to collect and then need to be evaluated in terms of its ratio. Secondly, in the case of concord and even syntactic arrangement, each case under the umbrella of these two is different from each other. Lastly, as the data is collected from the wall of non-native students, so it can be the reflection of their lack of proficiency in these areas of language or these can be the careless errors in an informal discourse where sole purpose is just to communicate and interact.

As the research is based on data driven approach to research – that is, it aims to work from data to theory not from theory to data Liddicoat (2011). This focus has given a particular shape to the way of developing an analysis in the research. As the first part of data analysis shows the distinctive grammatical structures of the data collected form CMC specifically Facebook Walls as compared to general grammatical rules of English. So this data has raised the question about communicative aptitude of CMC grammar. This question unfolds the debate between two boundaries; CMC grammar and pragmatics competence because the issue is about the understanding of CMC grammar and degree of successful communication Pragmatics competence is the ability to use language in a contextually apposite mode.

Findings

Grammatical innovations are derived out of the communicative demands of online environment. in particular the distinctive communicative characteristics have led to the development of a distinguished grammar patterns that rely heavily on nominal structures, with extensive deletion and omission of some core grammatical units like noun phrases working as subject, copula, auxiliaries with relative modifications. By tracking the data of Pakistani users of facebook, it is also observed that inclusion of particular grammatical or syntactic functions are emerging in CMC. Several patterns are observed in this study such as subject omission. Copula and auxiliary deletion, one word response which was mostly based on adjectives and that led to the discussion on attributive and predicative - analysing their emergence in corpus collected from the facebook walls of participants of specific age group. The analysis shows that these grammar features were restricted neither in function nor in variability. However, they became much more frequent.

Facebook grammar has some peculiarities in terms of syntactic reductions in the form of subject, copula and auxiliary. Copula deletion is allowed in African American Vernacular English (AAVE) but standard grammar form of English strictly follows this constituent when it is required and written medium in particular. On the contrary, results of this research have suggested that copula deletion is one of the observed facts of facebook grammar e.g. *me going* and *u welcome*. On the other hand, Standard English does not allow the omission of subject but it is also noticed on facebook e.g. *have fun in university* and *like it* etc. Omission of subject is usually observed in informal face to face communication where both sender and receiver are present and they know who is saying to whom because subject of a sentence tells about the doer.

Later part of this section states about communicative success with the element of reduction. The discussion on data analysis of facebook grammar has reported absence of another constituent; auxiliary in both cases declarative and interrogative e.g. we close friends and you coming? etc. A question mark has fulfilled the interrogative purpose with omission of auxiliary or copula in interrogative mood. The findings put forward that the reduction of ongoing conferred constituents also occurred in combination; subject and copula deletion e.g. in bed and subject with the combination of auxiliary omission e.g. going market. This reduction goes on the level of one word response where whole information or elicitation is performed through just one word which has made the grammar simplified and codified. It seems that facebook grammar is inclined towards the boundaries of language standardization process; simplification and codification. At the same time, the findings also clues to some other elements which were frequent but could not make a clear pattern such as concord, odd syntactic arrangement and unusual use of prepositions. Though there is not much difference in emerged syntactic patterns and in other irregular categories yet there are some causes which do not allow them to make patterns; as in concord category, each case reports a different agreement regarding tense inflections, numbers (singularity or plurality) as well as gender. Same is the case with the unusual use of prepositions. They were not found in a pattern rather each instance gave a different clue. As far as syntactic arrangement was concerned, it indicated odd constructions in the form of inversions. Likewise each inversion has set a different story.

Conclusion

It has been argued through analysis and interpretation that all types of grammar divergence and redundancies in Standard English were very much part of facebook. But a greater variety of divergences have been vividly detected to a varying degree used byPakistani Facebook users. Consequently, divergences and variations found in corpus mark the difference between the grammar of Standard English and grammar of CMC English.

