
Contents

Acknowledgments	I
Dedication	IV
Contents	V
Abstract	XIII
Résumé	XV
List of Abbreviations, Figures, and Tables	XVII
General Introduction	01

Part One: Theoretical Considerations**Chapter One: An Overview and Rationale for the Study**

1.1 Introduction	6
1.2 Surveying the Terrain of Computer Mediated Communication	7
1.2.1 An Information Age	7
1.2.1.1 The Internet: A definition	9
1.2.1.2 The Starting Point	11
1.2.1.3 A Step Forward	11
1.2.1.4 Internet Use Worldwide	12
1.2.1.5 The World Wide Web	13
1.3 Computer-Mediated Communication	14
1.3.1 In the Beginning	14
1.3.2 What is Computer-Mediated Communication?	16
1.3.3 Computer Mediated Communication Modes	18
1.3.3.1 Synchronous versus Asynchronous CMC	20
1.3.3.1.1 Instant Messaging: One-to-One Synchronous CMC	21
1.3.3.1.2 Chat: One-to-Many Synchronous CMC	25
1.3.3.1.3 Short Message Service (SMS): One-to-One Asynchronous CMC	27
1.3.3.1.3.1 Mobile Phone Technology	27
1.3.3.1.3.2 What is SMS?	28
1.3.3.1.4 E-mail	35
1.3.3.1.4.1 A Definition	35

1.3.3.1.4.3 The Pros and Cons of E-Mail	40
1.3.3.4 CMC in Africa and Algeria	40
1.4.1 What Makes a (Speech) Community?	45
1.4.2 CMC Virtual Communities	47
1.4.3 A Netizen's Life	51
1.4.4 Internet's Potential for Human-to-Human Contact	52
1.5 What is this Research about?	54
1.5.1 The Research's Skeleton	54
1.5.1.1 Delimitation of the Study	54
1.5.1.2 The Scientific Method	55
1.5.1.3 In the Beginning	56
1.5.1.4 Research Questions (RQS)	59
1.5.1.4.1 Problem Statement	59
1.5.1.4.2 Sub-Problems	59
1.5.1.5 Hypotheses	60
1.5.1.6 Aims of the Research	61
1.5.1.6.1 General Aim	61
1.5.1.6.2 Specific Aims	61
1.5.1.7 Motivation of the Research	61
1.5.1.8 Potential Relevance of the Research	62
1.5.1.9 Implications of the Findings	63
1.5.2 Structure of the Research Work	63
1.6 Chapter Summary	64

Chapter Two: Literature Review

2.1 Introduction	67
2.2 E-Mail Discourse (RQ1)	68
2.2.1 The Impact of Technology on Language	68
2.2.1.1 Information and Communication Technologies	68
2.2.1.2 The Move from Page to Screen	68
2.2.1.3 Language Change	69
2.2.1.4 Discourse and Technology	70

2.2.1.5 Online versus Offline Language	71
2.2.2 CMC Language	73
2.2.2.1 Computer – Mediated Discourse	73
2.2.2.2 CMD as a Communication Revolution	74
2.2.2.3 CMD as a Linguistic Revolution	75
2.2.2.4 Previous Research on Computer – Mediated Communication	76
2.2.2.5 Previous Research on Computer – Mediated Discourse	77
2.2.2.6 Research on the Linguistic Structure of CMC Language	79
2.2.3 E-Mail Language	80
2.2.3.1 Previous Research on E-mail Discourse	81
2.2.3.2 E-mail Linguistic Properties	83
2.2.3.2.1 Neography	83
2.2.3.2.2 Mode Mixing: E-mail on the Oral-Written Continuum	86
2.2.3.2.2.1 Speech versus Writing	86
2.2.3.2.2.1.1 Writing and Speech as Objects of Analysis	86
2.2.3.2.2.1.2 General Features of Speech and Writing	89
2.2.3.2.2.2 Speech versus Writing in CMC	91
2.2.3.2.2.3 ED is Speech, Writing, or Both?	94
2.2.3.3 Language Mixing in ED	96
2.2.3.3.1 Code Switching in the Global Context	96
2.2.3.3.2 Research on Code Switching in Writing	98
2.2.3.3.3 Code Switching in CMC	101
2.2.3.3.3.1 Over- generalizations	102
2.2.3.3.3.2 Synchronicity versus Asynchronicity in CMC	102
2.2.3.3.3 Code Switching in E-Mail Communication	103
2.3 Language Attitudes towards E-Mail Communication (RQ2)	108
2.3.1 ED as a New Linguistic Beast	108
2.3.1.1 ED as a Form of Writing	109
2.3.1.2 ED as a Form of Speech	111
2.3.1.3 ED as a combination of spoken and written language (Mix & Match)	113
2.3.1.4 ED as a Distinct Style (E-Style)	114

2.3.1.3.5 ED as a Still Evolving Language Style (Contact System)	115
2.3.2 Is E-mail Communication Deteriorating Language?	116
2.3.2.1 Language as Rule-Governed Behaviour	117
2.3.2.2 Prescriptivism	118
2.3.2.3 Prescriptivism in the Written Genre	121
2.3.2.4 CMC ‘Break’ the Rules	122
2.4 E-Learning through E-mail communication (RQ3)	127
2.4.1 E-learning: A Fashionable Mode of Learning	127
2.4.2 E-Learning Communities	130
2.4.3 E-mail: An Opportunity for Language Education	130
2.4.4 How good E-Mail is for Language Education?	131
2.4.5 E-Mail: An Opportunity for Language Learning	132
2.5 Chapter Summary	134

Part Two: Research Methodology and Findings

Chapter Three: Research Design and Data Collection

3.1 Introduction	137
3.2 Issues in Corpus Design	137
3.2.1 A Threefold Research: What Data for Which Questions?	137
3.2.2 Research Instruments	137
3.2.3 Research Methodologies in the Field of Computer-Mediated Communication	140
3.2.3.1 Quantitative versus Qualitative Framework of Study	140
3.2.4 Case Research Methodology	143
3.2.5 The Sample	144
3.3 The Online Language Diaries	146
3.3.1 Recalling the Research Question	146
3.3.1.1 Problem Statement	146
3.3.1.2 Hypotheses	147
3.3.2 Data collection procedure	147
3.3.2.1 The Research Tool	147

3.3.2.2 The Pilot Study	147
3.3.2.3 Procedure	147
3.3.2.4 Ethical Issues	150
3.3.2.5 Authenticity and Relevance	152
3.3.2.6 Time management	153
3.3.2.7 Amount of Data	153
3.3.2.8 Data processing	155
3.4 The Interview	155
3.4.1 Recalling the Research Question	155
3.4.1.1 Problem Statement	155
3.4.1.3 Hypotheses	155
3.4.2 Data Collection	156
3.4.2.1 Research Tool	156
3.4.2.2 The Sample	156
3.4.2.3 Procedure	156
3.4.2.4 Informed Consent	158
3.4.3 On-Going of the Interviews	159
3.4.4 Data processing	161
3.5 The Questionnaire	161
3.5.1 Recalling the Research Question	161
3.5.1.1 Problem Statement	161
3.5.1.2 Sub-Problems	162
3.5.1.3 The Hypotheses	162
3.5.2 The Research Tool	162
3.5.3 The Questionnaire's Parts	163
3.5.4 The Questionnaire Layout	164
3.5.5 The Pilot Questionnaire:	164
3.5.5.1 The Paper-and- Pencil-Questionnaire versus the Online Questionnaire, Which one is the one?	165
3.5.5.2 A Multi-Page Questionnaire	165
3.5.6 The Actual Population	166

3.5.7 Timing for the Questionnaire	167
3.5.8 Administration of the Questionnaire	167
3.5.9 Consent from the Participants	168
3.5.10 Content of the Questionnaire:	168
3.5.10.1 Language of the Questionnaire:	168
3.5.10.2 The Questionnaire Sequences	168
3.5.10.3 Types of Questions	169
3.5.11 Dynamics of the Questionnaire	170
3.6 Constraints on the Data	170
3.7 Chapter Summary	172

Chapter Four: Data Analysis and Findings

4.1 Introduction	175
4.2 Analysis of the Online Language Diaries Results	175
4.2.1 Method of Data Analysis	175
4.2.2 Length	175
4.2.3 Language Use in ED	176
4.2.3.1 Languages in Algeria	176
4.2.3.2 Languages in E-mail Communication	178
4.2.3.3 Representation of languages in E-mail Communication	181
4.2.3.3.1 Romanized Algerian Arabic	181
4.2.3.3.2 English	189
4.2.3.3.3 French	190
4.2.3.4 Neography	191
4.2.3.4.1 Phonetic Spelling	192
4.2.3.4.2 Syllabograms	196
4.2.3.4.3 Logograms	196
4.2.3.4.4 Graphical Representations	197
4.2.3.4.4.1 Emoticons	197
4.2.3.4.4.2 Punctuation	198
4.2.3.4.4.2.1 Capital Letters, Apostrophes, and Full Stops	199

4.2.3.4.4.2.2 Questions and Exclamation Marks	200
4.2.3.4.4.2.3 Use of Periods and Hyphens	200
4.3 Analysis of the Interview Results	201
4.3.1 More of ‘Talk’ inside the text	207
4.3.1.1 ‘Natural’ Switching in E-mail Texts	208
4.3.1.2 Informal Language	209
4.3.1.3 Use of Short Forms	209
4.3.1.4 Interactivity	209
4.3.2 More of ‘writing’ Inside the Text	209
4.3.2.1 The Lack of visual representations	209
4.3.2.2 Openings and Closings	210
4.4 Analysis of the Questionnaire Results	222
4.4.1 Procedure	222
4.4.2 Size of the Sample	222
4.4.3 Demographic data	222
4.4.4 Data Analysis	222
4.4.4.1 Data on Internet and E-Mail General Communication Behavior	223
4.5 Concluding Discussion of the Findings	236
4.5.1 Findings in Relation to Research Question 1	237
4.5.2 Findings in Relation to Research Question 2	238
4.5.3 Findings in Relation to Research Question 3	239
4.6. Chapter Summary	240
General Conclusion	241
Appendices	246
Appendix One: Online Language Diaries	246
Appendix Two: The Interview’s Questions	248
Appendix Three: The Questionnaire	250
Annexes	253
Annex One: A List of some Emoticons	253
Annex Two: Internet Timeline	255
Annex Three: The Chronological Appearance of CMC Specific Technologies	260

Annex Four: Factors Driving Internet Change	261
Annex Five: Internet Usage Statistics	264
References	266

ABSTRACT

The present study on young Algerians' users of e-mail communication and living in Oran aims at investigating two main axes of research. The first axe will be concerned with the study of the different linguistic features of e-mail communication and discovering the various attitudes towards the impact of e-mail language on the standards of traditional written language. The second axe offers a pedagogical dimension to the study of e-mail communication among young university students.

To achieve this, I researched to what extent the language of e-mail is indeed a new form of language, and also the ways in which this language draws upon features of spoken and written language. I also questioned the use of code switching and discussed its very nature. The dissertation challenged also popular assumptions that e-mail language is deteriorating traditional written media and tried to survey e-mail writers' attitudes towards the effect e-mail language is having on standard written language. The research has also tried to survey the informants' attitudes towards exploring e-mail communication effectively for promoting English language learning among them.

The main results obtained in this study are that language use in e-mail among young Algerians is creatively used and well suited to achieve the communication situation needs. Strategies such as phonetic spelling, syllabograms, logograms, and punctuation are employed to fulfil technical, economical, linguistic, and also communicative needs.

