

Chapter One

INTRODUCTION

The digital era or the global village, we belong to, is mainly marked by the emergence of the internet in mid 1990's. This era has staggeringly impacted the life of millions around the world , shaped their personalities, facilitated their communications, and altered their social, economic , political , and even linguistic habits . As a matter of fact, never before since the diffusion of the printing press has language experienced revolution in both form and function as in the age of the internet (Crystal 2001, pp 240-241) . In EFL classes, where writing is a vital skill, “electronic communication technology has [remarkably] revolutionized the composing process and participation in writing activities” (Sahandri , Mohd. Reza Ghorbani, & Kumar, 2002, p 75). Algeria is no exception, especially during the last couple of years where most Algerian EFL learners have become active users of Facebook. For diverse reasons, Facebook has become a solid network among those learners for it created an atmosphere in which written English is challenged by a new type of writing. Therefore, this thesis aims at using Facebook chat to investigate the impact of Computer-mediated Communication upon written English as used by Algerian EFL learners , and analyzes the characteristics of their writings linguistically.

1.1. Statement of the Problem

As an active user of the Internet for a decade, I have been observing a unique type of written language in the different modes of computer-mediated communication that it led me wonder about the impact of language in Internet. But once I received my job as an EFL instructor and started examining my EFL learners' feedback, the problem has become more salient that I decided to undertake research in this area.

Another compelling reason for conducting this research is that Algerians, no matter

their backgrounds, are now using this social networking website for diverse reasons, yet EFL learners are no exception. As never before, EFL learners have become active users of Facebook not just as a pleasing pastime, but also as a means to communicate using English making this an exciting period to study the subject, especially when reviewing the recent literature and could find no account already written around this topic.

1.2. Aims and Objectives of the Study

The aims and the objectives of this study are threefold:

1. To examine the impact of the Internet and CMC upon Algerian EFL learners' writings.
2. To provide a linguistic analysis of written English as produced by Algerian EFL learners in CMC through applying content analysis on original Facebook chat texts which were previously collected from these learners.
3. In academia, this research aims at raising both EFL instructors and Algerian EFL learners' awareness about the linguistic deviations, including orthography, grammar, vocabulary, etc, that the overuse of chat, and by extension all modes of CMC, might affect their academic writings, especially written assignments.

1.3. Main Research Themes and Questions

This study revolves around written English as produced by Algerian EFL learners in CMC. In other words, the linguistic characteristics that this computer-mediated writing carry is the major theme to be investigated in this thesis. The current study is therefore an attempt to answer the following questions:

1. Is written English in CMC, as practiced by Algerian EFL learners, dissimilar to the traditional standards of English?
2. If so, in what ways does this form of writing differ from the traditional writing? That is, which linguistic features does this form of writing carry?

1.4. Hypothesis

In order to answer the above questions, the researcher hypothesizes that if Algerian EFL learners practice writing in CMC, they produce special written English that can be easily discriminated from formal Standard English. Yet, this special e-language reveals more *non-standard* and *spoken-like* features than formal writing.

1.5. Methodology

In testing the above hypothesis, the researcher collected twenty-seven original pieces of text-based Facebook chat that covered forty-seven individuals. These chat records were voluntarily offered by nineteen Algerian EFL learners who were active Facebook chatters. These data were handled ethically by hiding all the information that might identify the identity or the location of the participant. The corpus was content-analyzed, and the linguistic analyses addressed four cases: Orthography, grammar, vocabulary, and cases of paralinguage.

1.6. Identification of some Basic Concepts

As Internet linguistics is a new research field that intersects with computing, many terms and concepts appear to be muddy. For that, the following part will provide some brief definitions to the most basic concepts in the study. (Refer to Appendix A for further definitions)

1.6.1. Computer-Mediated Communication (CMC)

Computer-mediated Communication (CMC) refers to any form of communication which is carried through the medium of a computer synchronously or asynchronously, including text messaging which is considered as a form of CMC, though it does not involve computer as such.

1.6.2. Modes of Computer Mediated Communication

In Computer-Mediated Communication, two modes can be discriminated: (1)

Asynchronous CMC, which does not require the communicators to be available at the same time or place so that the communication occurs. In this respect, messages are composed offline providing the sender the opportunity to plan, filter and edit the message. Examples of Asynchronous CMC include email and SMS. Alternatively, (2) Synchronous CMC requires its interlocutors to be online simultaneously. Examples of synchronous CMC include different forms of chat such as Instant Messaging and chat groups. In this thesis, analyses will exclusively address a synchronous mode of CMC, particularly chat in Facebook.

1.6.3. Facebook

Facebook is a social networking website that was created by Mark Zuckerberg. Its users can create and customize their own profiles with photos, videos, and information about themselves. Facebook allows friends to browse each others' profiles, write messages on their pages, and chat with each other. In this study, pieces of Facebook chat will be studied and analyzed linguistically.

1.6.4. Instant Messaging

Instant messaging is defined by Farmer (2005) as follows:

one of the simplest forms of synchronous online communications available. It allows two, and sometimes more, computer users to communicate across a network connection. For the most part, the communication is text-based, although many IM networks currently provide facilities to allow for audio and even video (p 50)

1.6.5. Netspeak

The word "Netspeak" is a word coined by David Crystal (2001). It is substitutive to the words "netlish", "weblish", "internet language", "cyberspeak", "electronic discourse", "interactive written discourse", "computer mediated communication", although the latter focuses on the medium itself. (Crystal, 2001, p19)

Chapter Two

LITERATURE REVIEW

INTRODUCTION TO THE LITERATURE

Over the last two decades , many studies researching the different moeds of CMC have come to life . Research included the study of email (Baron 2000) , computer conferencing (Yates 1996) , IRC (Werry 1996, Kershaw 1997, Anniesha Binte Hussin 2000, Yang 2006 , Hård af Segerstad 2002 , Baron 2007 , and Bodomo 2010) , newsgroup (Yang 2006) , and video-based CMC such as Bodomo's study (2010) . However, in Algeria, there are only few studies that researched chat in CMC , most of them investigated chatters' attitudes and the linguistic choices they would make in chat . Yet , the present study is original for two major reasons . The first is that it is a corpus-based study that uses original Facebook chat records and analyzes them linguistically . The second is that the chat corpus is collected from Facebook chat which makes the study more exciting, especially when reviewing the recent literature and could find no corpus collected from Facebook chat since it is a highly private new medium .

Accordingly , as the aim of this research is to investigate the impact of CMC on written English , and since it has been hypothesized previously that writing in CMC is non-standard and spoken-like , this literature review focuses on three major parts. The first part provides details on how different media impacted writing , beginning with the emergence of alphabet till the printing press , media, and CMC. The second part moves to introduce the new medium of CMC , its modes , and establishes Facebook chat as a new medium to be investigated in the current study . The third part crystalizes the most common linguistic features that CMC reserachers , such as David Crystal, Susan Herring , and Noami Baron, etc have sorted out, then it forgrounds the relationship between speech and writing before

reporting the major studies that investigated computer-mediated speech and writing , with more capitalization upon chat since it is the core of this study .

2.1 Part I

THE IMPACT OF DIFFERENT MEDIUMS ON WRITING

2.1.1. Introduction

This part endeavors to review how different media impacted writing . It begins with the emergence of the alphabet and the early tools of writing production to the more sophisticated means that technology brought . These means include the printing press, telegraphs , telephones, computers and word processors . After that , it proceeds to the general impact of computer-mediated communication and cyberspace upon writing . In other words, this part serves as a background to the whole research project as understanding the impact of different media preceding to computer-mediated communication will provide an explanatory framework on how writing moved from fingers into keyboards.

2.1.2. The Alphabet Impact

Half a century ago, Gelb (1963) asserted that the procreation of alphabetic writing was astoundingly a turning point in human history. According to Gelb, alphabet is “the most developed form of writing” (pp.183-189) . In fact , its emergence has impacted writing due to its ability to represent each sound of spoken language with a distinct symbol which was more sophisticated than using a system representing whole words with symbols (logograms) or clusters of sounds with single symbols or syllabaries (ibid) . In similar vein, Olson(1994) adds that:

The representation of ideas through pictures, the representation of words through logographic signs, the invention of syllabaries are all seen as failed attempts at or as halting steps towards the invention of the alphabet,

it being the most highly evolved in this direction and therefore superior. (p. 4)

Interestingly enough, introducing Alphabet to languages such as the Greek is thought by Eric Havelock, a classicist who established the “alphabetic mind” theory , to be the reason beyond their rooted philosophy. In fact, the Greek alphabet was adapted from the Phoenician script which was an only consonant based alphabet lacking symbols for vowels. Greeks could, therefore, record all of the segmental speech stream by re-purposing five unneeded symbols from the Phoenician script to launch Greek vowels (Coulmas, 1989, pp164-165) .

2.1. 2.1 A Note on Past Orthography Changes in English

Orthography is derived from the Greek word “ *af a*” meaning “correct spelling”. In English , spelling system has undergone a number of substantial changes in its orthography since its first appearance as ‘Futhark’ around the fifth century (see Figure 1). According to Scragg (1974) , Chronological accounts are the main reasons beyond the evolution of the English written system from Old English manuscripts that relied heavily upon Latin influence , till the standard norms of current English . As a matter of fact , the most variation in orthography took place during middle ages where spelling was marked by various features , such as the absence of standardization , whereas Chaucer’s and Shakespeare’s era was marked by orthographic freedom .

In sum , perhaps the most relevant part of Scragg’s work is the focus on the printing press and its impact upon spelling , for it became a mark of education . The following discussion in this section will be dedicated to the impact of the printing revolution upon writing

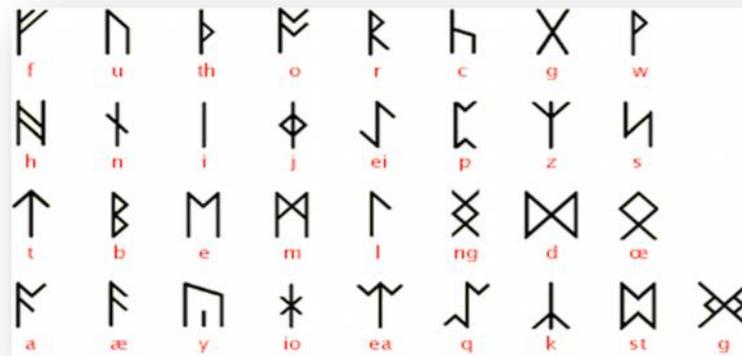


Figure 1. Futhark .

2.1.3. The Print and the Media Impacts

The creation of the printing press in the 1400s marked shifts not only in different parts of social life , but could also revolutionize language , encourage new styles, spellings, punctuation , and so forth. For example, the gist of Elizabeth Eisenstein’s investigation about printing ended up by describing it as an “agent of change” , especially in early modern Europe. Its influence touched the growth of a lay intelligentsia, led to movement towards a standard dialect, increased in literacy rates, fruited in the emergence of didactic children’s books, and, perhaps most importantly, created a tool for religious upheaval (first with the proliferation of printed indulgences, and then publication of Luther’s Bible and aprofusion of reforming tracts)(1979, pp 88-107).

In 1876, Bell’s telephone changed the language again with new patterns of dialogue (even the coining of *hello*) whereas his rival Edison invented the phonograph . In the 1920s , broadcasting made its entrance which had a huge prescriptive impact on English and selected voices became the ‘norm’. These developments are well attested in linguistic analyses (Scragg 1974) .

Unlike many researchers who brought about media and its affects on writing , most retrospective studies on written English stressed on the ‘power of the press’ (Scragg ,1974,

p. 64) . Press was a turning point for standardizing the system, perhaps the most relevant part of this process was launching a wide state censorship. Similarly, Ives (1979) pointed out that the printing press was the most notable influence on the spelling system, since it established the rules to avoid confusion and provided nationwide mutual intelligibility (cited in Jones , p. 15) . In the same vein , as the printing appeared , the written word reached greater audience, writing become standardized since spelling and vocabulary changed more slowly, and languages became more consistent in their usages due to the invention of the printing press (McMurdo, 1995, pp 142-143) . Additionally, and more interestingly , printing had a preserving affect on ideas. To exemplify this particular point , the impact of the press lied in dissociating age from wisdom that young people could acquire the same knowledges as elderly expert people via a mere diligent study. Or ,in other words , “the age of unquestioned authority is over” (ibid 5, p.145).

2.1.4. The Word Processor Impact

After computers appeared in the early 1980's and become affordable to large range of people , many linguists started to be concerned about the way people write . In fact, computer programs are equipped with functions and processes that assist their users seize information. Examples of these functions encompass processes that “imitate human writer's problem solving . In the meanwhile, computers can also be programmed to support writer's activities.” (Yang, 2006, p.19). Stated differently , word processor could “automatically check spelling and grammar as a writer composes are designed to mimic human cognition ” (Daiute, 2000, p. 253) .

Computerized people are therefore provided by techniques that enable them “consentartes on more important things ,especially the ideas being expressed” (Baron, 2001, p. 166) . That is , computer word processors made it possible to produce successive drafts without the need to write or retype the entire text next time. The fairly large

amount of texts that are written on word processors “underscores the need to consider the writing instrument as part of the writing process” (Daiute ,2000, p. 254).

Quite interestingly , word processor is thought to be merging speech and writing . According to Baron (2001) , word processors fruit in compositions that linguistically considered speech writing and that the computer screen fills the role of the listener (p. 214).

2.1.5. The Cyberspace Impact

Unlike the other media, the Internet is the medium with more significant impact on language usage as well as change than the telegraph, telephone, radio, cinema, and TV all combined. That is , by considering the aforementioned scenarios , which demonstrated the power of print and media over writing, one can infer that the internet is a version of an uncontrolled printing press with ample space for creativity and publishing without censorship. For that, it is very important to consider what dimensions writing takes in cyberspace.

As such, writing in cyberspace , or electronic writing , refers to the “ singular product of the [networked] computer ” (Ferris, 2002, p. 4) . In fact , the uniqueness of this product stems from moving from literacy to orality , linearity to connectivity ,fixity to fluidity, passivity to interactivity, and from traditional quality to value .

In a broader sense, “ the written style of language used in cyberspace has at least as much as in common with speech as it does with more traditional formal writing” (Baron, 2001 , p.18) . A fairly large number of researchers in the field described writing in CMC as a “ secondary orality”. That is ,the new orality introduced the age of media (Ong ,1982 , p.136) . In other words, communication become fragmented , computer-mediated communication is used for public communication , and formulaic devices have arisen” (Ferris ,2002, p. 6). However, many researchers consider copmuters to be text-

based medium reliant on the conventions of literacy (Killings Worth 1993 , Van Mersbergen 1994).

Fixity of the word on the page is an essential feature of traditional writing, however , “electronic writing lacks this fixity existing in cyberspace” (ibid, p. 7) . Relatedly, Murray (1985) asserts that with electronic writing, the permanence of writing is no longer possible ; a feature that totally clashes with the printing press that made backward and forward scanning possible to its readers while e-writing exists only in a vanishing electronic space .

Besides linearity and fixity, interactivity is an active feature of writing in cyberspace. An evidence of interactivity can be embedded in web pages due to the use of links that “allows interactivity between the reader, author, and medium [which creates] a unique re-negotiation of the writer audience relationship ... urging the reader to make decisions about destination and content ” (Ferris, 2002 , p. 8). In other words, reading in cyberspace is an active engaging process ,as the reader decides about where to go, and then surfs using links and online forms to reach flexibility.

Finally, the fact that electronic writing “ allows anyone with access to a networked computer to ‘publish’ in the internet ” (ibid, p. 9) made it possible to cyber writers gain wider public that the quality of the content might be put into question . For this purpose, researchers suggest ‘value’ to be a criterion by which ‘good’ electronic writing is judged (Ferris, p.10) . Interestingly enough , value is defined according to the Webdictionary (2012), as “ an ideal accepted by some individual or group ... the quality that renders something desirable or valuable ”.