Since the users are young students, creativity is evident in different kinds of reduction, simplification and codification. The prospect of CMC form of grammar is supplementary. It has set a tendency for its users to allow them to ignore the prescribed rules of language. They use language according to their convenience and comfort. As it is the time when language users want to display their maximum potential in less time and perform multiple tasks at once, life becomes mechanical and they feel at ease with this form of communication by permissible grammatical violation. It results in inventiveness as users reduce, simplify with its flexibility; every mode of communication has its own demands.

References

Aitchison, J. 1989. Words in the mind: An introduction to the mental lexicon. Oxford: Basil Blackwell.

Aarts, B. 1997. English syntax and argumentation. London: Macmillan Press Ltd.

- Aslam et el. 2011. A study of orthographic features of instant messaging in Pakistan: An empirical study, *Language in India* 11(1): 192-205
- Bachman, L.F., and Palmer, A. S. 1996. *Language testing in practice: Designing and developing useful language tests*. Oxford: Oxford University Press.
- Baron, N. S. 2008. *Always on: Language in an online and mobile world*. New York: Oxford University Press.
- Baron, N. S., and Ling, R. 2007. Text messaging and IM: Linguistic comparisons of American college data. *Journal of Language and Social Psychology* 26(1): 291-298
- Baron, N. S. 2007. Emerging patterns of American mobile phone use: Electronically- Mediated Communication in transition. In Mobile Media 2007: Proceedings of an international conference on social and cultural aspects of mobile phones, Convergent Media and Wireless Technologies, ed. Gerard Goggin and Larissa Hjorth, 218-30. Sydney: University of Sydney.
- Baron, N. S. 2003. Language of the Internet. In A. Farghali, ed. *The Stanford handbook for language engineers*. Stanford, California: CSLI, 59–127.
- Baron, N. 2003. Why email looks like speech: Proofreading, pedagogy, and public face, in Jean Aitchison and Diana Lewis, eds., *New Media Language*. London: Routledge.
- Baron, N. 2001. Why email looks like speech: Proofreading, pedagogy, and public face. *Language, the media, and international communication* 29(3): 1-4, St. Catherine's College, Oxford, UK.
- Biber, D. 1988. *Variation across speech and writing*. Cambridge: Cambridge University Press Burke, A. 2010. How the internet is changing language. Retrieved from:
 - http://savvycitizens.bcs.org/communication/how-the-internet-is-changing-the-english-language-and-the-ways-we-speak
- Cannon, G. 1985. Functional Shift in English. Linguistics. 23(1): 411-431.
- Chafe, W. L. 1982. Integration and involvement in speaking, writing, and oral literature. In *Spoken and written language: Exploring orality and literacy*, ed. D. Tannen, 35-53. Norwood: Ablex.
- Crook, C. 1985. Electronic messaging and the social organization of information. *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition* 7(3): 65-69.
- Crystal, D. 2001. Language and the internet. Cambridge: Cambridge University Press.
- Crystal, D. 1995. *The Cambridge encyclopedia of the English language*. Cambridge University Press.
- Givon, T. 1979. On understanding grammar. New York: Academic Press.
- Greenbaum. 1987. A university grammar of English. London: Longman.
- HårdafSegerstad, Y. 2002. *Use and adaptation of written language to the conditions of computer-mediated communication*. Department of Linguistics, Göteborg: Göteborg University.
- Herring, S. C., Stein, D., and Virtanen, T., eds. 2013. Introduction to the pragmatics of computer-mediated communication. In *Handbook of pragmatics of computer-mediated communication*, 3-31. Berlin: Mouton.