E-mail language is also found to contain unconventional spelling based on the English and French languages and a Romanized version of Algerian Arabic (ORSA). A mixture of these two varieties and others are depicted and identified as being written forms of oral code switching.

As for the spoken and written-like features of e-mail language, results have shown that e-mail language in Algeria bears far more resemblance to oral language than to its written counterpart and that it is , according to the psycho-structural model, a written version of oral language.

As for surveying language attitudes towards e-mail language, a number of young e-mail users demonstrated negative attitudes towards e-mail language, but a more important

category showed a laissez-faire approach to the concern of language deterioration accelerated by e-mail communication. These attitudes may be seen as a key element in the study of the future of both written and oral language in Algeria.

The study's results end with the overall suggestion that e-mail communication can be explored effectively by English students to develop their literacy and communication practices. In fact, e-mail can provide a terrain for English language proficiency for our informants who showed willingness to adopt the technology and enthusiasm to experience an e-learning environment via e-mail communication.

RESUME

La présente étude sur des jeunes utilisateurs Algériens du courrier électronique (E-mail) et vivant à Oran vise à enquêter sur deux axes principaux de recherche. Le premier axe sera consacré à l'étude des différentes caractéristiques linguistiques de la communication par e-mail et à découvrir les différentes attitudes à l'égard de l'impact du langage e-mail sur les normes de la langue traditionnelle écrite. Le deuxième axe propose une dimension pédagogique à l'étude de la communication par e-mail entre les jeunes universitaires.

Pour réaliser ceci, nous avons mené des recherches qui ont voulu mesurer combien ce type de langage électronique est en effet une nouvelle forme de communication, et aussi la manière dont cette langue tire sur les caractéristiques de la langue parlée et écrite. J'ai également remis en question l'utilisation du code-switching et discuté sa véritable nature. La thèse conteste aussi des assumptions populaires qui considèrent que l'e-mail est un facteur favorisant la détérioration linguistique de la langue écrite et essaie de sonder l'attitude des utilisateurs à l'égard de l'effet de l'e-mail sur la langue écrite standard.

La recherche a aussi essayé de sonder les attitudes des participants dans la recherche envers l'exploration efficace de l'email pour la promotion de l'apprentissage de la langue anglaise parmi eux.

Les principaux résultats obtenus dans cette étude révèlent que la manipulation des langues dans l'e-mail parmi les jeunes Algériens est faite d'une façon créative et bien adaptée aux besoins de l'événement communicative. Des stratégies telles que l'orthographe phonétique, syllabogrammes, logogrammes, et la ponctuation sont utilisées pour assumer des besoins techniques, économiques, linguistiques, et aussi communicatives.

La langue de l'e-mail se trouve également à contenir l'orthographe conventionnelle basée sur la langue française et anglaise et une version romanisée de l'arabe algérien (ORSA). Un mélange de ces deux variétés et d'autres sont décrits et identifiés comme étant une écriture du code switching utilisé dans le parlé.

En ce qui concerne les caractéristiques vocales et écrites de la langue de l'e-mail, les résultats ont montré que cette langue ressemble beaucoup plus à la langue orale qu'à son

homologue la langue écrite et ce selon le modèle psycho-structurel, une version écrite de la langue orale.

Quant à l'arpentage des attitudes linguistiques vers la langue de l'e-mail, un certain nombre de jeunes utilisateurs du courrier électronique ont montré des attitudes négatives à l'égard de l'e-mail, mais une catégorie plus importante a montré une attitude de laissez-faire à la préoccupation de la détérioration de la langue standard accélérée par l'e-mail. Ces attitudes peuvent être considérées comme des éléments clés dans l'étude de l'avenir de la langue écrite et orale en Algérie.

Cette étude se termine par la suggestion que l'e-mail peut être exploré de manière efficace par l'étudiant de la langue Anglaise à développer sa performance en Anglais écrit et ses pratiques de communication. En effet, l'e-mail peut fournir un terrain favorable pour maîtriser la langue Anglaise pour les jeunes participants de cette recherche qui ont montré la volonté d'adopter la technologie et l'enthousiasme de découvrir un environnement de e-Learning à travers le courrier électronique (e-mail).

List of Abbreviations

AA:	Algerian Arabic
Br:	Berber
CA:	Classical Arabic
CM:	Code Mixing
CS:	Code Switching
CMC:	Computer-Mediated Communication
CMD:	Computer-Mediated Discourse
E-mail/Email:	Electronic Mail
EMC:	Electronically-Mediated Communication
EML:	Electronically-Mediated Language
ED:	E-mail Discourse
Engl:	English
Fr:	French
ICQ:	I seek you
ICT:	Information Communication Technology
IM:	Instant messaging
IRC:	Chat Relay Chat
LET:	Linguistic Economy Theory
MUDs:	Multi-User Dimensions
ORSA:	Oran Spoken Arabic
Q...:	For example Q12: Question 12
RQ1:	Research Question One
RQ2:	Research Question Two
RQ3:	Research Question Three
SMS:	Short Message Service.

List of Tables

Table 1.1	CMC Modes	19
Table 1.2	Characters Available on a Mobile Phone	29
Table 1.3	Algerian Internet Usage and Population Growth	43
Table 1.4	A Provisional Outline for the Core Data Set of the Research	54
Table 1.5	A Comprehensive Outline for the Core Data Set of the Research	55
Table 2.1	Differences between Speaking and Writing	19
Table 2.2	Crystal’s Criteria for Speech and Writing in CMC and Non CMC Contexts	19
Table 2.3	Studies on Written “Code Switching”	99
Table 2.4	Previous Research on Code Switching in CMD	103
Table 3.1	General Dimensions of the Study	139
Table 3.2	Dimensions of Quantitative and Qualitative Research	142
Table 3.3	The Pilot Study, Stage I	149
Table 3.4	The Pilot Study, Stage II	149
Table 3.5	The Pilot Study, Stage III	154
Table 3.6	Demographic Matters	154
Table 3.7	Linguistic Matters (Degree of Competence in Languages)	154
Table 3.8	Demographic Data and e-mail Linguistic Habits of the Interviewees	158
Table 3.9	The Interview’s Phases	160
Table: 3.10	The Student’s Questionnaire	163
Table: 3.11	The General Parts of the Questionnaire	164
Table: 3.12	The Actual Students’ Population	167
Table 4.2.1	Standard Landmarks of the E-mail Corpus	176
Table 4.2.2	Numbers representing Algerian Arabic sounds	182
Table 4.2.3	Romanized Algerian Arabic Sentences	183
Table 4.2.4	Algerian Arabic Consonant Sounds Representations	19
Table 4.2.5	Algerian Arabic Vowel Sounds Representations	185
Table 4.2.6	Examples of French Language Use	190
Table 4.2.7	Some Old and New Emoticons.	198
Table 4.2.8	Overall Punctuation	199

List of Abbreviations, Tables, and Figures

Table 4.3.1	Habit of Regular Use of E-mail Communication	202
Table 4.3.2	Speaking and Writing in Asynchronous CMC and E-mail Communication	210
Table 4.4.1	Demographic Matters	222

List of Figures

Figure 1.1	Types of CMC Interaction	20
Figure 1.2	Example of Instant Messaging Communication	22
Figure 1.3	Example of Chat Communication	26
Figure 1.4	Key Board of the Alcatel One Touch 756	24
Figure 1.5	Characters Available on a Mobile Phone	29
Figure 1.6	Example of a Mobile Phone (in this case, a Nokia 6210) displaying a text message on the screen with predictive text entry system	32
Figure 1.7	Classification of CMC	37
Figure 1.8	Example of E-mail Communication	39
Figure 2.1	Views on Writing and Speech	88
Figure 2.2	Code Switching Typology	106
Figure 2.3	Linguistic Views	109
Figure 2.4	Comparison of Asynchronous CMC Characteristics with Characteristics of Face-to-Face Speech	111
Figure 2.5	The “Mix and Match Approach”	114
Figure 2.6	The Fight against SMS Language in France: Banned displayed on a French-language purist website	125
Figure 2.7	E-Mail’s Advantages for Language Education	132
Figure 3.1	Open-ended Survey Questions	169
Figure 3.2	Nominal Measurement Scale with Dichotomous Categories	170
Figure 3.3	Ordinal Scales with Itemized Categories	170
Figure 4.2.1	The Use of Languages in the Corpus	179
Figure 4.2.2	The ASCII Character Set	184
Figure 4.2.3	Full Forms versus Contracted Forms in the Corpus	191
Figure 4.3.1	Habit of Performing E-mail Communication	201
Figure 4.3.2	Testing the Psychological Model	203
Figure 4.3.3	The Psycho/Structural Model	204
Figure 4.3.4	Testing the Structural Model	205
Figure 4.3.5	Testing the Structural Model	206

Figure 4.3.6	Language Perception towards E-mail Communication	213
Figure 4.3.7	A Constraint-Based Model of E-mail-Mediated Language	218
Figure 4.4.1	Use of the Internet	224
Figure 4.4.2	Access to the Internet	225
Figure 4.4.3	Use of E-mail	226
Figure 4.4.4	Frequency of E-mail Use	229
Figure 4.4.5	E-mail Exchange Destination	227
Figure 4.4.6	Use of English in E-mail	230
Figure 4.4.7	Attitudes towards English Language Promotion via E-mail	231
Figure 4.4.8	Skills Development through E-Mail	233
Figure 4.4.9	Ability to Use E-Mail for Instructional Matters	234

***GENERAL
INTRODUCTION***

General Introduction

From the very beginning of human history, we have always communicated with each other. For philosopher Karl Raidmund Popper (1994), the ability to communicate about one's own existence is the very foundation of '*being human*'.

However, the ability to communicate through language by humans is unique. Reading, listening, writing and speaking allow us to learn and understand the power of language and the way to use that power effectively and creatively in an increasingly complex world.

Although all of us can speak at least one language, not everyone is able to write language. Many would agree that written language is a limited competence because it demands special competence and skills. However, with the explosion use of the Internet written language in the twenty-first century, the picture is reversed: The number of people involved in written communication has skyrocketed.

In fact, the turn from page to screen has given rise to novel linguistic phenomena which have distinguished its users from other significant-groups. Many scholars have expressed concern about language undergirded by technology and were interested in studying the synergy between them. This study shares much of this interest and aims to examine creative uses of language in one of asynchronous computer-mediated communication tools: E-mail communication (e-mail).

As a major means of global communication, e-mail communication is having a great impact on language use. It is a boom not only to the English language usage (Baron, 1998, 2001; Herring, 1996, 2001) but potentially to many languages. A growing number of studies are investigating the linguistic features of e-mail communication in non English-speaking communities¹.

It is the intention of this work to examine the linguistic features of e-mail communication in Algeria. A central question in this concern will focus on the nature of the language used and the effect of this language on traditional written media and those

¹ Most previous research has investigated English-based CMC neglecting what was happening in countries where English is not the principal medium of communication.

who make use of it. Questions like : (a) What are the new textual properties of e-mail language?; (b) Is e-mail language more like speech or does it have more ponderous qualities of writing as it is conveyed through a written medium?; (c) What is the very nature of code switching in e-mail communication?; (d) What is the impact of this language on e-mail users of standard written language? are raised for investigation.

First, to investigate the textual properties of e-mail language I shall try to collect an important corpus of e-mails and study the different manifestations of unconventional spelling within these texts.