2.1.6. Conclusion

While the invention of the alphabet revolutionized the representation of ideas through pictures , signs , and made writing easier and more accessible, the creation of the

printing press in the 1400s encouraged new styles, spellings, punctuation and writing reached larger audience, as it became standardized. The computer word processors did also affect writing by enabling writers to produce successive drafts without the need to rewrite texts entirely. Finally, and more importantly, the Internet is undoubtedly the medium with more significant impact on language usage as well as change than the other preceding media. In the course of this research project, the impact of the internet, namely CMC, will be discussed at length.

In summary, this part provides evidence that writing has always been impacted by the means of production (Daiute, 2000, p. 261). Whether this means is a pictograph, alphabet, print, radio, television, or internet, each of these means is regarded as a tool that produces writing according to its own technology of transmission.

2.2 Part II

COMPUTER-MEDIATED COMMUNICATION AS A NEW MEDIUM

2.2.1. An Overview of Computer-mediated Communication (CMC)

2.2.1.1. Definition

The term CMC was first introduced by Hiltz and Turoff in their study of computer conferencing, in 1978, where they used it as a mode of electronic communication. (cited in Kawasee 3). In fact, the term, CMC itself has been used in various ways by various authors such as Baron (1998), December (1996), and Bodomo (2010). The term CMC, therefore, has multifarious definitions. As such, Baron (1998) simply sees it as “a domain of information exchange via computer” (142). December (1996)’s definition of CMC, along with Baron’s, is one of the earliest and it is as follows:

Internet-based, computer-mediated communication involves information exchange that takes place on the global, cooperative collection of networks ... Messages

may undergo a range of time and distribution manipulations and encode a variety of media types. The resulting information content exchanged can involve a wide range of symbols people use for communication. (p. 24)

Additionally, “ Computer-Mediated Communication (CMC)” can be defined as " a research field that explores the social, communicative and linguistic impact of communication technologies, which have continually evolved in connection with the use of computer networks (esp. the Internet) ” (Kuo & Wible , 2001, p.1) .

In similar vein, Bodomo (2010) suggests a more recent definition :

CMC is defined as the coding and decoding of linguistic and other symbolic systems between sender and receiver for information processing in multiple formats through the medium of the computer and allied technologies such as PDAs, mobile phones, and blackberries; and through media like the internet, email, chat systems, text messaging, YouTube, Skype, and many more to be invented. As is seen, the term computer itself is no longer limited to desktop and laptop devices but generalizes onto smaller but even more powerful gadgets like palmtops, mobile phones, and PDAs, all with internet connectivity (p.6) .

Yet , many linguists such as Crystal (2001) and Herring (2001) establish a distinction between Computer-mediated Communication which refers to communications between humans using the medium of the computer , and between Computer-Mediated discourse (CMD) . Accordingly, CMD is viewed by Herring (2001) as a field of study within the broad interdisciplinary study of CMC : “ Computer-mediated discourse is the communication produced when human beings interact with one another by transmitting messages via networked computers ” (p.1) .

2.2.1.2. Different Modes of Computer-Mediated Communication

In Computer-mediated Communication , two modes can be discriminated : (1) Asynchronous CMC (asyn) , which does not require the communicators to be online and

available at the same time or place so that communications occur . In this respect, messages are composed offline providing the sender the opportunity to plan, filter and edit the message. Examples of Asynchronous CMC include email and SMS. Alternatively, (2) Synchronous CMC (sync) requires its interlocutors to be online simultaneously so that successful communications occur , as it allows for both interactive and written communication. Examples of Synchronous CMC include different forms of chat such as Instant Messaging (IM) . It is important , though , to give heed to text based and video-based types of computer-mediated Communication . Accordingly, Bodomo (2010) summarizes this point in the following vital terms:

[T]here is a fundamental distinction in the kind of activities that accompany either. Text-based CMC involves communication partners transmitting information between each other mainly through the medium of the written word along with other symbolic systems such as numbers and emotional icons. However, video-based CMC involves primary communication through the medium of moving images. Text-communication may accompany the video-communication process but this is secondary and is meant to serve *astalk around the image*, so to speak (6).

Adams Bodomo later states that most contemporary social networking sites, like Facebook, provide their users with video-based CMC that “Young users of the internet have radically moved away from communication through the plain written word to communication in the medium of video clips and voice-image interactions through video-based media such as Facebook, YouTube, video games, and skype” (ibid, xvi).

As stated previously, although analyses in this project will address only Facebook chat as a text based synchronous mode of CMC, a brief overview of both synchronous and asynchronous modes , as well as their properties will be presented.

2.2.1.2.1. Asynchronous CMC

As mentioned above, text-based asynchronous CMC refers to the type of

communication that does not require participants to be online and available at the same time. Messages are therefore composed off-line , giving the sender the benefit of time for planning and editing the message. Examples of this mode of CMC encompass :

2.2.1.2.1.1. Electronic mail (e-mail)

Electronic mail, ordinarily referred to as e-mail, is the electronic counterpart of traditional letters. It is an asynchronous form of communication, whereby written messages are typed on a computer keyboard and are read as text on a computer screen. Unlike their ancestors ,the ordinary letters, email messages are distinguished with some properties that can be summed up as follows :

- The time allotted for transmitting emails is reduced to less than few seconds.
- Users communicate for business or personal purposes by sending or receiving written messages and documents in electronic mailboxes.
- Messages and documents are stored in a server.
- Users can log on to their e-mail whenever access to the internet is available.
- Attachment of files, audio, images etc. is possible .
- Messages and documents may be sent in bulk to many users simultaneously .

2.2.1.2.1.2. Short Message Service (SMS)

Short message service (SMS), first introduced commercially in 1995, refers to the transmission of short text messages between mobile phone users by typing messages on a keyboard then sending them . “ The first SMS message was a Christmas greeting sent out in Britain in 1992. Today, SMS has emerged as one of the major digital communication media, with an estimation of over one billion messages exchanged per day around the world” (Bomodo, 2010, p. 112). It is an async form of CMC although it does not use computer as such. At any case, properties of this medium can be resumed as follows :

- Each short message can be up to 160 characters in length when Latin alphabets are

used, and seventy characters in length when non-Latin alphabets such as Arabic and Chinese are used

- Text messages are created on a small keypad of the mobile phone and are read as text on the tiny screen of the phone.
- Different models of mobile phones allow for slight differences .

2.2.1.2.1.3. Bulletin boards (BBS)

BBS can be defined as:

A form for text-based communication distinguished by the size of the audience it attempts to reach and the technological manner in which messages are read. In a BBS, individual contributors send messages to a single computer address. The program then posts these individual messages that visitors can access and read at their discretion (Smith, 2005).

In sum, properties of Bulletin Boards involve:

- purpose is usually academic in nature where users communicate by posting messages and announcements to a large group of individuals and having asynchronous group discussions on various issues
- users can respond privately or publicly
- synchronous chat is a popular feature (Anniesha Binte Hussin , 2000 , p.5)

2.2.1.2.1.4. Internet Forums

A forums is an asynchronous CMC mode which can be defined as :

A Web site that provides an online exchange of information between people about a particular topic. It provides a venue for questions and answers and may be monitored to keep the content appropriate. Also called a “discussion board” or “discussion group” . Internet forums include all the extras people expect from the Web, including images, videos, downloads and links, sometimes functioning as a mini-portal on the topic. (Internet Forums 2012)

In sum , some of the features of asynchronous forums include :

- Posts are planned, lengthy and time-consuming to be laid and read.
- Conversations are slower than in real time and might take time, making of it hard for users to remain engaged (Rourke & Anderson, 2002).
- Forums can be entirely anonymous or require registration with username and password. Messages may be displayed in chronological order of posting or in question-answer order where all related answers are displayed under the question .

2.2.1.2.1.5. Computer Conferencing

Computer conferencing refers to the use of computer and telecommunications technology to hold discussions between people in separate locations .Types of e-conferencing include video conferencing , a real-time video session between two or more users , and audio conferencing . While video conferencing offers written text via chat software , audio conferencing does not.Accordingly ,some features of computer conferencing include :

- Users communications are mainly held for academic purposes by composing messages which are saved to files .
- Many users can access a message at a time.
- Users can post messages to a whole group and discussions may stretch over a time Period.

2.2.1.2.1.5.1. On Video Conferencing

- Users communicate basicly for business purposes but this has quickly extended to personal purposes.
- Users communicate through synchronous video and audio communication especially if they are far in distance .

- Text occurs when users type messages using software which supports chat Features (Anniesha Binte Hussin, 2000, p. 4).

2.2.1.2.1.6. The World Wide Web

The World Wide Web, commonly known as “the Web” or abbreviated with the acronym “ www ”, is defined by the creator of the Web, Tim Berners-Lee, as “ the universe of network-accessible information, an embodiment of human knowledge” (cited in Crystal ,2001, p .13) . It can be seen as a portal to the other forms of CMC, since it possesses many functions and communicative properties such as :

- Many websites contain discussion groups and e-mail links.
- people can check out the latest newsgroup messages, or meet some friends in a chat room through the Web.

2.2.1.2.2. Synchronous CMC

As mentioned earlier, synchronous CMC, like spoken interaction, requires its interlocutors to be online simultaneously. It permits written communication to become interactive written discourse (Ferrara, Brunner et al. ,1991). According to Soukup (2000) , most synchronous CMC is text-only, and communication relies solely on what can be communicated through text and other graphic means (cited in Hård af Segerstad , 2002, p.59). However, it is noteworthy to point that audio and video chat are available as well, even if they are utilized less frequently than text-only CMC. On the whole, examples of sync CMC are various, some of them can be summarized as follows:

2.2.1.2.2.1. Chat

Chat is a way of communicating by sending text messages to people in the same chatroom in real-time . Crystal (2001) asserts that this process takes place “in a synchronous setting [where] a user enters a chat ‘room’ and joins an ongoing conversation in real time” (p. 130). Typically, most chat rooms now use both text and voice simultaneously. The oldest form of chat rooms are the text-based variety.

2.2.1.2.2.2. Instant Messaging (IM)

According to wikipedia , Instant messaging (IM) is defined as:

a form of real-time direct text-based chatting communication ... between two or more people using personal computers or other devices, along with shared clients. The user's text is conveyed over a network, such as the Internet. More advanced instant messaging software clients also allow enhanced modes of communication, such as live voice or video calling and inclusion of links to media (“Instant messaging,” November 2007)

Thus, “ instant messaging falls under the umbrella term online chat, since it is also text-based, bi-directionally exchanged, and happens in real-time” (ibid) . However, IM and online chat differ from other types of CMC such as email due to their asynchronicity. Nevertheless, divergence between IM and emails is reduced if considering “the systems [provided by IM services] that permit messages to be sent to users not then ‘logged on’ ” (ibid) . That is , it is very crucial at this point to establish a difference between chat programs and chatrooms. The former is bidirectionally private impromptu CMC ,while the latter is a one-way/ two-way public impromptu CMC. Some features of IM-Chat can be summarized as follows :

- The primary use of a chat room is to share information via text with a group of other users.

- The ability to converse with multiple people in the same conversation differentiates .
- Users may see each other via webcams, or talk directly .
- Users may talk for free using microphones and headphones .
- Many client programs allow file transfers and contact list .
- Saving text conversations for later reference are made possible by IM services .

2.2.2. Facebook as a New Medium for CMC

2.2.2.1. Introducing Facebook

In February 4th, 2004, a novel social networking website involving college students in the university sharing their personal information on the web and using it as a platform to keep in touch with friends was originated by a Harvard student called Mark Zuckerberg. According to Zuckerberg , the creation of this was meant to aggregate Harvard students together in a “ huge community site where you can type someone’s name and find all information about them ” (homedesigning, 9 August 2009) .Yet , the site has quickly gained enormous users worldwide . Stated differently, Bodomo (2010) asserted that :

Facebook, the new CMC medium [has] become one of the most popular websites ...Its popularity has increased so much so that not only the youth but some prominent members of older generations ... use it to get in touch with customers, constituents (p. 316) .

As a type of CMC, therefore, Facebook can be considered as an asynchronous communication tool whereby one- to- one or one- to- many communications are realized (ibid) .Nevertheless , determining whether facebook is a text-based computer-mediated communication or a video-based , synchronous one or asynchronous relies on the function provided by the website itself. A typical example might be wall –to-wall messages are asynchronous computer-mediated communication. Other parts in facebook language

such as chat, which is the focus of this study, is a form of IM and thus is a synchronous text based computer mediated communication. Unsurprisingly ,then, facebook is considered as a “mid way between text based CMC and video based CMC ” (Bodomo, 2010, p .315) .

Concisely, this section will scrutinize Facebook as a social networking website, and its functions with more emphasis upon text-based CMC features, particularly private chat .

2.2.2.2. Some Features of Facebook

By having an email account, one can register and log into Facebook ,and thus be able to use all the functions provided by Facebook. Those functions allow users to create and customize their own profiles with photos, videos, and information about themselves and about others. Facebook allows friends to browse each others profiles , write messages on their pages, and chat with each other ,both via video chat or text-based chat . In this study, pieces of text chat will be studied and analyzed linguistically.

2.2.2.1.1. Facebook Profiles

A Facebook profile consists of a number of different sections, including information, Status, Friends, Photos, Notes, Groups, and The Wall . However, since December 15, 2011, a Timeline was put forward to replace the Facebook Profile .

In a Timeline, photos, videos, and posts of any given user are categorized according to the period of time in which they were uploaded or created. Posts and events are displayed along a timeline that runs through the center of the profile, with the option of adding events that occurred prior to the user joining Facebook as well as "hiding" posts . Timeline was originally offered as an option, but all users will be migrated to the new format on March 30, 2012 (Abc News Videos, 22 Sept 2011) . The following figure demonstrates the Timeline .



Figure 2. Example of the layout of Facebook Timeline .

2.2.2.1.1.1. Photos and Albums

The album of photos is put into users' profile, and other users with the right credentials are eligible to browse and comment on it. That is, only friends who are allowed by the user who can access this privacy.

2.2.2.1.1.2. Groups

Facebook offers its users with a service called "groups", so that users can create new ones, join and participate in others. In many cases, groups exist to bring together users who share the common interests.

2.2.2.1.1.3. Events

This section makes it possible for users to organize and plan for events or join any events.

2.2.2.1.1.4. The Wall

The Wall is a forum for one's friends to post comments, pictures , videos or insights about anything . Users can always remove undesirable comments from their own Wall. They can restrict who their Wall is visible to, or turn it off entirely.

2.2.2.1.1.5. Chat

Facebook chat is a service provided by Facebook , it supports both (1) video chat, recently launched on August 2011, and (2) Text-based instant messaging chat , a synchronous mode of CMC, that allows friends to communicate by typing typically brief one-line written messages which are transmitted instantly by pressing the key "OK". This latter service was launched on April 23, 2008 ("Facebook features," September 2011) . Again, the focus of this study will cover only text-based Facebook chat that is produced by some Algerian EFL learners. Figure 3 below shows an example of a Facebook Chat session .