- Herring, S. C. 2011 .Commentary. In *Digital discourse: Language in the new media*, eds., C. Thurlow and K. Mroczek, 340-347. New York: Oxford University Press.
- Herring, S. C. 2011. Grammar and electronic communication. In *Encyclopedia of applied linguistics*, eds., C. Chapelle eds., C. Thurlow and K. Mroczek, 340-347. New Jersey: Wiley-Blackwell Publishers.
- Herring, S. C. 2008. Language and the internet. In *International Encyclopedia of Communication*, eds., W. Donsbach, 2640-2645. New Jersey: Blackwell Publishers.
- Herring, S. C. 1996. Two variants of an electronic message schema. In *Computer-Mediated Communication: Linguistic, Social and cross-cultural perspectives*, eds., S. C. Herring, 81-108. Amsterdam: John Benjamins. Retrieved from: http://ella.slis.indiana.edu/~herring/2variants.1996.pdf
- Jacobs, G. 2003. Breaking down virtual walls: Understanding the real space / cyberspace connections of language and literacy in adolescents' use of instant messaging. Paper presented at the American Educational Research Association, Chicago, Illinoi.
- Jenkins, J. 2003. World Englishes: A resource book for students. London: Routledge.
- Ko, K. K. 1996. Structural characteristics of computer-mediated language: A comparative analysis of interchange Discourse, *The Electronic Journal of Communication* 6(3). Retrieved from: http://www.cios.org/www/ejc/v6n396.htm
- Labov, W. 2011. *Principles of linguistic change, cognitive and cultural factors.* Malden, Massachusetts: Wiley-Blackwell Publishers.
- Lee, C. K. M., 2002. Literacy practices in computer-mediated communication in Hong Kong. *The Reading Matrix* 2(2): 1-25.
- Ling, R. 2004. *The mobile connection: The cell phone's impact on society*. San Mateo, CA: Morgan Kaufman.
- Leech, G., Deuchar, M., and Hoogenraad, R. 2006. English grammar for today: a new introduction. Basingstoke: Palgrave Macmillan.
- Quirk, R. et al. 1997. A comprehensive grammar of the English language, Essex: Longman.
- Rafi, M. S. (2018) Linguistic smplicity and complexity in computer-mediated communication of Urdu/English bilinguals. *Linguistics and Literature Review* 3(2): 46-59 in press.
- Rafi, M. S. (2017) Bilingualism and identity construction in the digital discourse. *Journal of Multicultural Discourses*. Retrieved from: http://dx.doi.org/10.1080/17447143.2017.1342649
- Randall, N. 2002. Lingo online: A report on the language of the keyboard generation. Department of English, University of Waterloo, UK
- Romiszowski, A., and Mason, R. Computer-Mediated Communication. Retrieved from: http://www.aect.org/edtech/15.pdf
- Riva, G. and Galimberti, C. 1998. Computer-mediated communication: Identity and social interaction in an electronic environment. *Social and General Psychology Monographs* 124(1): 434-464. Retrieved from: http://www.heldref.org/html/body_mono. html
- Robertson, D. 2001. Correct and incorrect English. Dehli: Ivy Publishing House.
- Tagliamonte, S., and Denis, C. 2008. Linguistic Ruin? Lol! Instant Messaging and Teen Language 83(1): 3-34.

- Taglimonte, S. 2007. Frequency and variation in the community grammar: Tracking a new change through the generations. *Language Variation and Change* 19(2): 199–217.
- Trudgill, P. 1986. Dialects in contact. Oxford: Blackwell
- Thurlow, C. and Poff, M. 2011. Text messaging. In *Handbook of the Pragmatics of CMC*, eds., S. C. Herring, D. Stein & T. Virtanen, 1-24. Berlin and New York: Mouton de Gruyter.
- Thurlow, C., Lengel, L. and Tomic, A. 2004. *Computer mediated communication: Social interaction and the internet*. London: Sage Publications
- Thurlow, C. 2003. Generation Txt? The sociolinguistics of young people's text-messaging Retrieved from http://www.shu.ac.uk/daol/articles/v1/n1/a3/thurlow2002003-paper.html
- Wallace, P. 1999. The psychology of the Internet. Cambridge, UK: Cambridge University Press.
- Werry, C. 1996. Linguistic and interactional features of Internet relay chat. In S. C. Herring (Ed.), *Computer-mediated communication: Linguistic, social, and cross-cultural perspectives*, 47-63. Amsterdam: John Benjamins.
- Widdowson, H. G. 1983. Learning purpose and language use. Oxford: Oxford University Press.