Second, to investigate the nature of language in e-mail communication (as being written and/or oral), my work will be mainly based on a model I propose. This model deals with this concern at both psychological and structural levels. Basically, the principle behind this model lies in the fact that there is a correlation between findings related to structural analysis of written language in e-mails and psychological analysis of the process of e-mail written language production².

Third, the researcher will also analyse language attitudes towards a process of language deterioration observed in e-mail communication by the scholarly community. This aspect of the study will be investigated through interviews where young e-mail users will be asked to describe on the one hand their attitudes as being either positive or negative about the influence of e-mail language on standards of writing and on the other hand state the reasons for such attitudes.

In fact, this research is not restricted to language analysis. Rather, it offers a pedagogical dimension to the study of e-mail communication among young university students. This will be achieved by questioning to what extent it is possible to implement the technology of e-mail in the world of English language learning in Algerian universities as a real opportunity for e-learning.

² See Chapter Four for more details about the psycho-structural model.

The task, described above, will have recourse to one of the major research approaches in social sciences that is case study. Through this research approach, online language diaries, interviews, and questionnaires are research tools used to empirically test the research hypotheses³ and bring about some '*truth*'.

This work is made up of a general introduction, four chapters, a general conclusion, appendices, and annexes. The first chapter (An Overview and Rationale for the Study) proposes a rapid look at the nature and history of computer-mediated communication and e-mail communication with special reference to Algeria. I predict that a better understanding of the technology (computer-mediated communication) and the research design will provide a cleared '*terrain*' for my reader.

The second chapter (Literature Review) deals with presenting previous works which have investigated, on the one hand, the linguistic characteristics of e-mail language and questioned language attitudes towards this technology and on the other, aspects of language learning mediated via e-mail communication. In this chapter the surveyed literature was devoted to researching the following questions: a) unconventional spelling; (b) spoken versus written language (c) oral versus written code switching; (d) attitudes towards e-mail language; (e) e-mail as an opportunity for language learning.

The third chapter (Research Design and Data Collection) recalls the research questions, sub problems and hypotheses. It outlines also the methods of data collection and analysis. The aim here is to provide a solid methodological framework for the investigation of the research questions.

The fourth chapter (Data Analysis and Findings) is an annotated catalogue of the findings based on the triangular approach to data collection and analysis: the online language diaries, the interviews, and the questionnaires. These findings will be used to see whether they corroborate or not with the research hypotheses.

This work ends with a general conclusion which draws a general picture of the research findings and the perspectives for future research.

³ See Chapter Three for the research hypotheses.

Part One

**Theoretical
Considerations**

Chapter One

AN OVERVIEW AND RATIONALE FOR THE STUDY

“For most of us the use of language is a crucial part of our daily lives. I’m a teacher so it’s perhaps not at all surprising that language should play a particularly large part in what I do each day...But with just a little reflection it soon becomes clear that nobody, whatever their age, social background, way of life or job, can for long avoid the use of language from the moment they awake until the moment they fall to sleep, and even they may well dream of situations in which the use of language is again unavoidable. Using language is very much a part of what is to be human and live the life of a human being.”

Langford (1994:1)

*“Here is an enormous incalculable force...let loose suddenly upon mankind; exercising all sorts of influences, social, moral and political; precipitating upon us novel problems which demand immediate solution; banishing the old before the new is half matured to replace it;...Yet with the curious hardness of a material age, we rarely regard this new power otherwise than as a money-getting and time-saving machine...not many of those...who fondly believe they can control it ever stop to think of it as... the most tremendous and far-reaching engine of social change which has ever blessed or cursed mankind.(Quoted in Boorstein, *the Americans: the national experience*, p.581)”*

Graham (1999: 21)

Chapter One: An Overview and Rationale for the Study

1.1 Introduction

To begin looking at e-mail communication, one must look first at the umbrella which envelops all online-based interaction. In the world of Internet, communication between humans is typical to an emerging type of communication called computer-mediated communication (CMC).

The first part of this chapter- *Surveying the Terrain of Computer Mediated Communication* - is an introduction to investigation on e-mail communication. The aim here is threefold:

- The first section- *An Information Age* - attempts to probe Internet communication at its roots.
- The second section- *Computer-Mediated Communication* - provides an overview on computer-mediated communication and presents CMC different modes where special emphasis is put on e-mail communication.
- The third section - *CMC and Social Networks*- considers CMC in relation to virtual communities.

The second part of the present work - *What is this Research about?* - reports the rationale behind this study and gives orientations about WHAT is to be researched. The orientations are presented in two sections:

- The first section- *The Research's Skeleton*- presents the research questions, the hypotheses, the aims and objectives, as well as the significance of the present study.
- The second section- *Structure of the Research Work*- outlines the architecture and the main chapters' divisions.

Discussing CMC will hopefully be relevant to the flow of discussion on e-mail communication and e-mail language use in the next chapters.

1.2 Surveying the Terrain of Computer Mediated Communication

1.2.1 An Information Age

In his work, Warschauer (1999) describes The Information Age as an era which is shaped by a ‘new’ industrial revolution.

‘Whereas the first industrial revolution was based on the harnessing of steam power, the newest industrial revolution is based on the harnessing of information, knowledge, and networks. This information-based revolution, which began in the post-war period and is accelerating today, is viewed by many as bringing about a new postmodern world based on radically different production methods and accompanying changes in lifestyle.’

(Warschauer, 1999: 9)

As we look toward the 21st century, the most important development affecting human life at different levels is the "information superhighway"¹. According to predictions, the "information superhighway" will transform the world into a global village. The communication revolution will lead to “[t]he death of distance” (Cairncross, 1997). Dorion (2003) explains:

"La mondialisation et les technologies de l'information et des communications (TIC) sont de plus en plus perçues comme inséparables. En réalité, la mondialisation serait en grande partie redevable aux TIC, car elle est, de prime abord, un

¹ See Bosscher (2001). Crystal (2001:3) argues: “Some commentators have likened the Internet to an amalgam of television, telephone, and conventional publishing, and the term cyberspace has been coined to capture the notion of a world of information present or possible in digital form (the information superhighway).”

phénomène économique d'internationalisation des échanges (Vidal, 1997 : 16)."

(Dorion, 2003:)

Undoubtedly, the Internet has made the biggest impact² in the last few years as it provides instant access to information anywhere in the world and, moreover, allows many different people to access the same piece of information at the same time (Hockey, 2004: 1). Levine & Scollon (2004) explain:

"Now we are seeing the proliferation of communication technologies from palm-sized digital video recorders to cell phones and chat rooms on the Internet. Journals are going online, and theses are being transmitted in multimedia formats."

(Levine & Scollon, 2004: 1)

Ryan et al., (2000) further add:

"Digital computers have been around for some 50 years. Their influence has been felt in fits and starts. Early significant applications were in science, engineering and mathematics. In the last 20 years we have seen computing become relatively universal with stand-alone PCs and workstations commonplace in homes, offices and factories. Both computational power and data storage capacity have become relatively cheap. Powerful application packages for word-processing, numerical processing

² Ryan & Scott & Freeman & Patel (2000: 7) argues: "Claims about the internet revolutionizing our lives are now commonplace." Leiner et al., in A Brief History of the Internet (20 Feb 98), further add: "Just as the Internet revolutionized how the world accessed information and communicated through the 1990's, the ongoing development in speed, bandwidth, and functionality will continue to cause fundamental changes to how our world operates for decades to come."

and graphical work are readily available. Data of all kinds can now be represented and manipulated digitally, including photographs, video and audio tracks. Increasingly all of this is possible not just on stand-alone computers but over networks and in particular the Internet.”

(Ryan et al., 2000: 9)

So, what is Internet³ then?

1.2.1.1 The Internet: A definition

In his book- A Brief History of the Future: The Origins of the Internet- Naughton (1991) comments:

‘The Internet is one of the most remarkable things human beings have ever made. In terms of its impact on society, it ranks with print, the railways, the telegraph, the automobile, electric power and television. Some would equate it with print and television, the two earlier technologies which most transformed the communication environment in which people live. Yet it is potentially more powerful than both because it harnesses the intellectual leverage which print gave to mankind without being hobbled by the one-to-many nature of broadcast television.’

(Naughton, 1991: 21-2)

³ Crystal (2001: 3) points out: “*The extra significance is even reflected in the spelling in languages which use capital letters... this is the first such technology to be conventionally identified with an initial capital. We do not give typographical enhancement to such developments as ‘Printing’, ‘Broadcasting’, ‘Radio’ or ‘Television’ but we do write ‘Internet’ or ‘Net’.*”

We should not deny the impact Internet is having on life, society and most importantly language. However, in order ‘to get through it’⁴, it is important to experience a defining process for a better understanding of the ‘network of networks’⁵. Here, we borrow from the former Federal Networking Council’s (1995) definition, which includes three primary elements:

- The Internet is linked together through a global address system.
- The Internet uses a common form of transmission protocol.
- The Internet allows public and private communication.

The Free Online Dictionary of Computing , on the other hand, provides a more technical definition of the technology:

“The Internet is best characterized as "the biggest network of computer networks on earth." A computer network is a data communications system made up of hardware and software that transmits data from one computer to another. In part, a computer network includes physical infrastructure like wires, cables, fiber optic lines, undersea cables, and satellites. The other part of a network is the software to keep it running. Computer networks can connect to other computer networks to get an even bigger computer network. The Internet is a set of connected computer networks.”

⁴ Wood & Smith (2005: 03): “*The Internet is like a giant jellyfish. You can’t step on it. You can’t go around it. You’ve got to get through it*”--John Evans.

⁵A term I borrowed from Wood & Smith (2005: 36) and Crystal (2001), Crystal (2001: 02) stipulates: “*The Internet is an association of computer networks with common standards which enable messages to be sent from any central computer (or host) on one network to any host on any other.*”

1.2.1.2 The Starting Point

Internet starting point can be traced to the late 1960s in the United States of America during which Internet was exploited as an experimental network⁶ which quickly grew to include a variety of fields namely defense, university, business, and later on⁷ personal usage⁸. It is now the largest computer network that is “*providing an increasing range of services and enabling unprecedented numbers of people to be in touch with each other through electronic-mail (e-mail), discussion groups, and the provision of digital ‘pages’ on any topic.*” Crystal (2001: 2)

1.2.1.3 A Step Forward

The next big step in the Internet era took place in the 1990s. During this period, Internet users were able to benefit from universal wireless access, where almost most users can connect while they are away from the home or office. Many airports, coffee bars, hotels and motels started to provide Internet services, some for a fee and some for free.

Another opportunity for Internet connection was mediated by an increasing manipulation of new small devices. Small tablets, pocket PCs, smart phones, ebooks, game machines, and even GPS devices were capable of attracting more fans.

As the Internet has become ubiquitous, faster, and increasingly accessible to technical and social communities, networking and collaborative services have grown rapidly, enabling people to communicate and share interests in various ways. Sites like Facebook, Twitter, Linked-In, YouTube, Flickr, Second Life, blogs, wikis, and many more let people of all ages rapidly share their interests of the past, the moment and the future with others everywhere.