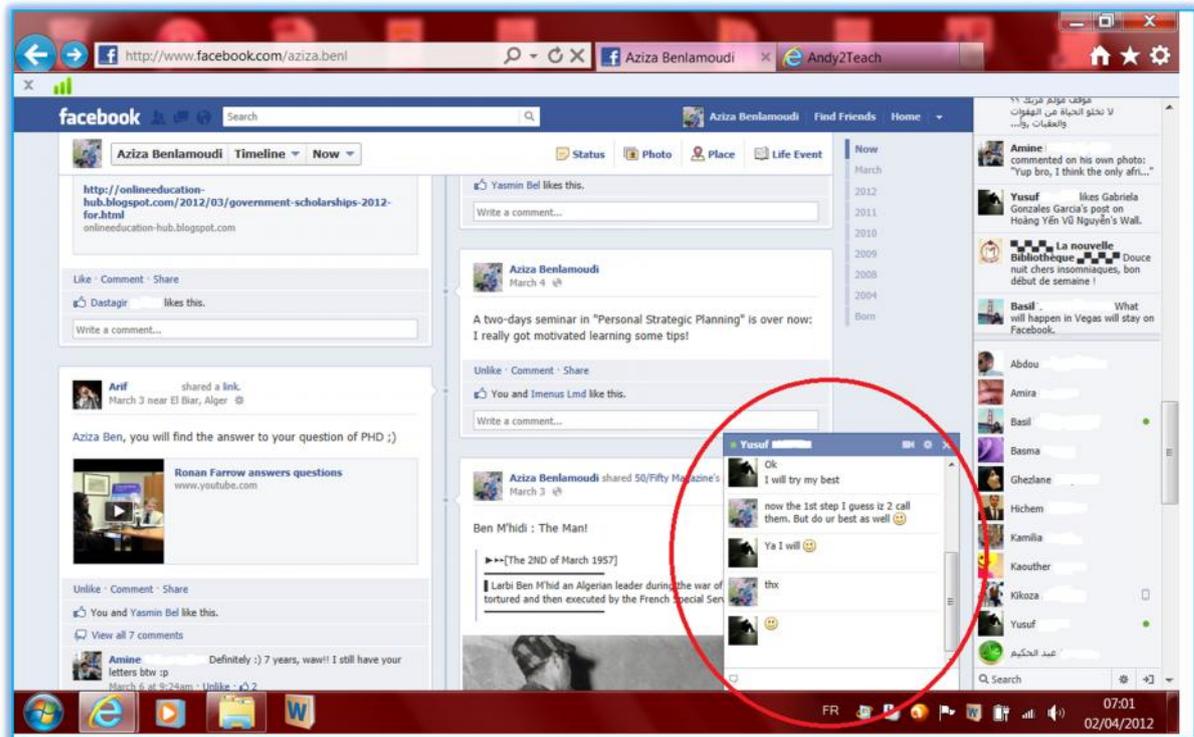


Figure 3. Example showing Facebook Chat dialogue as displayed in an ordinary page of Facebook.

2.3 Part III

WRITING IN THE AGE OF COMPUTER-MEDIATED COMMUNICATION

2.3.1. Introduction

Over the last two decades, CMC has seized the spotlight in terms of its effect upon language. In its most basic sense, CMC is a contact between human beings through computer devices. It is a fast, cheap, and democratic electronic medium that facilitates, shapes, and constrains communication. Within the realm of linguistics, different topics become the focus of different studies, for example gender issues, power, turn-taking, pronoun use, the “notion of a virtual community” in cyberspace, on its own social rules, communication styles, and so forth. The focus of the current study lies almost exclusively on exploring the grammatical features of written English in Facebook chat.

This section will be divided into three parts . First , it starts with the most common linguistic features of CMC . Second , it foregrounds the relationship between speech and writing . Third, it reports the major studies that investigated computer-mediated writing and speech with particular focus on chat since it is the core of this study.

2.3.2. Linguistic Features of CMC

Language is a means of conveying ideas and human speech through a system of arbitrary signals, such as voice sounds, gestures, or written symbols. In writing, Linguists (Crystal & Davy ,1969, pp 18-19 ; Crystal 2001, pp 7-8) identify five distinctive features of written language, summarized as follows:

- Graphic features: the general presentation and organization of the written language, defined in terms of such factors as distinctive typography, page design, spacing, use of illustrations and color.
- Orthographic (or graphological) features: the writing system of an individual language, defined in terms of such factors as distinctive use of the alphabet, capital letters, spelling, punctuation, and ways of expressing emphasis such as italics, boldface; for instance, American and British English are distinguished by many spelling differences (e.g. centre vs. center).
- Grammatical features: the many possibilities of syntax and morphology, defined in terms of such factors as the distinctive use of sentence structure, word order and word inflections.
- Lexical features: the vocabulary of a language, defined in terms of the set of words and idioms given distinctive use within a variety.
- Discourse features: the structural organisation of a text, defined in terms of such factors as coherence, relevance, paragraph structure, and the logical progression of ideas .

Overwhelmingly, as internet linguistics develops, however, writing in CMC develops to be perceived by many linguists such as Baron (2008) and Crystal (2001) as language variety in an electronic situation. The term language variety is used by Crystal to describe all kinds of situationally influenced language. Accordingly, "In a setting where linguistic differences are likely to loom large, the concept of a language variety will be helpful. A variety of language is a system of linguistic expression whose use is governed by situational factors" (Crystal, 2001, p.7). In this way, when computer technology clashes with writing, a variety of language will be the outcome. This outcome, labeled e-language, e-grammar, e-discourse, or "netspeak", a term coined by Crystal 2001, reveals its own linguistic characteristics, such as non-standard typography, nonstandard orthography, and unconventional morphology, which often makes of e-language a hybrid combination of written and spoken features.

2.3.2.1. Typography

Typograpy, in text-based modes of CMC, stands for different kinds of using :

Non alphabetic keyboard symbols such as numbers, punctuation, and special symbols such as <, \$, and @. It also includes non-standard capitalization as well as emoticons, or sequences of keyboard characteristics that prototypically imitate facial expressions. Other typographic characteristics of CMC include repeated punctuation (!!!,?!!...) and the substitution of numbers or letters for words or parts of words (e.g., 4 'for', 2day 'today' ur gr8 'you're great'). This latter usage is sometimes classified as non-standard spelling; indeed, there is considerable overlap between non-standard typography and nonstandard orthography in CMC, and the two often co-occur ...More common in CMC in general is the occasional substitution of words or parts of words with numbers or letters to save keystrokes and / or to symbolize a playful communication style. (Herring, in press, 2011, p. 2).

2.3.2.2. Emoticons

Emoticons use is largely claimed to be one of the defining typographical characteristics of electronic language , although a growing number of studies in English CMC report that they occur less often than popularly believed , and that the majority are simple ‘smilies’ :-) or ‘winkies’ ;-) (ibid) . Ordinarily, emoticons are defined by Dresner and Herring as :

a blend of ‘emotion’ and ‘icons’[. It] refers to graphic signs, such as the smiley face, that often accompany textual computer-mediated communication (CMC). The addition of graphic signs to printed text made its debut in CMC in 1982, when the rotated smiley face :-) was first proposed— along with a ‘frowny’ face :-(—by a computer scientist at Carnegie Mellon University, Scott Fahlman, as a means to signal that something was a joke (2010 , p.1) .

In the same breath, Baym (1995) provides a lively description of some popular computer mediated smilies in the following words :

They smile (:-)), wink mischievously (;-)), or frown (:(). They may indicate that a comment is to be taken as humorous or sarcastic. They may indicate good spirits, disappointment, surprise, and a range of other emotions. They may also suggest general friendliness. Creative ones may be used to indicate that identity of the user, as when an “8” is substituted for the colon to show that the poster wears glasses. These “emotions” are collected in “smiley face dictionaries”. Compiled by users, the dictionaries catalogue those emoticons actually in use as well as dozens of purely silly ones meant to represent things as obscure as buck-toothed vampires (p.152) .

Similarly, Crystal (2001) argues that people can "express textually the emotions they feel, often with the addition of synthesized sounds and visual effects" (p. 36) .The following list of the most used smilies is suggested by Sanderson (1993) :

Basic smileys

:-) pleasure, humour, etc.

:-(sadness, dissatisfaction, etc.

;-) winking (in any of its meanings)

;-(:~-(crying

%-(%-) confused

:o 8-o shocked, amazed

:-] :-[sarcastic

Joke smileys

[:-) User is wearing a walkman

8-) User is wearing sunglasses

B:-) User is wearing sunglasses on head

:-{) User has a moustache

:*) User is drunk

:-[User is a vampire

:-E User is a bucktoothed vampire

:-F User is a bucktoothed vampire with one tooth missing

:-~ User has a cold

:-@ User is screaming

-:-) User is a punk

-:-(Real punks don't smile

+:-) User holds a Christian religious office

0 :-) User is an angel at heart

Smiley stories

:-) 8-) 8-{})

A smiley to disguise himself gets glasses and a fake moustache.

C:-) >[] C8-)

Table 1. List of Smiles (cited in Crystal ,2001, p.37).

Interestingly , ten IM abbreviations have now made it into the *Oxford Dictionary*: BBLR “be back later”; HAND “have a nice day”; CUL8R “see you later”; RUOK “are you OK”; H8 “hate”; GR8 “great”; IMHO “in my humble opinion”; 😊 happy face; ☹ sad face; LOL “laughing out loud” (Ten 2003).

In fact , the codification of such emoticons into dictionaries and their evolution mirror a natural human adaptation to the new communication mediums. Creative and innovative use of keyboard characters to make pictures may not always serve any essential function to conversation but may exist only as text decorations and embellishments .

2.2.1.3. Orthography

Language in computer-mediated communication is widely known for a peculiar set of spelling habits , and orthographic norms . These norms involve abbreviation (acronyms, clipping,vowel omission as in pls for ‘please’, etc.) ; phonetically motivated letter substitution (e.g., z for ‘s’); spellings that imitate casual or dialectal pronunciations (e.g., wassup? For ‘what’s up?’); eye dialect (e.g., sez for ‘says’); and spellings that represent prosody or non-linguistic sounds, such as a ‘calling voice’ (helloooooo), laughter, and other (non-human) noises . (Herring , in press, 2011, p.3) . In fact , the reason beyond using abbreviations by CMC users is to save keystrokes , and thus representing speech in writing which suggests an evidence of orality in much text-based CMC (Cho, 2010) .

2.2.1.3.1. Abbreviations

The following table, extracted from Crystal (2001), reveals some of the various types of abbreviations found in netspeak which have become one of its most remarked features, adds David Crystal (2001, pp 84-86) .

a/s/l	age/sex/location	ic	I see
bbfn	bye bye for now	icwum	I see what you mean
bb1	be back later	idk	I don't know
b4	before	imo	in my opinion
bg	big grin	iow	in other words
brb	be right back	irl	in real life
btw	by the way	l8r	later
cu / cya	see you	lol	laughing out loud
dur?	do you remember?	m8	mate
f?	friends?	nc	no comment
f2f	face-to-face	np	no problem
gr8	great	obtw	oh by the way
+	think positive	o4u	only for you
Thx/tnx	thanks	4e	forever

Table 2. Some abbreviations used in Netspeak conversations.

2.2.1.4. Syntax

The syntax of written English in CMC is often described as “telegraphic” , or fragmented . That is, many parts of speech are delited , such as articles and subject

pronouns, “ especially in CMC modes [that] are characterized by brief, informal messages, such as , IM, SMS, and microblogging ” (Herring ,in press ,2011, p. 5) .

2.2.1.5. Lexicon

According to Crystal (2001) , “ [o]ne of the most obvious – but not thereby less significant – features is the lexicon that belongs exclusively to the Internet, and which is encountered when someone enters any of its situations” (p.81) . In other words , one of the most interesting features of language in CMC is its vocabulary . A large number of words and phrases have been introduced to language, particularly English, with the emergence of the internet to express some operations and activities all exhibiting the creativity of computer- mediated communicators . To clarify this issue , Crystal (2001) distinguishes different types of internet lexis summarized as follows :

Terms that are associated with software, and appears routinely on the screen, such as close, home ,toolbars, download, upload,404 error.

Terms which have emerged for the population of internet users: netizens, netters, netheards, cybersurfers, digiterati .

Words that are combined to create new words: one-click, double-click, click-and-buy, freeware, webcam, netdead, netnews, and many organizational names such as hotmail.

Words that are created with prefixes such as cyber-, hyper-, at- or (@-), and e- : Examples include cyberlawyer ,hyperlink, atcommand, @home, ecruting (electronic recruiting) .

2.3.3. Writing and Speech in Computer-Mediated Communication

As the current project endeavors to investigate the spoken like and the written like features of written English among Algerian EFL learners in CMC, particularly Facebook chat, the point of the departure for the analysis in the present study has to be established with respect to previous research on spoken and written English. As such, the following part will first review the relationship between speech and writing thoroughly, followed by another section that is dedicated to computer-mediated speech and writing since it is the core of this study.

2.3.3.1. Understanding Speech and Writing

Writing has always been affected by the medium it conveys. It has been throughout a long process of evolution since the emergence of Alphabet till the present era of CMC. Thus, there are a set of characters, constrained to each medium, that determine the uniqueness of each medium. Yet, language in CMC, or netspeak is no exception, for it has evolved to raise more questions regarding the relationship between speech and writing. In similar vein, Crystal (2001) asserts that “the evolution of netspeak illustrates a real tension which exists between the nature of the medium and the aims and expectations of its users. The heart of the matter seems to be its relationship to spoken and written language” (p. 24). In this terms, “since writing itself does not occur in a vacuum, any analysis of writing should be related to its alter ego—speech, without exception to Computer Mediated Communication.” (Yang, 2006, p.22), it is important, therefore, to provide a comprehensible framework about the nature of spoken and written language, particularly English, as well as the factors which differentiate them, followed by a historical overview on the evolution of both writing and speech and their evolution.

2.3.3.1.1. Writing and speech

Most knowledge people maintain about the chief differences between speech and writing derive from David Crystal's "The Cambridge Encyclopedia of the English Language" (1995). The Encyclopedia resumes the Most important differences between speech and writing .

Speech	Writing
1. Speech is time-bound, dynamic, transient. It is part of an interaction in which both participants are usually present, and the speaker has a particular addressee (or several addressees) in mind.	Writing is space-bound, static, permanent. It is the result of a situation in which the writer is usually distant from the reader, and often does not know who the reader is going to be (except in a very vague sense, as in poetry).

<p>2. There is no time-lag between production and reception, unless one is deliberately introduced by the recipient (and thus, is available for further reaction on the part of the speaker). The spontaneity and speed of most speech exchanges make it difficult to engage in complex advance planning. The pressure to think while talking promotes looser construction, repetition, rephrasing, and comment clauses (e.g. you know, you see, mind you). Intonation and pause divide long utterances into manageable chunks, but sentence boundaries are often unclear.</p>	<p>There is always a time-lag between production and reception. Writers must anticipate its effects, as well as the problems posed by having their language read and interpreted by many recipients in diverse settings. Writing allows repeated reading and close analysis, and promotes the development of careful organization and compact expression, with often intricate sentence structure. Units of discourse (sentences, paragraphs) are usually easy to identify through punctuation and layout.</p>
<p>3. Because participants are typically in face-to-face interaction, they can rely on such extralinguistic cues as facial expression and gesture to aid meaning (feedback). The lexicon of speech is often characteristically vague, using words which refer directly to the situation (deictic expressions, such as that one, in here, right now).</p>	<p>Lack of visual contact means that participants cannot rely on context to make their meaning clear; nor is there any immediate feedback. Most writing therefore avoids the use of deictic expressions, which are likely to be ambiguous.</p>

<p>4. Many words and constructions are characteristic of (especially informal) speech, such as contracted forms (isn't, he's). Lengthy co-ordinate sentences are normal, and are often of considerable complexity. There is nonsense vocabulary (e.g. thingamajig), obscenity, and slang, some of which does not appear in writing, or occurs only as graphic euphemism (e.g. f***)</p>	<p>Some words and constructions are characteristic of writing, such as multiple instances of subordination in the same sentence, elaborately balanced syntactic patterns, and the long (often multi-page) sentences found in some legal documents. Certain items of vocabulary are never spoken, such as the longer names of chemical compounds.</p>
<p>5. Speech is very suited to social or 'phatic' functions, such as passing the time of day, or any situation where casual and unplanned discourse is desirable. It is also good at expressing social relationships, and personal opinions and attitudes, due to the vast range of nuances which can be expressed by the prosody and accompanying non-verbal features.</p>	<p>Writing is very suited to the recording of facts and the communication of ideas, and to tasks of memory and learning. Written records are easier to keep and scan, tables demonstrate relationships between things, notes and lists provide mnemonics, and text can be read at speeds which suit a person's ability to learn.</p>

<p>6. There is an opportunity to rethink an utterance while the other person is listening (starting again, adding a qualification). However, errors, once spoken, cannot be withdrawn; the speaker must live with the consequences. Interruptions and overlapping speech are normal and highly audible.</p>	<p>Errors and other perceived inadequacies in our writing can be eliminated in later drafts without the reader ever knowing they were there. Interruptions, if they have occurred while writing, are also invisible in the final product.</p>
<p>7. Unique features of speech include most of the prosody. The many nuances of intonation, as well as contrasts of loudness, tempo, rhythm, pause, and other tones of voice cannot be written down with much efficiency.</p>	<p>Unique features of writing include pages, lines, capitalization, spatial organization, and several aspects of punctuation. Only a very few graphic conventions relate to prosody, such as question marks and italics (for emphasis). Several written genres (e.g. timetables, graphs, complex formulae) cannot be read aloud efficiently, but have to be assimilated visually.</p>

Table 3 . Differences between speech and writing (Crystal, 1995, p.291)

Although Crystal (2001) clearly distinguished between Speech and writing , Douglas Biber (1988) asserted that the relationship speech-writing should be viewed as complementary and any division that can be made between the two is never clear-cut :

There is no linguistic or situational characterisation of speech and writing that is true of all spoken and written genres. On the one hand, some spoken and written genres are very similar to one another. On the other hand, some spoken genres are quite different from one another, as are some written genres. The relations among these genres are systematic, but must be specified in a multi-dimensional space. (pp.36-37)

Unlike Crystal and Biber, Halliday (1985) further noted that although it is conventionalized by many people that speech is formless and featureless, he further adds that it is neither less structured nor less organized than writing (p.14). In similar vein, Linell (2001) commented on these conventions as follows :

The conditions under which written language is generally taught have promoted the quite common belief that (some variants of) written language represent(s) the "grammatical" correct language, whereas many variants of spoken language are incorrect, defective, incoherent, ugly or rude. (cited in Hård af Segerstad , 2002 , p.38)

2.3.3.1.2. Historical Evolution of Speech and writing

The relationship between speech and writing has gone thru many changes throughout the history of the English language. In this respect, many retrospective studies such as Biber (1988) , McInoth (1998) , and Baron (2001) , have reported that the status of both speech and writing has evolved since old ages till the current age of Computer-mediated communication.

In old ages, the social fabric relied heavily upon oral assumptions and even when linguistic communication was written, it tended to have an oral side as well (Baron ,2001, p. 28) . Yet , powerful scholars of that era , such as Aristotle, Plato,and even Herodotus were no exception. Aristotle, for instance, argued that "words spoken are symbols or signs of affections or impressions of the soul; written words are the signs of words spoken" (cited in Harris 1986:26). Plato held that spoken language is primary (Hård af

Segerstad,2002 , p.37) . Yet, Herodotus , well-known as the father of the written history, used to perform oral readings of his work (Baron 2001 :28).

In Medieval ages, English writing shared some similarities with ancient in that it took place in “ a society with a clear foothold in an oral culture and a toehold in the world of literacy ” (Baron, 2001, pp 30-32) ; however, written English in Middle ages was different in that it predominantly served transcription functions, especially after the establishment of the printing press that enabled the English people to move from a largely oral culture into a literacy culture where readers could represent spoken ideas and words with written records (ibid, pp 29-33). In this way, thus, writing began to build up its own independent identity, starting from the seventeenth century to the eighteenth, nineteenth and first half of the twentieth centuries.

In late eighteenth century , McIntosh (1998) contended that late eighteenth-century texts of the prose samples were more “written in style”. Typical features of eighteenth-century prose included colloquialisms , absence of archaisms, more abstract vocabulary, and more passive-voice verbs , and high precision in spelling grammar (p.31). McIntosh (1998) also concluded that due to the improvements in transportation and communication that writing made available to larger audience as well as the print culture which “[took] pains to make its written genres more obviously written and less like speech” (p.35). Similarly, Baron (2001) later stated that “ in the seventeenth and eighteenth centuries, writing developed a new set of quintessentially written functions with the emergence of newspapers and novels ” (p.7) .

At the earlier parts of the twentieth century, especially during the twenties and the sixties, a set of linguists , such as Bloomfield, De Saussure, and Jespersen conformed to ancient philosophers’ view regarding the position of writing (Hård af Segerstad ,2002 , p. 37). Leonard Bloomfield , for example, did not regard written language as language at all

, but rather believed that “ writing is not language but merely a way of recording language by means of visible marks” (Bloomfield ,1933 , p. 21). Thus, held that writing is just an external device which linguists use for observing features of speech of past times. However, bloomfield’s position has always been put into question, since this idea stands in contrast with what he actually practiced as the founder of the behavioral approach.

In the second part of the twentieth century, particularly since World War II , writing increasingly came to represent informal speech. Moreover, people learned to write the way they spoke stepwise instead of preparing to speak as they wrote. As this critical time, says Baron (2001) , “ we’ve generally blurred older assumptions that speech and writing are two distinct forms of communication ” (pp .7-8) . In other words, she summarizes the twenty-first century’s views about writing as follows :

Contemporary analyses of written language , show that writing is both less and more than a mirror of speech. Less, because it leaves out pronunciation, intonation, and facial cues. More, because it often has its own vocabulary, syntax, and usage conventions. Yet at bottom, there’s no denying that writing captures much of what we say—or could say—in face-to face spoken exchange. (ibid)

In sum , throughout the history of the English language, writing and speaking have exhibited a balancing relationship, but it seems that most salient observation about this relationship is that the role of writing has been to assist , in subsequent, representation of spoken words.

2.3.3.1.3. Theoretical model of the relationship between speech and writing

When analyzing the historical relationship between speech and writing, the salient observation that can be made is that speech and writing have been through disequilibrium. For this reason, Naomi Baron (2001 , pp 21-22) identified three distinctive models that

govern the relationship between speech and writing. They are the opposition view, the continuum view, and the cross-over view . In fact, Baron's classification is based upon five different research agendas which drove the interest in the relationship between speech and writing . These agendas can be summarized as follow :

- **Linguistic Agenda**

As mentioned previously, structuralists, such as Deborah Tannen (1982), Leonard Bloomfield (1933) stressed heavily the importance of speech over writing, before this latter appears now as a reputed domain of linguistic inquiry. Overwhelmingly, studies have largely concentrated on evolution of writing, comparing writing systems, or analyzing the “linguistics” of writing.

- **Historical/Cognitive Agenda**

In this agenda , it is thought by many sociologists, psychologists, and students that alphabetic writing influences human cognition, both historically and in modern times. For that, countless are the studies that endeavored to investigate whether literates and non-literates think in different ways . Stated differently, the core question is whether the presence of writing engenders a gap between literate and non-literate people.

- **Ethnographic Agenda**

A relatively large number of anthropologists and linguists concerned with language in social context view writing as a culturally dependent variable, rather than a mere form of representation. As mentioned earlier , usage-oriented linguists such as Douglas Biber (1988) have argued that the linguistic properties of speech and writing vary from context to context .

- **Technological Agenda**

Significantly, this agenda brings about writing within the realm of technology. This involves the choice of the writing tool , the medium upon which written marks are inscribed .

○ **Pedagogical Agenda**

Finally, the pedagogical perspective discusses the position of writing inside the classroom. For example, it is now conventionalized that formal correct grammar is what students should be instructed while spoken language is regarded less significant. For that , instructors themselves have long presumed that “grammar” entails “written grammar.” Baron (2001 , pp 19-20)

As stated above, The Opposition View, The Continuum View, The Cross-Over View are the three views about the relationship speech-writing that stemmed from these research agendas :

2.3.3.1.3.1. The Opposition View

Both the linguistic and the historical/cognitive agendas propound the notion of dichotomy between speech and writing. Baron (2001 , p 21) outlines a List of features that distinguishes the two in the following table:

Writing	Speech
Objective	Interpersonal
Monologue	A dialogue
Durable	Ephemeral
Scannable	Only linearly accessible
Planned	Spontaneous
Highly structured	Loosely structured
Syntactically complex	Syntactically simple

Concerned with past and future	Concerned with the present
Formal	Informal
Expository	Narrative
Argument-oriented	Event-oriented
Decontextualized	Contextualized
Abstract	Concrete

Table 4. Some Features that distinguish speech and writing according to the opposition view.

2.3.3.1.3.2. The Continuum View

The ethnographic and technological agendas both overtake the dichotomous mode and presupposes that features of speech and writing could exist in either. In this model, Baron later refers to the anthropologically-based investigations of writing in real world contexts that concluded with mismatches between characteristics of speech and writing. In many cases, for instance, an official speech may be argument-oriented, formal, highly structured, and built through complex syntax, while a handwritten note to a friend may have the structure one expects of speech (event-oriented, informal, loosely structured, composed using simpler syntax). In similar vein, Tannen (1982) showed that spoken and written discourses contained features of both in a study she conducted about spoken and written narratives.

2.3.3.1.3.3. The Cross-Over View

The cross-over view challenges the opposition and continuum models held about speech and writing. The aforementioned models presume that linguistic messages remain true to type: speeches are spoken, books are read, but this view assumes that only because

a linguistic message appears to be spoken or written does not necessarily entail that that would be the medium by which one would experience it.

Having touched above upon theories that categorize different views about the relationship speech-writing , it seems that comparisons between spoken and written language show that the boundary between the two is still foggy . Some researchers advocate a dichotomous view between the two, while others commend complementary continuum view.

2.3.3.2. Computer-mediated Speech and Writing

In CMC, “the question of how speech is related to writing [has always been] at the heart of the matter” (Crystal ,2001, p18). In this sense, many resarch studies draw upon existing research on differences between spoken and written language. Consequently, results of those analyses differed ; some assumed a continuum view , while others adopted the opposition model of the relationship between speech and writing . However, such results seem to vary depending on the context of the mode investigated. The context of an async e-mail, for instance, might differ from sync chat, and so on.

Ferris (1997) , for example, argued that writing in cyberspace included many oral characteristics because CMC introduced many qualities of temporal immediacy, phatic communion, the use of formulaic devices, presence of extra textual content, and development of community . She further suggested that writers had to learn the existing 'oral' conventions in order to successfully disseminate their writing .

Additionally, Baron (2001) argued that the frequency of adverbial subordinate clauses in CMC approximated traditional writing , however, when placing more stress upon contexts where message senders appeared personally involved while communicating rather than being rigorously informative, electronic messages more resembled speech (p. 250) .

Relatedly, Susan Herring (2001) asserted that the linguistic features , revealed by computer-mediated writing , resulted “ in a linguistic variety that despite being produced by written-like means, frequently contains features of orality ” (pp 9-10). According to Herring , this orality is attributed to the variable of the medium, which strongly influences structural complexity in CMC . Synchronous modes of CMD impose temporal constraints on users that result in a reduction of linguistic complexity relative to asynchronous modes. Accordingly, she further explains CMD writing in the following words :

Actually, although computer-mediated language often contains non-standard features, only a relatively small percentage of such features appears to be errors caused by inattention or lack of knowledge of the standard language forms. The majority are deliberate choices made by users to economize on typing effort, mimic spoken language features, or express themselves creatively. (ibid)

In similar vein, Kershaw's (1997) conducted an influential study which revealed that writing in syn CMC was informal . It lacked capitalization, punctuation and grammatical subjects , most participants ignored to capitalize where necessary, while punctuation appeared in some few cases. Subject deletion was a salient feature in CMC, especially when the subject was the first person 'I' . Another feature of informal writing that Kershaw's study highlighted was that , in CMC, a large number of typographical errors, high utilization of abbreviation and more simplified spellings. In fact, errors which made editing difficult were attributed to time restraint. Time restraint and repetition were found to be beyond the widespread use of typographical errors , abbreviations and simplified spellings.

Kershaw (1997) argued that unlike formal writing FW which lacked cues to emotional state and speaker intention, informal writing in CMC comprised techniques that show people's attitudes and modes. For example, pauses in thought were marked by

ellipses. Important words were fully capitalized or delimited by asterisks. Repetition of characters was a technique to indicate intonation.

Kershaw 's work concluded with two major points : (1) the medium itself decides the linguistic form that users adopt ,and (2) Sync CMC showed hybridity between FW and common speech CS .

Werry (1996) also studied texts from Internet Relay Chat(IRC) by analyzing exchange structures and their organization . This study was highly contributive since it identified the properties of IRC in terms of addressivity, abbreviation, prosody , gesture and linked them to physical constraints of the medium in order to compare IRC to speech.

As stated above, Werry's study of IRC properties was established and discussed thoroughly in (1) Addressivity which referred to the user's interaction to address another specific user by mentioning the addressee's name at the beginning of the utterance, followed by a colon in order to maintain a dialogue between the chatters.(2) Abbreviations were shown on IRC through short messages , subject pronouns deletion , especially the pronouns 'I' and 'you' , and extensive use of acronyms and symbols .Werry affirmed that abbreviations occurred due to spatial, temporal and social constraints , such as screen size, average typing speed, minimal response times, competition for attention, channel population and pace of conversations. (3) In prosody, Werry asserted that linguistic features illustrated in capitalisation, spelling and punctuation took place to substitute f-t-f voice, gesture and tone. (4) In terms of gestures, involved visual images, asterisks, and symbols used to show actions that are similar to f-t-f conversations.

Finally, Herring (2010) viewed text-based CMC as conversation-like by plainly summarizing language in CMC in the following words :

In casual parlance, Internet users often refer to textual exchanges as conversations, using verbs such as

'talked,' 'said,' and 'heard' rather than 'typed,' 'wrote,' or 'read' to describe their CMC activities. Even published authors sometimes refer, unconsciously, it seems, to 'speakers' rather than online 'writers', 'talk' rather than 'typed exchanges', 'turns' rather than 'messages,' and so forth, when reporting on CMC. This linguistic usage attests to the fact that users experience CMC in fundamentally similar ways to spoken conversation, despite CMC being produced and received by written means .

2.3.4. Conclusion

In brief , this part of literature review shed light on two major issues that this project aims to unveil . First , it summarized the linguistic properties of writing in CMC that previous researchers have already found . These properties include informal features of writing , such as informal vocabulary, non-standard orthography , repeated punctuation , paralinguistics and some other features that appear in spoken language . Second , the researcher extended the discussion to thoroughly identify the notions of both speech and writing , compare them, report how a bevy of researchers such as Noami Baron, Susan Herring, David crystal and others perceived the relationship between computer-mediated communication , speech , and writing.

SUMMARY

This scholarly literature has yielded many conclusive remarks regarding the relationship between writing and technology . These remarks can be summarized in the following points :

1. Writing has always been impacted by the means of production. Whether this means is a pictograph, alphabet, print, radio, television, or internet, each of these means is regarded as a tool that produces writing according to its own technology of transmission (Daiute , 2000 , p 261)

2. The medium of computer-mediated communication with its text-based , video-based asynchronous and synchronous modes, is still new medium that needs to be investigated . In this literature, Facebook chat was established as a representative mode , and thus its features were described in details .
3. The linguistic properties of writing in CMC, and particularly in chat , include non-standard orthography, informal vocabulary , paralinguistic features that appear in speech .
4. The literature also discussed what speech and writing are , and how a bevy of scholars viewed the relationship between speech , writing , and CMC .