⁶ Warschauer (1999:4) argues: “*The Internet started as a U.S. government experiment connecting a few defense agencies*”; Wood & Smith (2005: 125) “*...the Internet began as a network of computers linked for military communication but increasingly used by academics to share research information.*”, however, Walt Howe writes in an electronic article entitled [A Brief History of the Internet](#): “*Charley Kline at UCLA sent the first packets on ARPANET as he tried to connect to Stanford Research Institute on Oct 29, 1969.*”

⁷ In an electronic article -[A Brief History of the Internet](#) - Walt Howe writes: “*The early Internet was used by computer experts, engineers, scientists, and librarians. There was nothing friendly about it. There were no home or office personal computers in those days.*”

⁸ For an in-depth history of the development of the internet, see Hafner & Lyon (1996)

1.2.1.4 Internet Use Worldwide

Internet is the world's largest communication network⁹, with over 300 million host connected by the year 2000 (Crystal, 2001)¹⁰. With these figures, it is estimated that worldwide Internet population is currently doubling¹¹ in size each year. However, it is observed that there are large disparities between its penetration in different regions all over the globe. According to Warschauer (1999):

“Internationally, the Internet remains dominated by users in the United States and, secondarily, other industrialized countries. Access in developing countries remains rare. For example, Latin America and Africa each have less than 1% of all the world’s Internet sites. Yet even these figures don’t reveal the full inequality. For example, fully 98% of Africa’s sites are located in a single country (South Africa), leaving the entire rest of the continent with fewer connections to the Internet than a single good-sized university in the United States. Similarly, 88% of the Internet sites in the Middle East are located in Israel.”

Warschauer (1999: 18)

⁹ Hubert (1997: 12): *“The Internet’s pace of adoption eclipses all other technologies before it. Radio was in existence 38 years before 5à million people turned in; TV took 13 years to reach that point. Once the Net was opened to the general public, the Internet crossed that line in four years.”*

¹⁰ Ryan et al., (2000: 7) add: *“It is estimated that in the year 2000, 327 million people around the world will have Internet access. There will be 25 countries where over 10 per cent of the population will be internet users (Cyber Atlas, online)”*.

¹¹ This prediction has been falsified by other findings. Projections by Lottor (online) suggest a ten-fold increase over the next five years (2000-2005). The number of individual Web pages has already reached this figure. A recent report (Center for Next Generation Internet, Online) describes the current annual growth rate as 63 per cent.

Benford, et al., (2008) further add:

“North America, Australia/Oceania and Europe have the largest proportions of citizens online (as of 2007, 70%, 55% and 42% respectively), whilst the less developed continents have much lower penetration rates, for example 5% in Africa and 12% in Asia (Internet World Stats, 2007).”¹²

(Benford, et al., 2008:50-51)

Since the Internet began expanding globally, the number of non-English speaking users –including Algerian users- has grown to 470 million, or roughly two thirds of all Internet users (Cyber Atlas, 2003).

1.2.1.5 The World Wide Web

The experience of the World Wide Web¹³ is more of a social than a technical technology. Wood & Smith (2005) see it as *a portal* to the other forms of CMC and the vehicle of social interaction; that is:

*“...people begin their Internet excursions to pick up mail from their e-mail accounts, check out the latest newsgroup messages, or meet some friends in a chat room through the Web. This experience begins when they launch their **browser**, a program that downloads instructions taken from the Internet and displays them on their desktop computer as text, images, animation, and sounds.”*

(Wood & Smith, 2005:15)

¹² More to be said about recent statistics on worldwide Internet penetration up to June 30, 2012 in Annex12.

¹³ The World Wide Web is often referred to as simply “The Web” or abbreviated as WWW.

In Weaving the Web, the World Wide Web's inventor -Tim Berners-Lee (1999) - quotes a speech made by the South African president, Thabo Mbeki, on how people should seize the new technology to empower themselves; to keep themselves informed about the truth of their own economic, political and cultural circumstances; and to give themselves a voice that all the world could hear¹⁴ ; and comments: "*I could not have written a better mission statement for the World Wide Web*". And he adds again:

*"The dream of people-to-people communication through shared knowledge must be possible for groups of all sizes, interacting electronically with as much ease as they do now in person."*¹⁵

Berners- Lee (1999:133)

Remarks of this kind have grown since the mid-1990s. An emphasis, which formerly was on technology, has shifted to be on people and purposes. And as the Internet comes increasingly to be viewed from social perspectives, so the role of language becomes central (Crystal, 2001: vii- viii).

1.3 Computer-Mediated Communication

1.3.1 In the Beginning

Thurlow et al., (2003) argue:

"Technically speaking, computer mediated communication (or just CMC as it's commonly known) has been around since the first electronic digital computer was invented (some time during World War II), or at least since the first recorded exchange of prototype emails in the early 1960s¹⁶. From these moments on, people have been

¹⁴ See Berners- Lee (1999:110).

¹⁵ See Berners- Lee (1999: 169).

¹⁶ For weblinks and resources on the history of CMC visit the CMC website at www.sagepub.co.uk/resources/cmc

communicating about, and by means of, computer technology. Either way, the history of computer mediated communication is little more than fifty years old. For most of us it's hard to imagine a time when computers were not such an integral part of our lives, and it's only really been in the last twenty years that computers have gone from being highly technical and specialist to being personal and popular. Certainly, by the 1990s, personal computers have sprouted like mushrooms on the desks of office managers, schoolteachers, college students, doctors, home makers, and so on."

(Thurlow et al., 2003:14-15)

In the 1980's the term "Computer-Mediated Communication"¹⁷, more commonly known as CMC, emerged to encompass a range of online platforms¹⁸, including email, listservs, chat, or instant messaging. "*CMC is communication that takes place between human beings via the instrumentality of computers*" (Herring, 1996:01).

However, with the development of mobile devices such as the Blackberry and mobile phones, which are not really computers¹⁹, many researchers began speaking of Information Communication Technologies (ICTs), alluding to the machines themselves (computers and mobile phones) rather than to the information they conveyed.

What it was then needed is an umbrella term for various types of language transmitted via the gamut of ICTs. Some scholars supported the idea that the term CMC can become something of a stretch, others began speaking of Electronically -Mediated

¹⁷ The term Computer-mediated Communication (CMC) was first coined by Hiltz & Turoff (1978). CMC refers to a domain of information exchange via the computer (Baron 1998).

. Other terms such as electronic communication, online communication and cyber communication have also been used to describe this kind of human communication via the computer or the Internet.

¹⁸ See Annex Three for a list summarizing the chronological appearance of CMC specific technologies.

¹⁹ December's definition is significant and appropriate for the present argument in the sense that not only communications via computers are considered, but also those using other digital techniques such as the use of mobile phone network (December, 1996).

communication or (EMC)²⁰. However, in this work, I have chosen to follow *old tradition* and use the term CMC when referring to all ICTs including mobile phone services.

1.3.2 What is Computer-Mediated Communication?

Virtual communication, online communication, electronic communication, cyber communication, or even cyber conversation...etc. , all these are technical concepts used to refer to Computer-Mediated Communication , which can simply be defined as any human communication achieved through, or with the help of, computer technology (Baron,1998)²¹. For example, this is how Herring (2007) has put it:

“CMC is a predominantly text-based human-human interaction mediated by network computers or mobile telephony”.

Herring (2007: 1)

Santoro (1995), on the other hand, defines CMC as:

“At its broadest, CMC can encompass virtually all computers uses including such diverse applications as statistical analysis programs, remote-sensing systems, and financial modeling programs, all fit within the concept of human communication.”

(Santoro, 1995: 11)

Another working definition of CMC should be the one which, according to December²² (1996), is considering the rapidly changing nature of communication

²⁰ Other terms such as electronic communication, virtual communication, online communication and cyber communication have also been used to describe this kind of human communication via the computer or the Internet.

²¹ According to Baron (1998), CMC can be defined as a domain of information exchange via the computer.

²² John December is someone who has been associated with CMC for a long time, having founded and edited the widely cited website CMC magazine [wwwBT1:3].

technologies and at the same time does not specify forms. December (1996) describes CMC as:

“The process by which people create, exchange, and perceive information using networked telecommunications systems that facilitate encoding, transmitting, and decoding messages”

(December, 1996:01)

Naughton (2000) considers December’s definition as an exhaustive one in the sense that it seems to encompass both the delivery mechanisms derived from communication theory and the importance of the interaction of people that the technologies and processes mediate.

Herring²³ (199-) proposes another ‘classic’ definition which advances that “*CMC is communication that takes place between human beings via the instrumentality of computers*” (199-:1).

Crystal (2001), on the other hand, when defining CMC, sheds the light more on aspects of efficacy where he pinpoints that the efficacy of computer-mediated communication is noticeable as it enables vast numbers of people to be in a permanent state of communication across temporal and spatial barriers.

According to Warschauer (1999), the most effective way to define CMC is to try and pin down the core concepts. Warschauer (1999) proposes a ‘structure-based’ definition for CMC by decorticating CMC into three core concepts. According to Warschauer (1999), Computer Mediated Communication is based on:

- **Core Concept 1: COMPUTER** (Computers and Digital Networks) → CMC defines the ways in which digital networks –The Internet- have converged with

²³ Susan C. Herring is a scholar who has also been associated with the field for some time.

computers to create a set of networks able to support human communication²⁴. These CMC networks – also called CMC modes- serve as mediators of communication, which facilitate both synchronous and asynchronous modes of communication²⁵.

- **Core Concept 2: MEDIATED**→ CMC is communication that is MEDIATED²⁶ - transmitted and facilitated- through people’ interactions by means of computers and digital networks.
- **Core Concept 3: COMMUNICATION**→ CMC is COMMUNICATION²⁷ that is dynamic, transactional, multifunctional, and multimodal.²⁸

1.3.3 Computer Mediated Communication Modes

With the development of ICTs, written and oral language could be transmitted through CMC. But how language is conveyed?

“Many different forms have been devised for carrying out computer-mediated communication, including e-mail, bulletin boards, and various kinds

²⁴ Indeed, even Roszak (1994: 169), one of new technology’s harshest critics, conceded that “*Computer networks are in many ways a unique form of communication....there is no other way in which a great number of people over an area as large as the world’s telephone system can exchange ideas in so unstructured a way at all hours of the day and night, and even preserve a transcript in the form of hard copy.*”

²⁵ Li (2007) considers that a more concise definition of CMC will be “*the asynchronous and synchronous creation and transmission of messages using digital techniques.*” (December 1996).

²⁶ Thurlow et al. (2003: 18) argues: “... *all communication is mediated to some extent or other. According to Chambers’ Twenty-first Century Dictionary, the verb to mediate means to convey or transmit something or to act as a medium for something. In turn, a medium is something by which, or through which, an effect is produced. In other words, mediation is simply the process or means by which something is transmitted- whether it’s a message, a feeling, a sound, or a ghostly apparition! In the case of communication, we’ve already indicated that communication is always channeled by, and dependent on, its context for meaning... Communication can never exist in a vacuum.*”

²⁷ Thurlow et al. (2003: 17): “... *communication is itself something of a slippery fish to define. Even though it’s something we all do all the time, deciding what communication is and how it works has kept scholars busy for a very long time. In fact, one of the things that new technologies have done- and have always done- is force people to reconsider what the essential nature of communication really is. This partly what makes CMC such as a fascinating field of study for communication scholars: in some way, it’s almost as if we are experiencing communication anew, and yet in other ways, nothing’s changed.*”. For a more thoroughly introduction to the field of communication, we recommend Rob Anderson and Veronica Ross’s Questions of Communication (2002) and Daniel Canary, Michael Cody and Valerie Manusov’s Interpersonal Communication (2003).

²⁸ See also Thurlow et al. (2003: 17-18).

of conferencing systems. Probably, the most important distinction is between forms that are asynchronous, such as e-mail and forms that are synchronous or “real-time,” such as chat groups.”