Chapter Three

METHODOLOGY

INTRODUCTION

This chapter explicates the methods and the procedures that were used to collect and analyze data. As such, for the purpose of testing whether computer-mediated communication has an impact on Algerian EFL learners' writing, material was collected from chat in Facebook, which is a synchronous text-based mode of computer-mediated communication. In this division, both material and tools of data collection are described in length, justifications of why a particular material was chosen are also put forward.

Furthermore, details about the background of participants, the corpus to be studied, some ethical guidelines of gathering and handling data are also regarded, and accompanied with discussions about some of the practical limitations that could influence data collection. Next, the chapter provides extended descriptions of methods of data coding and analysis before concluding with a brief summary of this chapter.

3.1. Tools and Materials

The linguistic material for this study was collected from Facebook chat, which is a text-based synchronous mode of CMC. The tools whereby chat sessions were gathered in this project are computers connected to the internet. Participants, who are Algerian EFL learners, had to have an email address and an account on Facebook. The chat records were analyzed automatically with the assistance of the software tool 'Tropes'. This software is a computer tool that is developed by Pierre Molette and Agnès Landré (November 2011) in order to be used in corpus linguistics for quantitative and qualitative analyses. It analyses text style and calculates measurements like the frequency of all word categories, such as the number of

pronouns, verbs, connectors, modalities, and so forth. 'Tropes' has been used for analyzing the material from Facebook chat quantitatively. However, manual analyses were conducted over this automatic analysis because of two reasons: (1) 'Tropes' did not afford analyses for most of the intended cases, and (2) manual analyses were applied to confirm the accuracy of this software analyses.

3.2. Facebook chat as a mode of CMC

With reference to the definitions of CMC stated previously (refer to page 12), the present project shall establish chat as a synchronous mode of CMC. That is, on Facebook chat, users, or friends as they are known within the scope of Facebook, are able to communicate instantly at the same time; however, Facebook chat can also be asynchronous as text-based chat sessions can be stored for a long time in messages when users are offline, including the time and the date of chat. Moreover, Facebook is a private application whereby interlocutors, or friends, can manage their own contact list and authorize the partner with whom they choose to chat with. Like any IM programme, Facebook chat makes it possible for its users to chat with more than one friend in the same dialogue window by adding them, as they can engage in several dialogues separately with more than one friend simultaneously.

Each time when one starts a chat conversation with a friend, a dialogue box between the two appears. Consequently, there can be time lag in response to different interlocutors. Facebook users, or friends, also have slightly longer time to think about what to type before sending the message than in real life conversation.

3.3. A Note on the Choice of the Material from Facebook Chat

Why Facebook in particular?

Bodomo Adams (2010) described Facebook and its popularity in the following lively words:

Facebook, the new CMC medium, would become one of the most popular websites...Its popularity has increased so much so that not only the youth but some prominent members of older generations... use it to get in touch with customers, constituents (316)

Accordingly, the researcher opted for collecting data from Facebook chat not only because it is a mode of Computer-mediated Communication and an instance of instant messaging , but rather because Facebook, in general, has become increasingly used as a tool of communication among Algerian University students. Chat in Facebook does, therefore, establish a wealthy platform for the researcher to collect a corpus that will add to the adequacy of the analysis. Another important reason for collection of this particular data, though, is that, at such a time, there is a pressing curiosity that calls for researching how language is used in Facebook.

3.4. Data Collection and Participants

In order to investigate the characteristics of Algerian university students' writings in the social net , I created a page on Facebook in which I explained the purpose of this research project , and invited **forty** Algerian EFL learners to join it . They all understood the purpose of the study , showed enthusiasm and agreement about giving their records of chat, and therefore joined the page, or simply ' liked ' it as joining a page in Facebook requires hitting the button 'like' on it . Yet, only **nineteen** participants amongst forty have taken part of the project by actually emailing their chat sessions to the researcher in order to be used as research data in this study, since the process of submitting data was made explicit to participants . That is, they were asked to copy their Facebook text chat , paste it , using the tool feature available in Microsoft word software , save it , and then email it to mastersthesis@ymail.com . Text chats were thus printed and used as data for this study . However, the researcher obtained data due to another procedure whereby the researcher was added to private chat by other participants , but the researcher did not participate in any

discussion and only remained as an observer in order to avoid affecting the data .

The participants, who provided the data, represent Algerian EFL learners who are active users of the social networking website ‘ Facebook ’, and thus active chatters . They also study at different grades and attend different universities around the country. They voluntarily contributed with some private text-based Facebook chat conversations that they have had with each other. That is , the study addressed only student-to-student (s) conversations of Facebook chat amongst Algerian EFL learners . In actual fact, there are some reasons that have affected the decision of selecting Algerian EFL learners from distinctive universities. The chief reason is that the status of English in Algeria is unitary, since it is taught as a second foreign language after French , a dominant first foreign language in the country, and Arabic , a first language. It is also encompassed in the Algerian education system as an obligatory subject that Algerian learners begin to take in grade one at the middle school. Accordingly, another compelling reason for the choice of participants is to access to larger Algerian EFL learners across the country.

The process of collecting data commenced in August 2011 and continued till April 2012. It resulted in gathering **twenty-nine** original pieces of chat that contributed to a corpus of **4702** words and covered **forty-seven** individuals aged between **eighteen** and **thirty-two** years .

Furthermore, participants offered one to three pieces of chat, all of these chat sessions were held between two interlocutors except **three** Facebook instant messaging conversation which involved more than two as Facebook chat operation platform enables to add friends in order to carry on group chatting. **Twelve** conversations occurred between females (FF) , **three** between males (MM), and **eleven** conversations included a mixture between females and males (FM) . The average time per Facebook chat conversation is **eleven** minutes, however, it is noteworthy to mention that the length of these conversations varied considerably.

3.5. Ethical considerations in gathering and handling the data

In their famous book 'Internet Communication and Qualitative Research: A Handbook for Researching Online', Chris Mann, and Fiona Stewart (2000) established five principles that govern fair information processing online. These guidelines are summarized as follows:

- Personal data should be collected for one specific, legitimate purpose .
- People should have access to the data collected about themselves.
- Existence of data banks should be publicly known.
- Personal data should be reasonably guarded against risks such as loss, unauthorized access, modification or disclosure.
- Personal data are not to be communicated externally without the consent of the subjects who supplied the data .

To put the instructions suggested above into application, the researcher created a page on Facebook titled ' Algerian EFL Learners E-Writing (MA Thesis) ' in which she thoroughly explained to the participants research purposes of the study and how their data would be handled confidentially (see the layout of the page in Figure 4) .

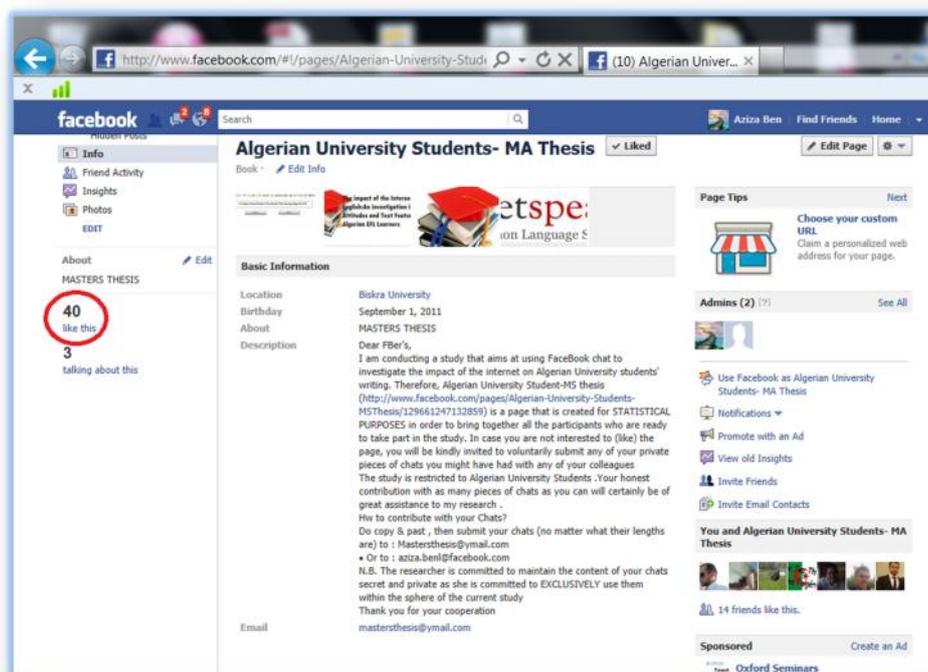


Figure 4. The layout of ‘Algerian EFL Learners E-Writing (MA Thesis) ’ formal page displaying its information section .

As corpora were received, the researcher did actually consider those guidelines . All information that may identify the identity of the participant remained anonymous to everyone but the researcher . Therefore, participants’ original information were hidden and replaced with other names and the data were not exposed in public nor were they used for purposes other than the study.

Furthermore, while it is ethical to participate in the chat conversations to be analyzed linguistically, the researcher avoided to participate in any piece of chat to be included in the analyses for diverse reasons. One such reason is that the researcher’s engagement could affect the content of the data as well as the spontaneity of participants. Another reason is that literature revealed that “Murray’s (1991) study was a typical example of how validity of data might be questioned.” (Anniesha Binte Hussin ,2000 , pp 34-35) .

3.6. Possible Limitations

While some participants showed enthusiasm about offering their data, it proved difficult to engage larger population of Algerian EFL learners to part with their chats. One of the reasons that was voiced in the course of this research and throughout the page created is that chat is considered very personal.

Moreover, the researcher is aware that there were some constraints which might affect the linguistic features produced by the participants since data collection relied on their voluntary contribution because some users, for instance, filtered some content of chat records before submission due to such privacy purposes.

3.7. Data Coding and Analysis

Different approaches have been adopted by different researchers to analyze chat and to compare it to spoken and written language. The current study aims at testing whether Algerian EFL learners writings in CMC differentiates from formal standard English, and whether it exhibits more spoken-like features. Consequently, this study has adopted a mixed approach (both quantitative-qualitative approach) since “mixed methods designs arguably contribute to a better understanding of the various phenomena under investigation” (Angori, J, 2010, p. 33). As such, this study qualitatively and quantitatively describes language in Facebook chat in order to adequately and comprehensibly identify whether it is similar or different from speech. For this purpose, a coding scheme was developed to analyze data. The unit of analysis for this coding scheme is “Algerian EFL learners’ writing in Facebook chat”, whereas the research established four categories to account for cases of analyses. They are: Orthography, grammar, vocabulary, and cases of paralinguistics (refer to **Table 5** below).

Unit of Analysis	Algerian EFL Learners' writing in Facebook chat
Cases of Analysis	1. Orthography
	2. Grammar
	3. Vocabulary
	4. Paralinguistic features and Graphics

Table 5. Coding Scheme for data analysis.

Taken altogether, this project identifies the orthographic , syntactic , lexical , and paralinguistic characteristics of writing in CMC in order to identify the impact of CMC on written English as exercised by Algerian EFL learners since standard orthography, grammar , vocabulary have long been conventionally considered as criteria that differentiate spoken language from written language .

SUMMARY

On the whole , this chapter provided detailed information about data, tools whereby they were gathered as well as the ethics , the limitations that might affect these data, and methods of analyses. Accordingly, **nineteen** participants, who are Algerian EFL learners, participated with **twenty-nine** chat dialogues that fruited in a corpus of **4702** words . This inanimate corpus of text-based Facebook chat was qualitatively and quantitatively analyzed. As such, these linguistic analyses addressed four cases: Orthography, grammar, vocabulary, and cases of paralanguage and graphics.

Chapter Four

RESULTS, ANALYSES AND INTERPRETATIONS

4.1. Orthography

Orthography is a standardized system for using a particular **writing system** (script) to write a particular **language**. It includes rules of **spelling** , and may also concern other elements of the written language , such as **punctuation** and **capitalization** . In internet linguistics research, the question of how spelling is perceived by CMC users has always been an area of debate , for it is taken for granted that CMC writers' spellings break the norms of standard writing . In this research project, analyses of authentic chat records of Algerian EFL learners revealed diversified features, ranging from formal conventional spellings of words and expressions, and more remarkable use of both informal abbreviations to improper capitalization, and extensive use of contractions. The following part will provide a detailed description of the informal orthographic deviations committed by some Algerian EFL learners .

4.1.1 Abbreviations

Abbreviations refer to the act of shortening words and phrases . In fact, the use of abbreviations is a common linguistic phenomenon which can be outstandingly found in the Facebook chat data. Table 6 below summarizes all the abbreviations found in the corpus :

Type of Abbreviation	Meaning	Frequency	Type of Abbreviation	Meaning	Frequency
U	you	132	com'on	come on	1
r/re	are	32	dnt	do not	1
Ur	your/ in words like yourself	28	doc	document	1
LOL/lol/lOoOl	laughing out loud	24	doin'	doing	2
coz/becoz/bcauz/cuz /bcz	because	10	eny	any	1
thnx/thx	thanks	9	esp	especially	1
gud/gd	good	6	ex	example	1
abt/bt	about	6	gonna	going to	1
2 /2morrow/ 2day	to / two/ tomorrow/today	5	gotta	got to	1
doc/DR	doctor	4	gr8	great	1
Sth/sthg/smth	something	4	havin	havin	1
Nd	and	4	hny	honey	2
Hw	how	4	hpe	hope	1
Wanna	want to	4	I L U	I love you	1
4/ 4got/b4	for/ forgot/before	5	interestin'	interesting	1
Bro	brother	3		Licence Master Doctorat	
Btw/btw	by the way	3	LMD	In Real	1
FB	Facebook	3	IRL	Life	1
Mnt	minute	3	m	I am	1
OMG	oh my god	3	MEPI	Middle East Partnership Initiative	1
Plz	please	3	msg	message	1
Pic	picture	3	newz	news	1
Wht	what	3	n8	night	1
C	see	2	Pc	personal computer pragmatic	1
GN	Good night	2	prag	s	1
hav/hve	have	2	puttin	putting	1
			readin	reading	1

HW	Homework	2	Sept	September	1
Iz	is	2	sharin	sharing	1
Knw	know	2	shud	should	1
Wht	what	3		Short messagin g service	1
Luv	love	2	ss	students	1
Ppl	people	2	thinkin'	thinking	1
readin'/readin	reading	2	this yr	this year	1
Sis	sister	2	tll	tell	1
Sry	sorry	2	tmr	tomorrow	1
Tht	that	2	univ	university	1
Thgs	things	2	v/ov	of	1
Amazing	amazing	1		Very Important Person	1
ASAP	As Soon As Possible	1	w8	wait	1
Az	as	1	waz	was	1
BritCiv	British Civilization	1	winnin	winning	1
Buzy	busy	1	y?	Why ?	1
			Y	you	1

Table 6. All Types of abbreviations and shortcuts found in the Facebook chat corpora .

Findings in the above table indicate that there are a number of different types of abbreviations that can be grouped as follows :

4.1.1.1 Omission of Vowels and Accent simulation

This included all types of abbreviations originating from phonetically motivated letters by means of omitting vowels, or spelling a word as it is pronounced. As indicated in Table 6, this type of abbreviations occurred the most among the other categories . Instances involved the commonest abbreviation ‘u’ with one hundred thirty-two occurrences , followed by ‘r’ with thirty-two occurrences, and ‘ur’ with twenty-eight occurrences . Other types such as ‘coz’, ‘thnx’, ‘abt’ , ‘gud’, ‘plz’ , ‘wht’ , ‘C’ , ‘sthg’, ‘nd’, ‘hw’, ‘ppl’ ,

‘sis’, ‘tht’ and ‘thgs’ were recurring consistently in the corpus ; however, other phenomena such as accent simulation was found to be very common, even if it took diverse patterns , such as in ‘sharin’ and ‘ interesting’ ’ (see Table 6 for meaning and frequency of vowel omission and accent simulation) . Other illustrations for vowel omission and accent simulation are found in Example 1 and Example 2 :

Example 1 .

*Faiza : But **whtabt** the HW*

Chaima : i attached the file

Faiza : thanks

*Chaima : **sry** hny it’s 2 late*

***gd** luck*

Example 2 .

*Nacim : any ways; what am **thinkin’** of is to stop **sharin** from the usa **nd** the europe **nd** start our own project ! [je vx dire c bon on a marre]*

[i want to say it is enough]

4.1.1.2 Acronyms

Acronyms refer to abbreviations formed from initial letters of a series of words and pronounced as one word. The most common example from the Facebook chat records was ‘LOL’, followed by ‘BTW’ and ‘OMG’ ,then ‘GN’ while ‘ASAP’ , and ‘FB’, ‘I L U’ and ‘IRL’ were the least common (refer to **Table 6** for meaning and frequency of these acronyms). Data also exhibited that these acronyms are related exclusively to CMC, and that Algerian EFL chatters mutually understood these abbreviations except in one case where a participant requested further clarifications (see **Example 5**) .The following examples show how acronyms revealed in the data:

Example 3 .

*Mohcen : send me her address **ASAP***

Maya : i will try to look in my old papers

2morrow[inch]

*when i find , i'll send it tou
i used to have her card*

Example 4 .

*Kaouthar : I guess it's my time to go
time to cook , lol*

Example 5 .

*Moussa : this happened to me once but **IRL**
Hadjer : what do u mean with this irl ?
Moussa : In Real Life*

4.1.1.3 Letter and number homophones

This included the use of numbers to replace words or parts of words ,such as the use of '2' which occurred the highest in the data among this category , followed by the use of '4', then the use of '8' in words such as 'gr8' (refer to **Table 6.** for these cases, their meanings and occurrences) . Example **6** below illustrates how Algerian EFL learners made use of numbers to substitute words :

Example 6.

*Salma : btw i **4got** to tell u [mabrouk]
[congratulations]
Salim : Y ?
Ah ,thx*

4.1.1.4 Clippings

Clippings refer to words that are shortened by losing word ending . This type of abbreviations was very common in the data. Examples included 'doc', 'bro', 'pic', 'sis', 'esp', 'pragma', 'sept', 'univ' (refer to **Table 6** for meaning and frequency of these clippings) . The succeeding examples show how clippings impacted the participants' writings :

Example 7 .

*Afaf : i left my copybook ov **pragma** in my room!
Wafia : oh Afaf!!!*

Example 8 .

*Nacim : I'll go offline like Racim.
Have a nice day
Moussa : u too bro*

Furthermore, a notable phenomenon that was revealed in chat data is that the usage of abbreviations overcame the English language. That is , abbreviated words that are borrowed from both spoken Algerian Arabic and French also appeared in the corpus . A feature that needs to be investigated thoroughly in other research occasions, as the aim of the current study is to research how written English is impacted by CMC . The following table illustrates these cases :

Abbreviation	Language	Intended spelling	Translation	Frequency
Hmd	[Ar.]	(hmdolillah)	Praise be to Allah (God)	3
C	[Fr.]	C'est	It is	2
Inch	[Ar.]	(inchallah)	Interjection meaning 'God willing'	2
BN/bn8	[Fr.]	Bonne nuit	Good night	2
j ss	[Fr.]	je suis	I am	1
Ki	[Fr.]	qui	who	1
Koi	[Fr.]	quoi	what	1
Lsl	[Fr.]	l'essentiel	essentially	1
Mé	[Fr.]	mais	but	1
Mnt	[Fr.]	maintenant	now	1
Slt	[Fr.]	salut	hi	1
Vx	[Fr.]	veux	want	1
Total				17

Table 7. Code mixing: Mixture of Romanized Algerian Arabic and French abbreviations found in the Facebook chat corpus .

Besides code mixing , the most noticeable phenomenon that was voiced in the data is that Algerian EFL learners obeyed to the international norms of chat language , and used abbreviations creatively . Also, analyses concluded that the fact that Algerian EFL learners shared the same background and degree of intimacy seemed to be the reason beyond the extensive use of abbreviations .

4.1.2. Capitalization

Another common feature, which highly marked its existence and thus suggested evidence for non-standard spelling, is the absence of capitalization in most of learners' contributions. Outstandingly, standard capitalization was found to be absent in proper nouns, at the beginning of the participants' contributions, and mostly in the pronoun 'I'. The following section will provide findings and analyses of the use of this orthographic device in the data.

4.1.2.1. Proper nouns

Occurrences of all proper nouns found in the data		Proper Capitalizing in proper nouns		Improper Capitalizing in proper nouns	
43	100%	18	41,86 %	25	58,14%

Table 8. Occurrences of proper and improper capitalization in all proper nouns found in the data.

As displayed in the table above, Algerian EFL learners tended to attribute lowercase letters to proper nouns in twenty-five instances versus eighteen instances where uppercases were properly attributed to initiate proper nouns in the data. As a result, this tendency seems to be popular among Algerian EFL learners in Facebook chat (Examples 9 and 10 are extracted from the corpus to illustrate this particular point).

Example 9.

*Maya : try when u go to see some professors there
in **h**ussin **d**ey & ther **r** in **h**yd*

Example 10.

Karima : well dear i should go

Djihad : now ?

*Karima : coz i should buy a train ticket to go to florence
[inshallah]to my uncle*

4.1.2.2. The pronoun 'I'

Overall occurrences of the pronoun 'I' in the data		Proper capitalizing of the pronoun 'I'		Improper Capitalizing in the pronoun 'I'	
182	100%	78	42,86 %	104	57,14 %

Table 9. Occurrences of proper and improper capitalization in the pronouns found in the data .

In table 9 , absence of capitalization in the pronoun 'I' accounted for (57,14 %) versus (42,86 %) for cases where this pronoun was properly spelled in uppercase letters. Possibly, the absence of capitalization found in the data might be justified under time restraints, and the degree of friendship between the participants .

Example 11 .

Fares : i wanted to subscrib for the secondary school teachers test or interview, but i was told that my diploma doesn't count

Rania : why not

Fares : they accept only master

Rania : LMD ?

Fares : i guess i will tear my diploma apart

4.1.2.3. At the beginning of the participants' contributions :

Participants overall messages « turns » in the data		Uppercases at the beginning of the participants' contributions		Lowercases at the beginning of the participants' contributions	
915	100%	54	5,90 %	861	94,09 %

Table 10 . Occurrences of proper and improper capitalization at the beginning of the participants' contributions in the data .

Table 10 above illustrates one of the common orthographic deviations that are found in Facebook chat corpus. Lack of initial capitalization in learners' contributions was found to be the most occurring and the most repeated systematically. Results , thus, showed that almost all learners contributions lacked initial capitalization (94,09 %) whereas only (5,90 %) contributions were initially capitalized . The extraction below exemplify how initial capitalization was violated by Algerian EFL learners :

Example 12 .

Afaf : hello ;-)
Wafia : hi
Afaf : how r u doing
Wafia : did u receive my email ?
Afaf : yes i did

4.1.3. Contractions

Besides informal use of misspelling and misuse of capitalization , observations from the data exhibited high tendency of another type of informal spelling . Perhaps, the most remarkable type was the use of contractions . By definition , a contraction is a word formed from two or more words by omitting or combining some sounds . Accordingly , the table below quantitatively compares between occurrences of full spellings versus occurrences of contractions found in the data .

	Cases for full spellings	Cases for contractions	Total
Number of occurrences	27	83	110
Percentage	24.54%	75.45%	100%

Table 11 . Occurrences of cases for full spellings versus occurrences of contractions in the data .

As shown in table 11, Algerian EFL learners leaned to spell words fully without contractions only in twenty-seven instances versus eighty-three instances where contractions took place in the data. Unsurprisingly, therefore, this leaning toward contractions seems to be popular among Algerian EFL learners in Facebook chat which can be justified, once more, in time restraints, and the degree of friendship between the participants. The following table summarizes all the contractions found in the data with their frequency.

Contractions	Frequency	Contractions	Frequency
I'm/ i'm	23	she's	2
It's/ it's	20	u'll	2
don't	13	you'll	2
that's	11	wasn't	2
I'll/ i'll	10	nothing's	1
I've/i've	5	com'on	1
what's	3	gotta	1
didn't	3	I'd	1
who's	2	it'll	1
won't	2	kinda	1
couldn't	2	they're	1
haven't	2	they've	1
there's	2	we'r	1

Table 12 . List of some contractions and their occurrences in the chat data .

This table indicates that contractions such as ‘I’m’, ‘It’s’, ‘don’t’, ‘that’s’, ‘I’ll’, and ‘I’ve’ were the most recurring in the data with twenty-three, twenty, thirteen, eleven, ten, and five times respectively . Other contractions occurred less , such as ‘what’s’ and ‘didn’t’ which occurred in three instances, followed by a set of other contractions , including ‘who’s’, ‘won’t’, ‘there’s’ ,’you’ll’, etc occurred only twice, while more sophisticated contractions , such as ‘it’ll’, and ‘gotta’ occurred the least (only once) . Example 13 is extracted from the corpus to illustrate this phenomenon as practiced by Algerian EFL participants :

Example 13 .

Rahim: i'm sorry for didnt notice that someone's chatting with me

Fares : it's ok

Rahim: and u Fares, hw r y?

Fares : I'm fine hmd , but i'm not in the mode now

4.2. Grammar

In standard norms of the language, grammar can be defined as the branch of linguistics that deals with syntax and morphology. Syntax studies sentence structure and the rules for forming admissible and arranged sentences , whereas morphology deals with the rules for forming admissible words . Again, this study aims at comparing the grammar of computer-mediated writing , in Facebook chat, to the grammar of standard writing . Thusly, content analysis of chat corpora will depict cases of telegraphic language .

4.2.1. Telegraphic language

4.2.1.1. Deletion of the pronoun ‘I’

Feature	Overall occurrences of the pronoun ‘I’ in the data	Deletion of the pronoun ‘I’	Total
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Number of occurrences	182	34	216
Percentage	81.32%	18.68%	100%

Table 13 . Overall occurrences of the pronoun ‘I’ versus its deletion in the data .

The comparison between the above table shows that the pronoun ‘I’ tended to be present in most of the participants messages , while its deletion occurred less in the chat corpora . Interestingly, although subject pronoun presence exceeded its absence in the chat data , the deletion of the pronoun 'I' was found to be a popular phenomenon which provides evidence for telegraphic language .

4.2.1.2. Other Features of Telegraphy

Feature	Number	Percentage
Deletion of the pronoun 'I'	34	50.75%
Deletion of the auxiliary 'to be'	19	28.36%
Deletion of the pronoun 'you'	14	20.90%
Total	67	100%

Table 14 . Occurrences of subject pronouns deletion and the auxiliary 'to be' in the data.

More manifestly, the following figure compares ,by means of graph , the occurrences of each subject pronoun and the auxiliary 'to be' in the data :

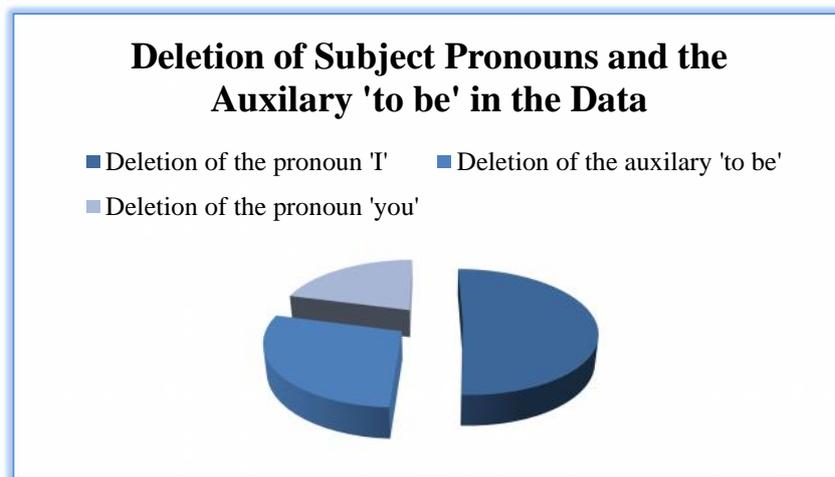


Figure 5. Deletion of subject pronouns and the auxiliary 'to be' in the data .

Besides subject pronoun deletion, data showed few cases where other pronouns , parts of speech, and articles were deleted . Table **14** and figure **5** above show that the deletion of auxiliary 'to be' was common in the corpora , and accounted for nineteen situations , followed by the deletion of the pronoun 'I' that accounted for fourteen situations , while the deletion of other subject pronouns occurred less . The table above shows that Algerian Facebook chatters show subject pronoun deletion, especially the pronoun 'I' and 'you'. Seemingly, Algerian Facebook chatters made use of telegraphic language due to the temporal constraints of chat , such as the typing speed and their competition to grab attention . Anyhow, The table below quantitatively compares between occurrences of the deletion of the pronouns 'I' and 'you' , and the auxiliary 'to be' .

Example 14 .

*Salim : no m just on an iphone
so takes time to write*

Example 15 .

*Rafik: had 5 weeks of work & a week of terrible cold & headeache :)
Rahim: lol*

Example 16 .

*Houda : as i told u
waiting to meet him after holidays*

4.3. Vocabulary

4.3.1. Informal Vocabulary

One of the salient features that was practiced by the participants from which Facebook chat data were collected is the use of informal vocabulary ; a feature which seems to mirror the shared background between the participants and the nature of Facebook itself since users are considered to be friends. The following table resumes some of the informal vocabulary that took place in the data :

Some informal words and expressions	Frequency	Some informal words and expressions	Frequency
Hi/hi	22	Kiss	2
get/got/gotta	21	Nope	2
Yeah	14	Baby	1
ok/okay/okey	13	Dad	1
Hey	9	Funny	1
yep/yup	7	gosh	1
Guy	5	Kinda	1
Honey	5	Loads	1
mom/mum	5	Nah	1
Darling	3	no way	1
Damn	2	Sweety	1
Dude	2		

Table 15. List of some informal vocabulary found in Facebook chat data.

Findings in the table above show that Algerian EFL learners appeared informal in Facebook chat . Words such as the greeting expression ‘hi’ was the most employed in the data with twenty-two occurrences , followed by the interjection ‘yeah’, the adverb ‘ok’, the

interjection ‘hey’ to grab the chatters’ attention, as well as the interjection ‘yep’ which indicated an affirmative response ; they appeared respectively with twenty-one, fourteen, thirteen, nine , and seven occurrences . Similarly, there were also other informal words such as , ‘guy’ , ‘honey’ , and ‘mom’ which appeared five times , followed by a set of other words that mirrored nothing but informality and warm friendship . These words included ‘darling’ , ‘damn’ , ‘dude’ which occurred three times , while more other words , such as ‘kiss’ , ‘nope’ that indicated ‘no’ , occurred twice , whereas the other words like ‘baby’ , and ‘sweetie’ , etc revealed only once. Anyhow, example **17** is extracted from the corpus to illustrate this type of informality found in learners’ Facebook chat writings .

Example 17 .

*Afaf : yep I've just consulted my **damn** email
too much*
*Wafia : no choose only one
quotation and write an essay abt it*

Example 18 .