(Warschauer, 1999: 6)

CMC can be divided up along two dimensions. One is Synchronicity²⁹: Does communication happen in real time (synchronous), or Asynchronicity³⁰: Do senders send their messages to recipients to open at their convenience (asynchronous)? The other dimension is audience scope: is the communication intended for a single person (one-to-one) or for a larger audience (one-to-many)?³¹ Here is a tentative summary of CMC modes³²

	Asynchronous	Synchronous
One-to-one	Electronic Mail (E-mail) Short Message Service (SMS)	Instant Messaging (IM)
One-to-many	Newsgroups, Listservs, Blogs, My Space, Facebook, You Tube	Computer Conferencing, MUDs, MOOs, Chat, Second Life

Table 1.1: CMC Modes

²⁹In describing Real-time interactive ‘chat’ or synchronous communication, Ryan et al., (2000: 102-103) argue: “Many computer systems enable users to ‘chat’ to people who are online at the same time as themselves by sending text messages interactively. These forms of interactive messaging systems (chat) on the Internet follow a similar model to that of citizen’s band radio, in that they are multi-user chat systems in which people get together on ‘channels’ and participate in an interactive textual dialogue on topics of interest. Many Internet Service Providers (ISPs) and Web sites have chat rooms for users. There are thousands of chat rooms on all sorts of topics and you get the software to access to them when you sign up. Users often have to pay extra for access to these chat rooms.”

³⁰ “Time-delayed ‘chat’ or asynchronous communication does not require all participants to be present and active at the same time. They are not required to respond immediately to questions or other participants’ interventions. Contributions responses can be read and replied to a time that is convenient to the individual. E-mail, discussion lists, newsgroups and group conferencing systems facilitate this type of asynchronous communication.” (Ryan et al., 2000: 105)

³¹ Crystal (2001b: 11) does not consider the distinction [between synchronous and asynchronous CMC] absolute.

³² The following table represents the four-way schema of asynchronous versus synchronous, and one-to-one versus one-to-many CMC modes

For clarity and because the focus of this research is on CMC written communication, I have organized the overview of CMC modes according to the four-way schema of asynchronous versus synchronous, and one-to-one versus one-to many omitting discussion on CMC audio and video exchanges .

1.3.3.1 Synchronous versus Asynchronous CMC

In contrast to face-to- face interaction which occurs under same-time/same-place conditions **(1)**, CMC supports asynchronous (different-time/different-place **(4)**) and synchronous (same-time/different-place **(2)**) interactions (see figure1).

	Same place	Different place
Same Time	1	2
Different Time	3	4

Figure 1.1: Types of CMC Interaction

(Source: Ngwenya, Annand & Wang, 2004:323)

However, although it is common to speak of asynchronous and synchronous communication in CMC, there are certain shortcomings associated with such straightforward categorization³³. The position of the boundary between synchronous and asynchronous CMC has not yet been answered. Crystal (2001) argues that forms of text-based CMC usually considered to be asynchronous (e-mail, SMS) need to be reassessed. For example, users of e-mail and SMS can engage in interactions consisting of multiple

³³ Baron (2008) believes that we cannot speak of synchronous versus asynchronous communication as if the two are polar opposites. The problem of synchronous versus asynchronous CMC is just telling part of the story. The distinction between one-to-one and one-to-many CMC is somewhat problematic. With cases like when SMS is being sent to a larger public (e.g., games or announcements made by telecommunication companies) researchers are misled.

exchanges within a very short space of time. He explains further that also synchronous CMC is not fully synchronous in the way spoken face-to-face interaction is: There is always the lag of typing and sending the message. He observes that chatrooms and the like are too constrained by their response times and the slow speed of typing to be considered as a good analogy of speech. Baron (2008) confirms Crystal's observations. She argues that:

“In actuality, they [synchronous versus asynchronous] fall along a continuum. In a sense, the only real synchronous communication is that in which one person can interrupt another—the prototypes being telephone conversations or face-to-face speech”

(Baron, 2008:15)

In fact, there is evidently a cline, not a dichotomy between synchronous and asynchronous communication.

In the coming section, I will introduce four types³⁴ of CMC: the one-to-one synchronous CMC (IM), the one-to-many synchronous CMC (chat), the one-to-one asynchronous CMC (SMS), and end up with an in-depth introduction of the one-to-one asynchronous CMC (e-mail): the heart of my research.

1.3.3.1 Instant Messaging: One-to-One Synchronous CMC

In principle, instant messaging (IM) is a form of CMC that, like e-mail, is prototypically utilized between a single sender and a single recipient. The essential difference between e-mail and IM is synchronicity: e-mail is asynchronous and IM is synchronous. I might send someone an e-mail at midnight and not expect a reply until a

³⁴ By referring to an informal survey I undertook with my informants on their frequent use of the different modes of CMC used among young Algerians, I decided to focus my research on these four types of CMC. In fact, the survey drew the following estimations on their preferences: 1) SMS; 2) Chat; 3) e-mail; 4) IM.

decent hour the next morning. With IM, I only message someone when I know he/she is online. At least, that is how, in principle, the two systems of one-to-one CMC communication work.

In the late 1990s, IM became a widespread phenomenon in the world, thanks in large part to Mirabilis Ltd's ICQ ("I seek you") and to the technology and marketing efforts of America Online (especially AIM-AOL Instant Messenger). Other contemporary players in the IM market include Yahoo! Messenger, MSN Messenger, and Google Talk. Increasingly, today's IM systems provide audio and video options as well.





Figure 1.2: Example of Instant Messaging Communication
(Source: Google Images)

Most of IM platforms offer far more than just opportunities for carrying on synchronous conversations. Typical profiles, buddy lists, away messages, and the ability to block particular people on your list.

Profiles are personal information forms, in which users can store contact information (physical address, mobile phone numbers, email addresses); date of birth and home town; favourite bands or quotations; and so forth.

Buddy lists are devices for defining the circle of friends. Essentially, they are list of the IM screen names (the IM equivalent of e-mail addresses) of those people to whom the user share information about his/her comings and goings. Your buddies know when you are logged on to IM and when you are offline.

Buddies also have access to so-called away messages, which people post to announce that although they are still logged on to IM, they will not be checking messages because they have moved away from their computer-to- get something to eat, go to the bathroom, or attend class.

What if the IM's user does not want particular people on his/her buddy list to contact him/her? The solution is to remove these individuals from the list. A temporary fix is to block a specific person.

By such opportunities, instant messaging of various forms has succeeded to captivate teenage and young adults' audiences (Lenhart et al., 2001). It was predicted by the International Data Corporation that

“The corporate IM will grow from 5.5 million users worldwide in 2000 to 180 million in 2004. By that time, the number of messages sent will approach 2 trillion annually”

(Info World, October25, 2000)

1.3.3.1.2 Chat: One-to-Many Synchronous CMC

A chat room, Chat Relay Chat (IRC)³⁵, or simply chat is the best known venue of CMC. It is created to converse. Generically, chat is a synchronous platform for holding textual³⁶ conversations with multiple participants in any of ten thousand of Internet chat rooms, each dedicated to a particular topic. While conversation takes place in real time, users can scroll back through the archive to respond to earlier conversations.

In Chat, users log on through nicknames and are free to camouflage their real-world personal characteristics (age, gender, background...etc.). Bechar-Israeli (1995) points out that the extent to which nicknames are important parts of the electronic self: nicknames are experienced by CMC users as an extension of the self. Bechar-Israeli (1995) further states that the emergent IRC culture is a culture of linguistic virtuosity on the one hand, and of contempt for the rules of the language on the other hand. It is, for him, a culture that provides freedom in abundance to engage in identity games through the use of nicknames.

³⁵ Internet Relay Chat (IRC) Chat, as we now know it, was born in 1988. In that year, Jarkko Oikarinen, a student at the University of Oulu in Finland, wrote a program that came to be known as Internet Relay Chat (IRC), which was intended as an improvement on UNIX talk. According to Fasold & Connor (2006: 102), Internet Relay Chat (IRC) is “ *A free and popular form of chat programme ...It was developed in 1988 by Jarkko Oikarinen and came to international prominence during the Gulf War when it was used to send out live and uncensored reports of the conflict*”.

³⁶ Chat generates a public linguistic record, which is -up to now- attracting the interest of linguists and Internet Researchers who are eager to understand the nature of these ‘conversational-texts’.



Figure 1.3: Example of Chat Communication

(Source: Google Images)

Chat rooms became immensely popular in Algeria because it is a venue which has broken the rules³⁷. Thanks to it, young Algerian chatters are afforded the freedom to build different types of social ties (especially, friendship, and love relations) between the two sexes, something they were not allowed to do as they were handicapped by restrictions stemming out from social and religious norms.

1.3.3.1.3 Short Message Service (SMS): One-to-One Asynchronous CMC³⁸

1.3.3.1.3.1 Mobile Phone Technology

It is used to be common among people that when a new technology is introduced, it spreads out between those who understand and grasp it. But when all the classes in a society strive to own and use such a new technology, it becomes strange phenomenon against rules.

Mobile phone's use has broken all rules because of its world wild fame. Ling (1998) and Klammer (2001) believe that owning a mobile phone today is seen as something that we 'need'.

“The physical presence of telecommunications equipment has moved from a relatively anonymous position in our lives to one that is more central”

(Ling, 1998:15)

The basic concept of cellular phones³⁹ began in Sweden in the mid-1950s when researchers started developing crude mobile (car phones). In 1969, a Nordic Mobile Telephone Group was established.

Soon thereafter, Germany, France, Italy, and Britain independently tried their hand at mobile systems, though costs were high. In 1992 eight European countries (Germany,

³⁷ According to an important number of participants, chat communication has broken social and religious norms.

³⁸ This section will be consistently covered as compared to the preceding ones (CMC modes sections). This is done to recall some of the researcher's findings regarding a study undertaken on SMS communication in 2009.

³⁹ In this research work, the words mobile phones, cellular phones, cell phones are used interchangeably.

Denmark, Finland, France, the UK, Sweden, Portugal, and Italy) began using the Groupe Spécial Mobile (GSM) network⁴⁰: The first European consortium formed in late 1982 to create a single mobile telephone system that would function across Europe.

1.3.3.1.3.2 What is SMS?

In her book Always On: Language in an Online and Mobile World (2008), Baron observes:

“In America, relatively easy access to computers made email, and later instant messaging, convenient ways of sending written communiqués to family, friends, and co-workers. By contrast, in much of the world, especially where computers were less ubiquitous, mobile phones largely assumed these functions.”

(Baron, 2008:16)

In today’s Global System for Mobile Communication telephony⁴¹(GSM), Short Message Service (SMS)⁴² allows mobile phone users to exchange text messages of up to 160 characters⁴³. But nowadays, *“There is no limit to the length of the composed*

⁴⁰ Adopted in many parts of the world beyond Europe (in more than 200 countries), by early 2007, GSM accounted for over 80 percent of the global mobile market⁴⁰. As of early January 2007, there were 2.73 billion mobile phone subscriptions⁴⁰. More than one-third of the earth’s population had mobile access, largely on the GSM system. (Source: GSM World).

⁴¹ In the early 1990s, GSM was known as Groupe Spécial Mobile. Over time, GSM has come to mean “Global System for Mobile Telecommunications”

⁴² SMS appeared with GSM standard in 1992. The acronym SMS formally stands for “Short Messaging System”, though in everyday parlance -especially among the scholarly community- most people speak of SMS meaning “Short Text Messaging”. In the United Kingdom, this phenomenon is known as text messaging or texting. In France, the company Cégétel (SFR) invented the term “texto”, while France Télécom (Orange) coined the term “mini-message”. Both terms are used in France, although “texto” is more popular (Anis, 2001). In Algeria, most young Algerians frequently make both use of SMS and texto when referring to Short Message Service, the oldest prefer the acronym SMS. As for this dissertation, I will use the following words: text messaging, texting, SMS texts, and SMS messages interchangeably to refer to the production of small written texts on mobile phones.

⁴³ Each SMS can be up to 160 characters in length when Latin alphabets are used, and 70 characters in length when using non-Latin alphabets such as Arabic or Chinese. However, messages have become longer in the past two or three years but more expensive through the concatenation of two messages. A 163-character message cost the price of two messages.

messages... even messages exceeding the number of characters can be sent between users. Messages, which are too long, will be split into smaller chunks automatically during the sending process". (Li, 2007:12-13)



Figure 1.4: Key Board of the Alcatel One Touch 756
 (Source: Alcatel)

1	.,?!'”	
2	abc2 àâ æ ç ä å ã	
3	def3 é è ê ë	
4	ghi4 î ï	
5	jk15	
6	mno6 ô ö œ ñ ò ó	
7	pqr7 \$ ß	
8	tuv8 ù û ü	
9	wxyz9 ý	
+	[triggers the opening of a window with the table shown in next column]	.,?!'”-()@/:_ ;+&%= <>£¥¤[]{} ~^`¡¢£\$%&'()*+,-./:;<

Figure 1.5: Characters Available on a Mobile Phone
 (Source: Baron, 2008)

According to Cor Stuttenheim, the Dutch inventor of SMS,

“[SMS] started as a message service, allowing operators to inform all their own customers about things such as problems with the network...[I]t was not really meant to communicate from consumer to consumer and certainly not meant to become the main channel which the younger generation would use to communicate with each other.”⁴⁴

Only when operators in the United Kingdom and in France interconnected their networks at the end of the twentieth century did ordinary users make SMS an interpersonal communication medium.

In Algeria, for instance, Zitouni (2009) argues:

SMS functionalities are used mainly for social purposes and/or professional ones and their appeal is undeniable. A Friend of mine (A teacher at the University of Oran; Age: 29) answered a question I posed on her motivations to use the service. She said: “I think that many, not only me, would see SMS as being more efficient than unanswered phone calls and fruitless walks to empty offices and houses”.

(Zitouni, 2009: 24)

Moreover, young Algerian texters engage in SMS communication at the most diverse moments. They use SMSs in school, despite their prohibition, in parties, when visiting relatives. Moreover, many put the device under their pillows or beside their beds,

⁴⁴ Interview by Richard Wray, *The Guardian*, March 16, 2002.

take it with them wherever they go, and only turn it off on rare occasions as in mosques or funeral services. SMS services also permit text communication between peers for opinion sharing, feedback or to request support. Consequently, the type of communication results in teenagers' tendencies to spend more time outside the home and encouraged them also to become self-independent.

As a device designed for communication, SMS's usage has none of a miracle. Messages can be composed either by typing on a mobile phone, or by using a computer⁴⁵. Li (2007) describes the way texters send their SMSs as follows:

“One of the most common ways of sending an SMS is by typing on the keypad of a mobile phone (Doring cited in Hard af Segerstad 2002). Some mobile phones equipped with a touch-screen (smart phones) may enable users to input the message by using the ‘Graffiti’ function which is similar to using a writing pad. Another way to send a text message is to use a computer. Web-based SMS service providers allow users to send text messages through the Internet.”

(Li, 2007: 13)

Messages are generally created by tapping the numbers of the phone keypad one or more times, corresponding to the letter of the Latin alphabet that is intended. For example, on the “2” key, one short tap would represent the letter A; two taps, the letter, B, and three taps, the letter C⁴⁶. To type, for instance, the five- character word “Salam”⁴⁷ (“hello”), the

⁴⁵Li (2007:13) argues: “Using a computer to text messages will give a wide range of choices of inputting devices and strategies such as keyboards, writing pads, a microphone together with a speech recognition software and even simply the ‘copy-and-paste’ functions.”

⁴⁶Baron (2008:17) argues: “Lettering had already appeared on mobile phones, a relic of the days in which area telephone exchanges had names. (When I was a child my phone number was GR4-25253, with the “GR” standing for “Greenbelt”, the name of the town with that exchange. Today, the same number would be 474-2525).”

following keys have to be pressed: 72526. However, the keys have to be pressed 10 times, to get the correct sequence of letters (7777255526). Obviously, this procedure makes text entry laborious and time consuming.

These days, however, several alternatives have emerged for simplifying texting input. A number of handset manufacturers offer phones with full tiny key-boards (similar to Blackberry). Predictive texting programs (sometimes known as T₉ programs or built-in dictionaries) enable also users to type one or two letters of a word, and then a software program offers up the full word, predicting the user's intent.

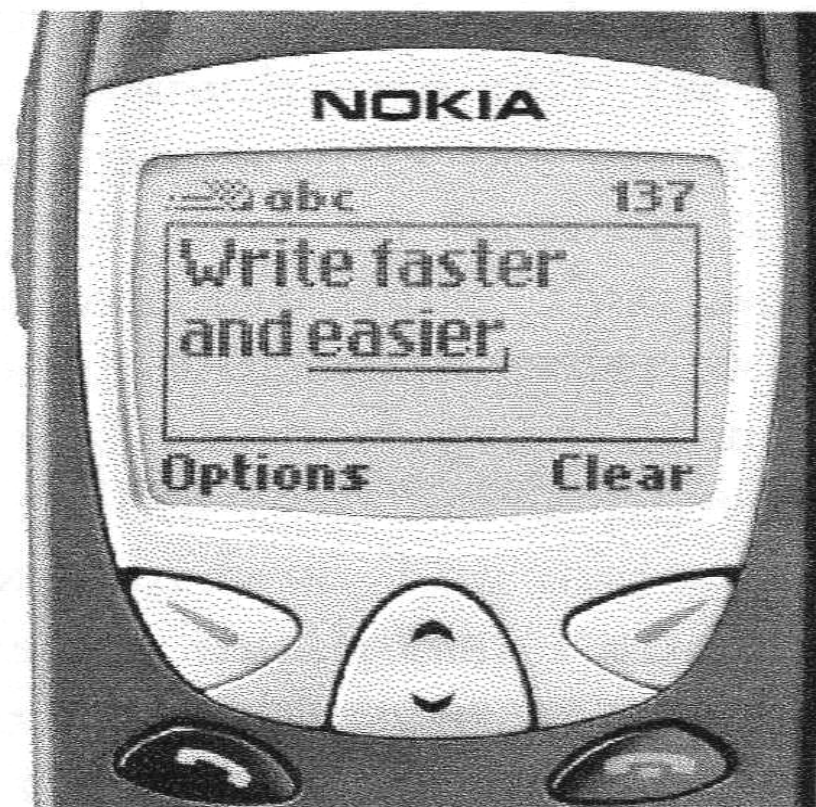


Figure 1.6: Example of a Mobile Phone (in this case, a Nokia 6210) displaying a text message on the screen with predictive text entry system

²⁰“Salam” is an example extracted from the corpus of research of Zitouni (2009).

(Source: Nokia)

Text messages are usually displayed on the small screen of a mobile phone into different parts. Li (2007) explains:

*“A typical mobile text message consists of the following parts: **Header**, which usually includes the time and date of sending the message, the identity of the message sender either by a mobile phone number or by a name if that number has an entry in the recipient’s contact list. **Body of message**, which is the main content of the message. The body of the message may be a new message or a forwarded message or a combination of both. Openings and closures can be added, though it is not common. Text messages may include words, numbers and also other symbols.*

(Li, 2007: 12-13)

In Algeria, mobile communication was not widely spread until the end of the 1995⁴⁸: at that time mobile phone industry developed its Short Message Service (Crystal, 2001), but it did not become popular until 1998. The introduction of cell phones to the larger public in Algeria was not possible at that time because of its costs. Only those with professional responsibilities or financial means could afford a GSM.

Over time, handset shrank, but usership was slow-growing, partly because phones were expensive and so were calling rates. Equally important was the fact that the mobile phone had not developed into a “personal” item in Algeria. Given the profusion of landlines, who needed to carry around (and pay for) another phone?

⁴⁸ Djezzy Operator.

As Algerian mobile phones finally emerged as a medium-for-the-mass around the turn of the century⁴⁹, its use aligned predominantly with the idea of development and modernization, and was consequently conducted in a practical modality ensuring existing kinship, friendship and business networks. Algerian users of mobile phones benefits now from two main applications: phone calls and SMS texts⁵⁰.

In fact, the vast majority of phone calls in Algeria are likely to be uncompleted calls, known as ‘beeping’ or ‘flashing’: You call someone, let it ring once or twice, and disconnect before the call is completed ; your name and/or number appears on the recipient’s mobile. Algerians may have a routine of flashing a girlfriend or boyfriend regularly to assert presence and stay close “I am thinking of you”. They may flash people to make or track meetings arrangements (‘flash me when you get too busy’, ‘ flash me when you are on your way to the meeting’) or they may simply flash to say ‘phone me back, I haven’t any units left’ or ‘I want this call to be on your bill’ . The latter almost happens when two people are introduced to each other for the first time through mutual friends or professional contacts. One flashes the other, and says, ‘now you have my number’. The receiver saves it in his/her contacts’ list and then flashes back, and the saving is reciprocated. Algerian mobile phone users make use of flashing in order to win the fierce battle to keep a mobile in permanent operation, but this battle itself indicates the great importance attached to staying connected by mobiles, and this importance-I would argue- is tied to the need of maintaining, managing and expanding already existing social networks.

⁴⁹ Djezzy Operator

⁵⁰ In Algeria, mobile phone users know when to talk and when to send a text message. To know more about motives for such distinction, I collected some interesting data from my workmates (whose age is between 30 and 50) regarding their SMS customs. I found that, although texting in Algeria is less expensive than voice calls (as it is in most of the world), most of their mobile communications were voice calls. In fact, the Algerian reserves texting for communication with a handful of people-generally “intimate” correspondents such as a wife, a husband, a girlfriend, a boyfriend, close circle of friends, and also family members. When the Algerian send text messages rather than placing voice calls, the decision is often based on social norms regarding privacy when he/she is in public space. Most of my colleagues considered inappropriate to broadcast private business in public, something text messaging can afford.

SMS is also a very important mobile functionality used among Algerians. It is estimated that mobile phone users in Algeria create, send and receive messages approximately five times a day (Djezzy operator, 2007).

1.3.3.1.4 E-mail

Hafner & Lyon (1996) describes the electronic mail (e-mail) as one of the oldest forms of computer-mediated communication. Just after its invention, E-mail caught on fast and became a very popular application on the Net. Wood & Smith (2005) argue:

“E-mail is perhaps the most popular and familiar channel for communicating through the Internet. Like its ancestor, the much slower, paper-based “snail-mail” routed through traditional postal means, e-mail involves the exchange of textual messages between two or more parties. Unlike its ancestor, e-mail arrives very quickly and seems to express meaning in a notably variant fashion.”

(Wood & Smith, 2005:10)

1.3.3.1.4.1 A Definition

Erboul& Bernicot (2009) define:

“Le CE [courrier électronique] est une forme de Communication Médiatisée par Ordinateur (CMO) asynchrone, comparable au courrier postal. Il présente de nombreux avantages tel que sa rapidité de transmission. (Herring, 1996; Anis, 1998, 2000 ; Crystal, 2001). Les caractéristiques spatio-temporelles de l'échange traditionnel sont modifiées : l'espace est étendu, le temps est comprimé (Anis, 1998, Panckhurst, 1998, Crystal, 2001).”