*Salim: I need 2 go **guys** ! hav **fun**...(will be continued)*
Abdelhak: Series or wht ?
*khelil : @ sarah u see Sarah ?
@salim : leave **Mr. VIP***
Salim : haha
tell u later
*khelil : Keep ur foot on earth **dude** ! lol*

4.4. Paralinguistic Features and Graphics

In spoken interactions, Paralinguistic Features refer to all facial expressions , body language, gestures, tone, and intonation patterns that add extra mutual understanding among interlocutors. That is, “ [w]hen people speak face-to-face, they convey far more information than the words and phrases making up their sentences ” (Baron, 2001, p 242) .

In CMC , writers seemed to apply face-to-face spoken interactions on writing due to creative use of punctuation, emoticons , and other markers . Accordingly , the following part will provide a detailed description of paralinguistic Features and graphics used by the participants in this study .

4.4.1. Use of punctuation

Punctuation refers to the marks used to clarify meaning by indicating separation of words into sentences and clauses and phrases . In researching language in CMC, perhaps the most significant and exceptional element that characterizes standardized writing is punctuation, for it has long been a criterion that differentiates speech from writing , and “ reveals how writers view the balance between spoken and written language ” (Baron, 2001, p 167) . The following table groups the punctuation marks found in Facebook chat data and their Number of occurrences :

Type of punctuation	Number of occurrences
!	82
?	79
!!	17
!!!	5
!!!!!!!	2
!?	2
!!!!!!!!!!!!!!!!!!!!	1
?!	1
?????	1
Total	187

Table 16 . List of punctuation marks found in Facebook chat data and their Number of occurrences.

The list of punctuation marks that took place in the data shows that the exclamation mark ‘ ! ’ occurred the most in the data in eighty -two instances , followed by the question mark ‘ ? ’ with seventy-nine occurrences , then multiple punctuation marks such as ‘ !! ’, ‘ !!! ’, ‘ !!!!!!! ’, and ‘ !!!!!!!!!!!!!!!!!!!!! ’ were frequently occurring in the data

with seventeen, five, two, and one times respectively . The other types of punctuation marks occurred only once, such as ‘?!’ and ‘?????’ .

Altogether , analyses of written English in Facebook chat data afforded many observations regarding the use of punctuation among Algerian EFL learners . In actual fact, punctuation use was highly informal and sometimes aimless except some use of exclamation marks and question marks that adhered to the norms of standard writing . Typical instances for such use included the following features :

4.4.1.1. Final periods at the end of participants’ contributions were absent :

Although this feature is purely orthographic rather than paralinguistic, it was found to occur in most of the learners’ contributions ; a finding that is consistent to Kershaw’s work (1997) which revealed that punctuation was present to a minimal degree . Interestingly, this feature and some other typographical errors in spelling , such as ‘homey’ instead of ‘honey’, and ‘thing in’ instead of ‘thinking’ , is due to difficulty of editing and time restraint , but rarely due to lack of knowledge (see Example 19 and 20)

Example 19 .

*Souad : i’m with the assignment
u r interested in presentation or test?
Kaouthar : for the time being i’m interested in test
i don’t know why
but i naturallyy find myself thing in that
thinking of that
Souad : one feels more comfortable doing the test rather than presenting*

Example 20 .

*Souad : do appear in FB next time
Kaouthar : i’ll [inch]
hope to see u soon
have a nice day, homey
honey
not homey
hhhhhhhhh*

4.4.1.2. *Increased use of unconventional types of punctuation :*

Participants tended to use multiple dots and ellipsis (...) extensively in order to give their interlocutors a sign that what they type needs further discussion or a succeeding idea will be typed in few seconds, or simply to indicate a thinking pause. Another feature was the intensive use of repeated question and exclamation marks (!!!!/????) that might be justified in users' attempt to show extra emphasis regarding their attitudes, or simply in "the fact that it requires little more effort to type a hundred question marks than it does to type one" (Hård af Segerstad, 2002, p145). Besides question and exclamation marks, the presence of parentheses and quotation marks in data was catchy, and participants seemed to use them in order to add extra information, or in cases of code mixing to indicate that word between brackets or quotations is in another language than English. (Refer to Table 17 for other symbols and unconventional punctuation marks in the data)

4.4.1.3. *Unusual use of different types of symbols :*

The different unusual symbols that were found in the chat data were the symbol '&', the symbol '@', the symbol '%', the symbol '\$', the symbol '#', and the symbol '+'. First, the symbol & was the highest to take place in the data, seventeen times, followed by the symbol '@' that was found in one contribution to replace the article 'at', and appeared in another contribution as a part of an e-mail address form, but in most cases it was used to indicate the intended interlocutor in the chat records that included group chatting between more than two friends (see example 18). The symbol '\$' was found to indicate money in general, and the symbol '+' to indicate positive thinking, while the other symbols were used to save time, effort and to adhere to "the save keystroke principle" (Crystal, 2001, p 87), for it is daunting to wholly type 'and' while the easier symbol '&' exists. Anyhow, below are some types of unconventional punctuation marks

and symbols found in the corpus , followed by examples illustrating how these symbols appeared in the data .

Other Types of Symbols and Unconventional Punctuation	Number of Occurrences
&	17
Multiple dots (...)	16
.../.../.....	9
@	6
()	3
'''	3
%	1
\$	1
#	1
+++++	1
Total	58

Table 17 . List of other types of unconventional punctuation marks and symbols found in Facebook chat data.

Example 21 .

Youcef: every thing

it's all about what u hav in the pocket

money \$

Ibtissam : that's cool, so i'll buy one too, [bssah 3lik ah] xD

[but the payment is on you ah]

Example 22 .

Romayssa : wait a mnt !

back

Fares : welcome back

Romayssa : We said ...?

Fares : wierd people r playing with future of generations to come

Example 23 .

*Basma : me too,[ana mazal mabditch]
[I have not started yet]*

*Asma : wht!!!!!!!!!!!!!!!!!!!!
when will u submit ur work?*

Basma : i don't know

Example 24 .

*Mounira : youre not online in facebookin the last days
Are u at work*

*Wahid : @home ...
Just want to stay away of tecnology !!
it's not good all th time*

4.4.2. Use of Emoticons

One of the most popular features that people maintain about computer-mediated language is the use of smileys and emoticons. By definition, emoticons are combinations of keyboard characters that are created to represent an emotional facial expression. The following table summarizes all the emoticons found in the corpora:

Type of Emoticon	Number of occurrences	Meaning
:)	10	simple smiling face
;))	5	simple winking face
:p	3	Happy/ sticking the tongue out
:o	2	Amazed or in shock
:~)	2	Smiling face
;-)	2	Winking face
xD	2	Laughter
^^	2	Smiling
:D	1	Laughing/Big grin
:S	1	Incoherence or loss of words
:/	1	Wry face/skeptical
:(1	sad face/disappointment
;)))))))))	1	Big wink
:-(((1	high disappointment
:'(1	Crying
;)^	1	winking twice

:@	1	Screaming
^_^	1	Banzai smiley showing enthusiasm
(y)	1	Like
Total	41	

Table 18. List of emoticons found in Facebook chat data .

However, results stemming from this research project revealed that although emoticons were common in the Facebook chat corpus, they barely occurred as popularly believed . In fact, emoticons that are found to be the most frequently occurred are the simple unsophisticated ones which could be easily understood and that Facebook chatters could click on or type easily and immediately . Therefore, Facebook chat corpora resulted in nineteen distinctive types of emoticons ; the most common ones were the simple smiling faces ‘ :)’ , followed by a winking eye ‘ ;)’ . The smiling faces that expressed happiness, pleasure, optimism, and humor occurred ten times, whereas the winking eye ‘ ;)’ occurred five times . The symbol ‘ :p’ occurred three times , while the other symbols, such as ‘ :o’ , ‘ xD’ , and the winking ‘ ;-)’ , and the smiling symbol ‘ ^^’ occurred twice , while the remaining types of emoticons , such as the sad face and, the skeptical face , the crying face, etc rarely took place in the chat corpora (see **Table18** for types of emoticons and their frequency) .

Additionally, and more importantly, it seems that Algerian EFL learners appeared on chat as they usually do appear in real life conversations. For example, they tended to use emoticons to substitute body language, such as facial expressions and gestures in order to express their status, attitudes and share their opinions , as they tell much about their personal identity. Below are some extractions from the data illustrating how emoticons were used in Algerian EFL learners’ Facebook chat records .

Example 25 .

*Khelil: [Mabroooooooooooooooooooooook]:-)
[Congratulations]
told u that u can make it bro :p*

Example 26 :

Karima : u heared that linda's mom has passed
*Djihad : wht!
omg :o
[allah akbar]
[Allah is the greatest]
the poor,she's left alone*

Example 27 :

*Dalal : :S
Maya : everyone is getting married
what is wrong ?*

4.4.3. Use of Markers for emphasis

Besides punctuation marks and the use of creative emoticons, there comes another common feature which highly marked its existence and thus suggested evidence for paralinguistic . Emphasis is one of the paralinguistic strategies that learners were found to exercise in their Facebook chat writings. Learners, for instance, developed many markers for emphasis , including strategies of capitalization , multiple letters , and the use of asterisks and underscores . The following part will provide more details and analyses of the use of these markers .

4.4.3.1. Capitalization

One of the interesting features that requires deep observation is capitalization . In this study, capitalization is found to take different positions and serve as distinctive functions; however, more concentration in this part will be placed upon the function of emphasis. In fact, it is found that Algerian Facebook chatters tended to type words and

4.4.3.2. Multiple Letters

One of the prominent spelling behaviors ,which were found in the corpora , was the use of non-standard repeated letters in many of the participants' contributions . Analyses of the chat corpora demonstrated that repeated letters were the most frequently occurring among the other strategies that chatters usually use as a means of emphasis , or as a strategy to attract attention, especially in some cases when a chatter took prolonged time before responding on his interlocutor (s) ; nevertheless, multiple letters emphasis seemed to be less serious than emphasis by means of asterisks and capitalization . Significantly, analyses of the chat corpus showed that besides repeated letters , some participants tended to repeat full words in order to indicate emphasis . (See example 30 below)

Interestingly enough , it is noteworthy to mention that repeated letters that appeared in the corpus overcame the borders of the English language usage, and also appeared in phonetically and orthographically romanized Algerian Arabic (see the underlined word in Example 25) . Again , since the focus of this study lies exclusively on the impact of computer-mediated communication upon written English , such features will be excluded from the content analysis. The following table groups the cases for multiple letters use found in the chat data , followed by examples extracted from the corpora .

Multiple letters
Byeeeeeeeeee
hiiiiii/heyyyyy/helloooo
KISSSSSSSSSSSSSSSSSSSSSSSSSSSES
Long
IOoOI
Muuuuuuch
Realllllllly
Reallyyyyyyyyyy
Sleeeeeep
Sooo

Sooooooooon
Sureeeeeeeeeeeeeeeee
Wawwwwwwww

Table 20 . Cases for multiple letters use found in the chat data.

Example 30:

Fares: well, I must go becauz i really really really really wanna sleeeeep
Rahim :it's ok
good night

Example 31:

Abdelhak: u heard that salim (together with his group) won the globablechallenge
Sarah :wht ? Realllllllly ?
Khelil : yep, he shared that on his wall

4.4.3.3. Asterisks

Other alternative markers that indicate emphasis on a particular point is attaching asterisks and underscores to words and expressions . In this project , the use of asterisks are found to be another strategy whereby Algerian Facebook chatters substitute body language that text-based chat lacks . Consequently, they play the same role of emoticons in a more simplified manner . In similar vein , Hård af Segerstad (2002 , p 142) viewed their usage as “ poor man’s emoticons ” that are adopted when a chatter doubts how keyboard characters are combined to form facial expressions . Finally, analyses in this study showed that Facebook chatters used asterisks to focus on a particular issue , or to beg and urge their interlocutors to take a subject matter into consideration , but findings showed that they are not popular among Algerian EFL learners, and that they occurred less frequently than both capitalization and multiple letters . Table 21 below reveals all cases of asterisks ’use in the data, followed by an example extracted from the corpora :

Asterisks
hero
not well
Okay*
plz*

Table 21 . Cases for Asterisks found in the chat data.

Example 32 .

*Yassmine: her email? plz**
Abdou : but do I have your promise
don't give it to any one
Yassmine: as usual of course
Abdou: she's not an ordinary worker
*Okay**

4.4.4. Prosody and Interjections

Prosody refers to the patterns of stress and intonation in a language . Thereby, Prosody involves all kinds of non-linguistic sounds that are common in f-t-f voice , such as laughter , non human voices , and interjections . Interjection is defined by the Oxford dictionary as “ a short sound or word or phrase spoken suddenly to express an emotion . Oh ! , look out ! and ow ! are interjections ” . In this research project , Algerian EFL learners’ spellings that represent prosody were recurring remarkably in their chat corpora . The table below displays types of prosody , including interjections that took place in the data .

Interjections	Frequency	Interjections	Frequency
ah/ahh/ahhh./ahhhhh	9	Euh	3
hhh/hhhh/hhhhhh/hhhhhhhh h	9	ow/oww	3

haha/ haaa	8	aha!	3
hmm/ hmmm/ emmm/ mmm	7	Oups !	2
Oh	6	Pfff	2
wawwwwwwwww/waw/wow	5	Ihh	1
hey/hey/hey/hey/hey	4	chuuut	1
héhé	3	heloooo ?	1

Table 22 . List of interjections and their frequency in the data .

Table 22 indicates that sounds such as interjections , laughter, and other human and non-human noises were creatively present in the chat records of Algerian EFL learners. Laughter, together with ‘ah’,for instance, were found to be the most occurring among the other voices (nine occurrences) . Besides , laughter plainly took several forms in the data, it ranged from ‘hhh’, ‘haha’ to ‘hah’ and ‘héhé’, followed by seven occurrences for ‘hmm’ , a voice indicating that the participant is wondering, taking a thinking pause, or, in some cases, requesting further details . The interjection ‘oh’ appeared six times , and was a signal for surprise, shock, and often for introducing an added comment or afterthought , directly followed by the interjection ‘wow/waw’ for expressing surprise, great impressing , and admiration, then ‘euh’ ,’ow’, and ‘aha !’ with three occurrences . ‘Euh’ for expressing a thinking pause and little surprise, followed by the interjection ‘ow’ for expressing disappointment and sympathy, then ‘aha !’ , an exclamation of discovering something. ‘Pff ‘ and ‘oups !’ occurred twice , and the latter ‘oups !’ was used by participants to acknowledge a mistake or an accident . The remaining voices occurred only once, such as the calling voice of ‘helloo’ and ‘hey’ that were, as stated previously, meant to attract attention , whereas ‘chut’ to hold the interlocutor remain silent . In brief,

Analyses of chat in this study provided evidence that Algerian EFL learners use interjections to imitate f-t-f conversations. Anyways, the extractions below exemplify how interjections were used by Algerian EFL learners :

Example 33.

Afaf : But I didnt get whteach of the F ,M,U signifies
Wafia: F stands for Form M: Meaning and U: Use
*Afaf : **aha! I C***
this requires deep thinkin'!

Example 34 .

Yassmine : he never answers
even when I met him, he wasnt as helpful as u!

*Abdelhak : **owww** really*
okay we gonna use another way
by putting a pressure on him

Chapter Five

DISCUSSION

5. Discussion

This research project ensured that Facebook chat and by extension all modes of computer-mediated communication have an impact on written English. This impact is twofold dimension. First, written English in CMC, and particularly in Facebook chat, was found to show non-standard features in spelling, grammar, and vocabulary. Second, written English was also found to resemble f-t-f spoken conversations, such as in the creative use of paralinguistics by means of writing. In fact, these two major findings stemmed from an in-depth observation, description, and then analysis of Algerian EFL learners' linguistic choices in Facebook chat. Here, in this part of the discussion, I shall compare and contrast some linguistic choices found in the current project to some of the previous studies. Points of comparison and contrast will cover orthography, grammar, vocabulary, and features of paralinguistics.