(Erboul& Bernicot, 2009:1)

Without question, e-mail is the first communication tool to be developed through CMC⁵¹, Benford, et al., (2008) say:

“Various ways of communicating online have emerged as the Internet continues to grow organically. The first communication tool to be developed was email by which electronic text messages, analogous to letters, notes or memos, can be sent via the Internet from one computer to another in as little as a few seconds or minutes.”

(Benford et al., 2008: 48)

It is also the most popular application provided, once the Internet was in place⁵². E-mail communication was the most popular application because of its multiple advantages. A favourable position was mostly due to the fact that e-mails can be sent round the world and received in seconds with free costs and to its possibility to be consulted at any time and place. The technology is now an indispensable part of modern work and play, love and war⁵³. Graham (1999) argues:

“The most immediately useful aspect of the Internet is the electronic mail system known as e-mail, which combines features of post, fax and telephone at relatively little cost. Its ease and immediacy has

⁵¹ E-mail was invented in 1971 and the first electronic mail or ‘network mail’ was sent in 1972 in the United States. (Hafner & Lyon, 1996).

⁵² Frank Heart, the director of the team which built the physical ARPANET infrastructure later commented on the invention of e-mail: “When the mail was being developed, nobody thought at the beginning it was going to be the smash hit that it was. People liked it, they thought it was nice, but nobody imagined it was going to be the explosion of excitement and interest that it became. So it was a surprise to everybody, that it was a big hit.” (qtd in Ian R. Hardy Spring, 1996: 41).

⁵³ Radicati (2010) estimates that e-mail accounts are predicted to increase from over 2.9 billion in 2010 to over 3.8 billion in 2014.

made it attractive to huge numbers of users very rapidly.”

(Graham, 1999: 23)

1.3.3.1.4.2 A One-to-One Asynchronous Communication

In principle, e-mail is a one-to-one asynchronous medium. It provides interaction between participants by combining the permanent nature of written communication with the highly rapid transmission speed of spoken communication.

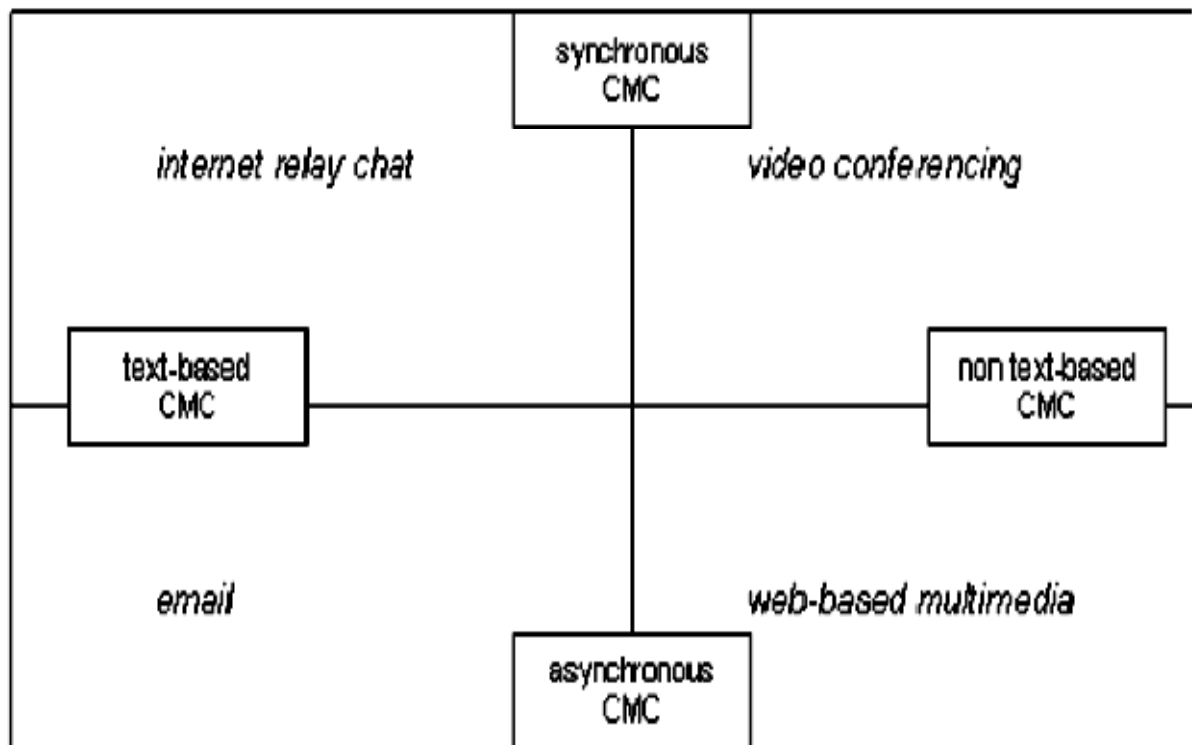


Figure 1.7: Classification of CMC

(Source: Rulík, 2006: 16)

However, neither of these characteristics is always true. Senders and recipients are free to send messages as things fit them. Ryan et al., (2000) explain:

“In general most e-mail systems enable the user to compose and send outgoing messages to one or more people. Messages are routed by the system to

the addressee's mailbox and wait there until the next time the addressee logs on. The addressee can respond to incoming messages in various ways- read the message, reply to it, edit and forward it, delete it or leave it for later attention."

(Ryan et al., 2000: 104)

The idea of synchronicity is also to be questioned⁵⁴. Computers servers and signal transport speeds have improved enormously. Lag time⁵⁵ may be as short as a second or two, making e-mail essentially synchronous, if a user chooses to use it that way.

Messages sent through e-mail services can be a text, a binary file or pictures. Ryan et al., (2000) argue:

"Users can also attach files to a message. With the latest generation of e-mail systems one can attach any type of file, eg, text, spreadsheet, graphic or audio and, provided the person receiving the mail has compatible software, the file can be opened and used immediately or downloaded for later use"

(Ryan et al., 2000:104)

It is possible to imagine a lot of situations where sending an e-mail is very useful. A student can get his papers corrected by a professor from another country just by sending him/her an e-mail. Another good example is that of the large number of surveys done in the frame of scientific projects and which are put on the net and answered through e-mails.

⁵⁴ Ryan et al., (2000) believe that asynchronicity in e-mail communication is to be considered as one key missing element in human communication because it lacks "...the appreciation of the evolution of the discussion that occurs in a face to face meeting." (Ryan et al., 2000: 105)

⁵⁵ Lag time refers to the period of time separating exchanges; in this case e-mail exchanges.

An e-mail message, as manifested on the computer screen, consists of three components: *the message header*-contains information about the message, like sender, addressee, subject, date, etc-; *the body of the message* that the user types or inserts into the message window; and *the attachment*- could be a simple text, images, multimedia files ...etc.

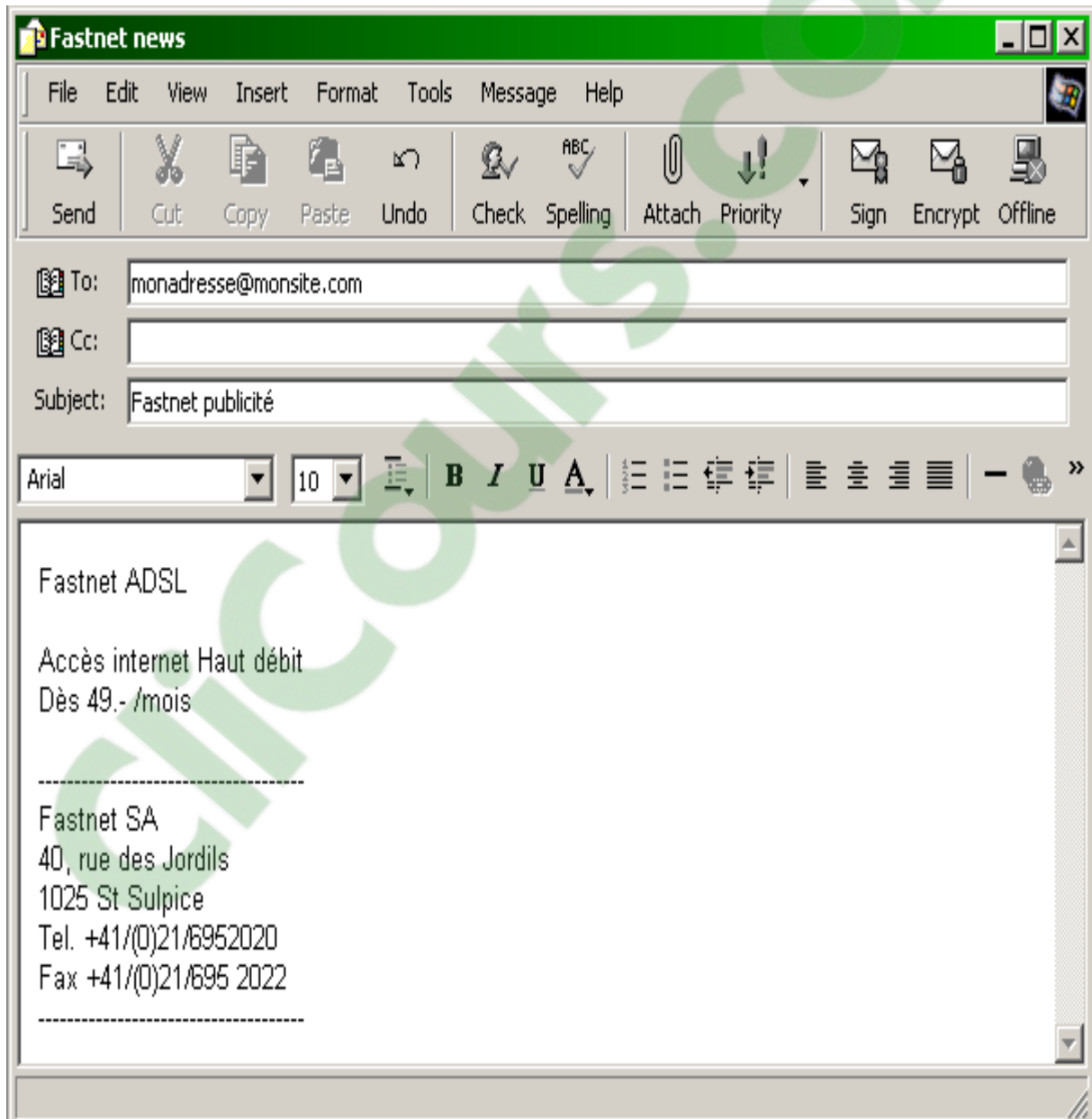


Figure 1.8: Example of E-mail Communication

(Source: Google Images)

By now, e-mail has become sufficiently domesticated in Algeria. Its style and content are diverse as the people using it.

1.3.3.1.4.3 The Pros and Cons of E-Mail

It is worthy to note that our previous discussion on CMC and e-mail communication does not imply that computer-mediated communication automatically has any particular negative or positive impact on its users. As Roszak (1994) points out, computer networks can be used for ‘negative’ purposes as easily as they can be used for development of knowledge. The advantages and disadvantages of e-mail and other new communications media depend in large part on the way they are used (Roszak, 1994). Nevertheless, “*the features of this new medium are quite powerful, which explains in part why the Internet has been such a fast-growing technology*” (Warschauer, 1999: 6).