First, in orthography, the present study identified many linguistic deviations, including the use of abbreviations, absence of capitalization where necessary, and extensive use of contractions. In abbreviations, findings revealed that Algerian EFL chatters used different creative forms of abbreviations, including omission of vowels, accent simulation, acronyms, use of letter and number homophones, and Clippings. These findings were shared amongst most of the previous studies on CMC. For instance, the use of abbreviations in this project aligned Werry (1996)'s model of IRC linguistic features. Werry's features are three. First, features for economy and text entry reduction. Second, features for giving the respelling a simulation of spoken language. Third, features involving graphical effects and iconicity (Werry 1996).

Likewise, Yang (2006) found that CMC users created their own idiosyncratic phonetic spellings of commonly used patterns in their writings , and showed that many phonetic deviations had become parts of a growing CMC-based lexicon of phonetic spellings .

Regarding proper capitalization, the current project detected that standard capitalization was absent in most proper nouns , at the beginning of the participants' contributions, and mostly in the pronoun 'I' . These findings were similar to the works of Yang (2006) , and Bodomo (2010) . While Yang studied IM and revealed that “the whole sentences could be produced without capitals or punctuation even for the word ‘I’ ”(2006 , p 37) , Bodomo studied MSN and showed that “capitalization of the first letter of country names, capitalization of the first singular person pronoun and capitalization of the first letter at the beginning of a sentence in standard English are not strictly followed when typing MSN texts ”(p 74) .

Secondly , in grammar, most of the previous studies Werry (1996) , Kershaw (1997) , Yang (2006) , Anniesha Binte Hussin (2000) detected that subject pronouns were deleted in most of chatters' writings , and thus proved that writing in chat was telegraphic . For example, Werry (1996) categorized the omission of subject pronouns, especially the first person singular pronoun 'I' , and the second pronoun 'you', as a type of abbreviations . In the same vein , Kershaw (1997) found that subject deletion was a very common phenomenon , especially when the subject was the first person , but this researcher also highlighted that subject deletion was not universal . He also found that copular deletion was very common . Anniesha Binte Hussin perceived IRC as a genre and characterized it by “reduction of spelling to the minimum; misspellings tend to be unedited; typing words without a space break; and deletion of subject pronouns. ”(2000 , p 98) . However, the current project found that the use of telegraphic writing , including

deleting the pronoun 'I', the auxiliary 'to be', and the pronoun 'you', was opted by many participants, but not most of them. Instead, the current study provided evidence that Algerian EFL learners' writings was less telegraphic if compared to the other studies.

Third, in vocabulary, findings in this project proved that Algerian EFL learners were very informal in their Facebook chat because of their friendship. Likewise, Anniesha Binte Hussin (2000) found that the use of dialect and colloquial language was used "to achieve the purpose of sense of belonging to a particular community" (p 97). However, findings in this project contrast with Anniesha Binte Hussin's study, and by extension all the other studies of IRC, in that Facebook chat users already know each other, and, due to the nature of Facebook medium itself, are considered to be friends.

Fourthly, and paralinguistically, the present study marked a set of linguistic features that are consistent with spoken conversations in lieu of standard writing. These paralinguistic features included creative use of punctuation, use of emoticons, use of markers for emphasis, and use of prosody and interjections. In the use of punctuation, findings revealed that Algerian EFL chatters used different creative forms of punctuation to compensate for the lack of gestures and actions in CMC. For example, they tended to use some types of symbols and unconventional punctuation, such as multiple exclamation and question marks, ellipsis in order to add extra emphasis or to indicate a thinking pause, and many other attitudes. In the use of emoticons, participants showed their attitudes through graphic symbols and emoticons. In fact, emoticons were creatively used by Algerian chatters because of the social constraint imposed on them, their distance due to their physical absence, their attempt to maintain a stimulating chat conversation, to make their writing appear more expressive, and even to show off. These results are consistent with that of Werry's (1996), Kershaw's (1997), Anniesha Binte Hussin (2000), Hård af Segerstad (2002), Yang (2006), and Bodomo (2010). The latter, for instance, found

that the “pervasive use of emoticons [is used] to express our feelings when we write ”(p 12) .

Examples of emoticons to indicate attitude are the smiley face and the winking face. These smileys were the most widely used in the current study . There are two major reasons for the wide use of these two smileys : (1) they can be typed or clicked on easily, and (2) Algerian chatters lacked knowledge of more sophisticated emoticons . This finding is corroborative with the one of Hård af Segerstad :

The elaborated emoticons ...are hardly ever used in actual written conversation. The problem is that the use of intricate symbols demands that specific background knowledge that has to be shared by both sender and receiver ...the simplest ones ... are likely to be understood by most users (2002, p141)

Apart from emoticons , participants developed many markers for emphasis , including strategies of capitalization , multiple letters , and the use of asterisks and underscores . In capitalization , Algerian Facebook chatters tended to type words and expressions that were wholly capitalized in order to add more stress , attract attention, and even shout on the interlocutor . This finding is similar to Kershaw’s (1997) , Anniesha Binte Hussin (2000) , Hård af Segerstad (2002) , Yang (2006) , and Bodomo (2010) . Kershaw noted that stressed words were indicated by whole word capitalisation or a demarcation with asterisks (1997) , Hård af Segerstad found that “typing which uses nothing but capitals is equivalent to shouting and extensive use of all caps might be taken as rude behavior”(p 144) , Anniesha Binte Hussin found that “[Chatters] use capital letters to emphasise loudness associated with shouting”(2000 , p 54) , and Yang discovered that “people usually wrote some words in capital to get attention. Some people also emphasized their messages with asterisks”(2006 , p57) . Other markers for emphasis included use of asterisks and multiple letters . This latter was found to be the most frequently occurring among the other strategies that chatters usually use as a means of emphasis , grab attention,

and express intonation . In this vein , Werry (1996) found that reduplicated letters were used to represent expressive intonation . Strikingly, though , this study displayed that repeated letters overcame the borders of the English language usage, and also appeared in phonetically and orthographically romanized Algerian Arabic ; a feature that needs to be discussed in further research since the focus of this study lies only on the impact of computer-mediated communication upon written English . Other alternative markers that indicated emphasis , mode , or action was attaching asterisks and underscores to words and expressions . While asterisks appeared in the chat data in some cases , underscores were totally absent . Therefore , the finding related to asterisks ' use is consistent with many previous studies such as Kershaw's study which held that asterisks indicated actions embedded in comments (1997) , Anniesha Binte Hussin 's study that noted that asterisks were used "to indicate actions/gestures "(2000 , p 56) , and Yang's which classified word emphasis by asterisks as a popular spelling practice (2006) . However , Hård af Segerstad ' findings contrasted with this study in that she found that asterisks were used even more than emoticons and that "the method to indicate action or emotion by means of asterisks is the more popular " (2002 , p142) .

Overall , although findings of paralinguage seem to be consistent with almost all the previous studies of chat , Hiltz & Turoff (1993) noted that physical gestures, intonation, facial expression, body language and other paralinguistic cues were missing in chat .

To conclude the discussion, findings in this study were corroborative with previous research in CMC , though there were some points of divergence since these findings are considered within the realm of the selected population in a given time and period , as well as the general methods used . In brief , written English that was found to be non-standard and resembling more speech than writing confirmed the hypothesis and provided

answers to the research questions stated earlier in the introductory chapter . The reasons beyond these linguistic findings can be summarized under the constraints of the chat medium itself , the participants' endeavor to ensure a common background, friendship ,and intimacy . For example, Werry (1996) and Kershaw (1997) noted that such linguistic choices take place because of the physical constraints of the medium; to simulate f-t-f conversations , to simulate conversations in terms of pace, vocalizations and paralinguistic features; and to reduce time and effort to communicate .

Chapter Six

CONCLUSION

6. Conclusion

This thesis has investigated the impact of CMC on written English and how Algerian EFL learners exercised writing in one of the synchronous text-based modes of CMC, namely chat. Accordingly, the chief aim of this research was to test whether Algerian EFL learners' writings in CMC were non-standard and spoken-like. For that, it was the mission of this project to also identify, evaluate the linguistic choices made by those learners, compare and contrast them to both standard norms of English writing and speech.

Thus, the first step in doing so was to review the literature. The literature provided details on the emergence of alphabet till the printing press, media, and CMC. Then, it moved to introduce the new medium of CMC, it highlighted its most common features, then it foregrounded the relationship between speech and writing before reporting the major studies that investigated computer-mediated speech and writing, with extra stress on chat since it is the core of this study.

The second step was research methodology. In this thesis, the researcher opted for Facebook chat as a mode of CMC, and thus collected twenty-nine original pieces of chat dialogues from nineteen Algerian EFL learners who attended different universities around the country. Chat records were content-analyzed, and the researcher studied how those EFL learners made use of orthography, grammar, vocabulary, and paralinguistics as an approach to find out whether writing in CMC differentiated from formal standard English, and whether it showed more spoken-like features. Chat records were analyzed

both quantitatively and qualitatively due to manual analyses , and with slight assistance of the software ‘Tropes V.8.1’ .

Results showed that Facebook chat , and by extension the other modes of CMC , had an impact on written English . This impact was embodied in the number of non-standard features of written language that were creatively practiced by Algerian EFL learners . These non-standard features included orthographic , grammatical , and lexical deviations besides a set of other choices that indicated paralinguistic .

In verdict , the findings in this study suggested the following conclusive remarks :

1. Writing in CMC revealed hybridity between formal standard writing and speech . However, the tendency was more towards informality and speech , especially in paralinguistic features and graphics that were used creatively .
2. Informality , especially in vocabulary stemmed from learners’ common background, friendship, and familiarity with one another .
3. Linguistic deviations that were found in CMC writing took place due to some constraints that are related to the chat medium itself , such as lack of physical co-presence, speed and simultaneity, chatters’ desire to minimize efforts .
4. Algerian EFL learners writings in CMC seemed to be similar to the international CMC language norms ; however, Algerian chatters tended to leave their own touch by mixing English, French , and romanized Algerian Arabic .

6.1. Pedagogical implementations

CMC and recent technologies , including blogs, wikis , and interactive websites such as Twitter , Facebook ,...etc have become part of learners’ daily lives . A phenomenon that makes the call for more awareness on the part of both instructors and learners more

pressing than ever . That is , the fear in academia will be that the spoken-like and the non-standard features of computer-mediated writing will seep into learners' academic writings .

For that, the current project suggests the following remarks :

1. EFL instructors should forbid learners to use any type of non-standard writing in academic settings, especially those errors and mistakes related to e-language.
2. Learners should differentiate between academic settings and informal settings as well as the serious consequences stemming from any mixture between them.
3. EAP programs and workshops of writing should be integrated into the curriculum , so that learners develop their writing skills .
4. In an age where learners rely heavily on the spell checker instead of dictionary consultation , EFL instructors should encourage learners to handwrite their written assignments .
5. While no one can judge learners' tendency to be informal in Facebook, it is recommended that EFL learners should exploit all the formal linguistic knowledge they possess .
6. As learners were found to be technology-addicted in this research , it is also suggested that educators should use new classroom activities that would make learners more motivated and involved by enabling them to use their laptops, iphones, or iPods.

6.2. Recommendations for Future Research

Computer-mediated research is a fairly new discipline that is acceleratedly going on constant evolution . In such a field, there are many areas to be investigated in future research occasions. For example, it would be still an interesting research to analyze language in one's timeline (wall) , though it is less challenging to ethically access material from Facebook timeline, for it is less private than Facebook chat .

In similar vein, the social networking website Facebook is the highly used among Algerian youth . The latest statistics show that sixty percent (68%) of Algerian Facebook users were aged from eighteen to twenty-five years (18 to 25) in 2011 (Internet World Stat , 2011) . Here, the researcher predicts that in the few coming years, the tendency will be more towards other social networking websites such as the use of very short texts inTwitter.

Furthermore, it would be more profound to investigate writing in all the other text-based synchronous and asynchronous modes of computer-mediated communication, such as public chatrooms, fora, emails, SMS, etc . However, the more exciting endeavor would be to research video-based CMC media like YouTube , especially that many social networking tools like Facebook are implemented with video-based CMC . Moreover, it would also be an interesting endeavor to investigate other issues rather than the written forms of the language as CMC research might involve issues , such as code mixing, a feature that was remarkable in Algerian chatters' writings in this study , sociolinguistic issues, gender , and so forth . Another worthwhile endeavor would be investigating language use by other population than Algerian EFL learners' chatters, so that more thorough linguistic conclusions about different languages in CMC become possible.

In brief, the pressing need to conduct more research on CMC precisely matches David Crystal's words in that "[Computer-mediated research] suggests material for a thousand theses. The sheer scale of the present Internet, let alone its future telecosmic incarnations, has convinced me that we are on the brink of the biggest language revolution ever"(2001 , p 241).

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Appendix

DEFINITIONS OF KEY TERMS

Blackberries

A hand-held device which serves as a cellular phone, personal organizer, wireless Internet browser, speakerphone, long-range digital walkie-talkie, and mini-laptop which can send and receive email from just about anywhere.

Chat Program

A program that makes exchange text or voice messages in real time through a computer network . Examples of chat programs are MSN Messenger , and Yahoo messenger.

ICQ (I seek you)

Unlike IRC , ICQ is a chat program that is “ primarily concerned with bringing people together mainly for chatting and casual conversation...[however] ICQ, is an IRC between people who have a pre-existing relationship” (Ooi , 2002, p 93)

Internet Relay Chat (IRC)

IRC is a multiuser, real-time communication system consisting of thousands of rooms dealing with different topics, so that people enter one room at a time, or even open more than one chat window and to engage themselves in two or more conversations simultaneously (Crystal, 2001, p11) . Stated differently, IRC is synchronous chat whereby users communicate by typing abbreviated (one-line) written messages to be displayed to everyone in the room or channel in the temporal order in which they are received, with the user's nickname appended automatically before each message (Herring, 1997).

Laptop

A portable computer that is small enough to be used in one's lap .

Newsgroup

A collection of messages about a particular topic accessed over the Internet

Palmtop

Computer small enough to be held in one hand

PDA

A lightweight consumer electronic device that looks like a hand-held computer but instead performs specific tasks; can serve as a diary or a personal database or a telephone or an alarm clock etc.

Skype

Skype introduces itself on its website at: www.skype.com:

Skype was founded in 2003 by Niklas Zennström and Janus Friis. Skype created a little piece of software that makes communicating with people around the world easy and fun. With Skype you can say hello or share a laugh with anyone, anywhere. And if both of you are on Skype, it's free. (Retrieved on October 9, 2011)

As a CMC medium, Skype allows its users to communicate through the usual synchronous chatting via text simultaneously with the possibility to actually hear each other and converse on internet phone. In similar vein, Skype impacted communication “so much that it has even come along with a new verb in the English language, ‘to skype’, meaning to communicate through the internet using a video-based computer-mediated communication tool called Skype”. (Bodomo, p 364)

Social Network Sites

Social network sites may be defined as :

web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and

traverse their list of connections and those made by others within the system.(Boyd & Ellison, N. B. 2007)

Video games

A game played on a computer (or other device) using computer graphics for display .

Video-conferencing

The connection of two or more computers or dedicated devices that can capture and display video and audio in real time so that distant people can talk and see each other .

Webcam

It is a video camera that feeds its images in real time to a computer or computer network .

The common use as a video camera for the World Wide Web gave the webcam its name.

Website

A computer connected to the internet that maintains a series of web pages on the World Wide Web .

YouTube

A commercial video sharing website where users can upload, view and share video clips .