1.3.3.4 CMC in Africa and Algeria

Over the past few years, the use of CMC in Africa has experienced a tremendous development. The proliferation and the rapid adoption of CMC technologies by Africans have proposed the entry of Africa into the “*global village*”.

Many Africans considered that the use of ICTs as a chance for the African continent to escape marginalization and poverty. However :

“Pour la plupart des gouvernements africains les priorités sont ailleurs : elles consistent à éradiquer les maladies endémiques, l’analphabétisme et la pauvreté. Les lourds investissements que supposent la recherche et développement sont jugés hors de portée et les politiques en matière de TIC se sont limitées à fournir l’accès aux citoyens, c’est-à-dire dans le meilleur des cas à doter le personnel de l’administration et les écoles en ordinateurs, à créer un cadre « attrayant » pour les investissements et l’implantation des grandes compagnies de

télécommunication qui opèrent partout en Afrique aujourd’hui notamment dans le domaine de la téléphonie mobile. ”

(Oruame, 2007:)

Alzouma (2008) further adds:

“According to Oruame (2007), no African country, perhaps with exception of South Africa, has any clear-cut policy on funding ICT R&D and no country has made any substantial progress in this area...Unlike Asia, the African environment has continued to stifle real prospect in ICT R&D. Government funding is non-existence (sic!) and the private sector support does not also exist.”

Alzouma (2008: 19-20)

By referring to some previous research and statistics, Alzouma (2008) - in *“Téléphone mobile, Internet et développement : l’Afrique dans la société de l’information ?”* - notes that the so-called “transformational” character of ICTs in Africa is a fake picture⁵⁶. He concludes that Africans remain essentially receivers and passive consumers of technological productions and innovations. Lanre Ajayi, president of the Nigerian Internet Group adds:

“Africa is out of it...We should not think the ability to make a phone call with ease translate into

⁵⁶ Gaston Zongo, an ICTs consultant in PIWA (Panos Institute of West Africa), asserts: *“We have always made the mistake of confusing ICT deployment for ICT R&D and acting on the assumption that with mobile phones and Internet gaining grounds, we have earned a place in the knowledge economy.”* (qtd in : Alzouma, 2008: 20)

development...There is no short cut to joining the information society.”

(qtd in : Alzouma, 2008: 19-20)

As an African country, Algeria enjoys inclusion in the so called *Information Society*. There are reports of access to the Internet in most regions and sectors⁵⁷ in Algeria. However, a number of commentators point out that, until now, a prosperous expansion of Computer Mediated Communication has not yet been achieved⁵⁸. This state of affairs is ascribed to some extent to the fact that Internet communication is constrained by an economic factor. Internet usage among Algerians is to a great extent limited to a specific social class which is economically able⁵⁹ to enjoy the facilities offered by the medium.

[Africa Internet Stats](#) is a site link which provides Internet usage statistics on African countries including Algeria. Here is an estimation of the Algerian Internet Usage and Population Growth during the period from 2000 to 2010:

⁵⁷ Temlali (2008:02) explains :“ *L’Algérie a été un des premiers Etats «connectés» du monde arabe: certaines universités et centres de recherche étaient, dans les années 80 déjà, raccordées aux réseaux américains et européens.*” ([Internet en Algérie: en attendant le boom, le retard](#))

⁵⁸ In an Electronic article- [Internet en Algérie: En Attendant le Boom, le Retard](#)-Temlali (2008:02) argues : “*L’Internet algérien n’a pas connu la même heureuse explosion que le secteur de la téléphonie mobile, où le nombre d’abonnés est passé de 54 mille en 2000 à 27 millions en 2007*”. From [Internet Connectivity :](#) “*The Internet development in Algeria is still in a relatively early stage. Since 1994, Le Centre d’étude et de Recherche sur l’information Scientifique et Technique (CERIST) is the leading and only institution offering Internet service in Algeria. Apart from Algiers, CERIST has created three different nodes (point of presence) in the country, namely in Oran, Constantine and Ourgla. While CERIST is the only provider of full Internet service, a number of private companies are now offering web creation and hosting services, as well as e-mail connection. The Internet Service Company (ISC) in Algiers currently offers, in addition to network and multi-media services, e-mail forwarding service (using Unix to Unix Copy Command – UUCP), Web page design, creation and hosting, Web navigation service, and Internet training. The company claims to have a fiber optic T3 connection with Sprint.*”

⁵⁹ ‘Economically able’ refers, here, to the possession of computers and Internet connection at home.

YEAR	Users	Population	% Pen.	Usage Source
2000	50,000	31,795,500	0.2 %	ITU
2005	1,920,000	33,033,546	5.8 %	ITU
2007	2,460,000	33,506,567	7.3 %	ITU
2008	3,500,000	33,769,669	10.4 %	ITU
2009	4,100,000	34,178,188	12.0 %	ITU
2010	4,700,000	34,586,184	13.6 %	ITU

Table 1.3: Algerian Internet Usage and Population Growth

(Source: **WORLD INTERNET STATS Algeria**,
Internet Usage Stats and Market Reports, 2012)

Temlali (2008) explains:

"Selon les statistiques rendues publiques par le ministère des Postes et des Technologies de l'information fin 2007, le pays compte 70 providers, plus de 5 mille cybercafés; 11 mille établissements scolaires sont connectés à la «toile». On estime le nombre d'«internautes» à quelque 4 millions sur une population de 33 millions. Un «chiffre astronomique» que conteste Rafik Khenifsa, directeur d'un hebdomadaire spécialisé dans les NTIC... »⁶⁰

Temlali (2008:02)

⁶⁰ Rafik Khenifsa – Head manager of *Imag*- argues : 'Un internaute est un usager de l'Internet qui dispose d'un abonnement. C'est ainsi que le définissent les organismes internationaux des télécommunications.' Or, le nombre d'abonnés aux services DSL, tous opérateurs confondus, ne dépassait pas 250 mille à la fin de l'année 2007, comme le souligne Ahmed Kehili, directeur du provider public Djaweb, filiale de l'opérateur historique Algérie Télécom. Beaucoup d'Algériens se connectent certes dans les cybercafés ou sur le RTC grâce à des numéros d'accès publics (le 1515, le 1516...), mais leur nombre est impossible à déterminer avec exactitude.'

1.4 CMC and Social Networks

In an article entitled *An Electronic Group is Virtually a Social Network*, Wellman (1996) writes:

*“When a computer network connects people, it is a social network. Just as a computer network is a set of machines connected by a set of cables, a social network is a set of people (or organizations or other social entities) connected by a set of socially-meaningful relationships”.*⁶¹

(Wellman, 1996: 2)

Communication on the Internet and the social space constructed by the act of communicating electronically has emerged as a hot topic in several popular and intellectual circles. In an article, Mazur (2000) writes:

“Human to human communication is an essential part of our everyday lives. Advances in communication technology have enabled anytime-anywhere connection between people. There are a wide variety of devices to communicate with family, friends and workgroup members who are distributed geographically. We use cellular phones when stuck in traffic, to advise others when we will be late, or at the store to call home to be reminded of what is needed. Instant messaging services connect us with on-line friends and relatives.”

(Mazur, 2000:5)

⁶¹ See also Wellman & Gulia (1996) and Wellman et al., (1996)

Internet growing popularity prompts discussion regarding many fundamental aspects of social interaction, including the question of ‘*Global Village*’⁶² and ‘*Community*’⁶³.

The coming sections explore the concept of the community and the virtual community as a prominent metaphor in people’s experiences with the various CMC environments. What follows is, then, an examination of the common features ‘netizens’⁶⁴ share and the ways in which they construct social networks.

1.4.1 What Makes a (Speech) Community?

One of the most interpersonal needs is to “belong” and to feel that one is member of a group of others who share similar interests and goals⁶⁵, and to feel that one is a valued member of that group (Brewer, 1991). Community is then an important aspect of life for most people. Cooley (1983) considers that all normal humans have a natural affinity for community and highlights the fact that, no matter what the community scale is, it is difficult to organize, extend and maintain a community. Wood & Smith (2005) define a community as follows:

“At the heart of it, community is based on a sense of belonging. Individuals rarely feel as if they belong with a group of strangers on an elevator in the same way that they belong with their classmates in school or with coworkers on the job. The German social theorist, Ferdinand Tönnies (1957), makes this distinction clear in his classic comparison between

⁶² Crystal (2001:5-6): “There has been much talk of the notion of a ‘global village’, which is at first sight a persuasive metaphor. Yet such a concept raises all kinds of linguistic questions. A village is a close-knit community, traditionally identified by a local dialect or language which distinguishes its members from those elsewhere: “that’s not how we say things round here’. If there is to be a genuine global village,⁶² then we need to ask ‘what is its dialect?’, ‘what are the shared features of language which give the world community of users their sense of identity?’ And, if we cannot discern any unifying dialect or language, or a trend towards such a unity, we need to ask ourselves if this ‘global village’ is anything more than a media fiction.”

⁶³ See R. Hardy Spring, (1996) in Li (2007)

⁶⁴ A term borrowed from Crystal (2001).

⁶⁵ Wood & Smith (2005:127): “Despite the distances that can separate them, people have an intrinsic need for community.”

*society and community. The detached, happenstance gathering of people he called **gesellschaft**, but the sense of belonging, a sense of “we-ness” he called **gemeinschaft**. The distinction is subtle but important one, for it helps define the virtual communities forming online. Therein, the feeling of belonging to a fellowship reflects the bonds experienced in a state of *gemeinschaft*.”*

(Wood & Smith (2005:127))

Speech communities have always supported the idea of belonging. However, the term ‘speech community’ misleads when it comes to whether language should be considered as a criterion of demarcation between what is a speech community and what is not. Saville-Troike (1989) stipulates that one way of defining a speech community is with reference to rules of speaking which are shared by the members of the community and are not used by ‘outsiders’.

In this sense, the linguistic choices made by members of the groups helps to define it as a community. Brumfit (2001) supports Saville-Troike’s point of view:

“Language use only becomes problematic when there are languages and styles to choose from. The, selection of language and style may result from, and also become a badge of social differentiation. Indeed, we may go even further, and argue that whenever there is social differentiation, linguistic variation will reflect it. Thus, language users operate as communities through the linguistic choices they make.”

(Brumfit, 2001:135)

However, Romaine (1994) is of an opposite position. He believes that a speech community can be

“A group of people who do not necessarily share the same language, but share a set of forms and rules for the use rather than linguistic...a speech community is not necessarily co-extensive with language community”

(Romaine, 1994:22)

In fact, Romaine’s definition of a speech community is relevant to the study of CMC virtual communities because it suits what these latter are meant to: interactions that happen between individuals or groups with a variety of sociolinguistic histories, but with shared rules of interaction. Wislon & Peterson (2002) argue that

“Information and communication technologies have enabled the emergence of new sorts of communities and communicative practices-phenomena worthy of the attention of anthropological researchers”

(Wislon & Peterson, 2002:449)

Researchers in Communication, Linguistics, Sociolinguistics, Anthropology, and Cultural Studies have pointed out the wide spread use of “community” in CMC environments and examined its construction.

1.4.2 CMC Virtual Communities

In her study of asynchronous communication of newsgroups discussions, Baym (1995) suggests that certain social dynamics in CMC, such as group-specific forms of expression, identity, social relationships, and behavioural norms, promote a sense of community. These communal constructs have become popularly known as *virtual communities*.

The notion of a CMC virtual community gained currency when it was popularised by Rheingold (1993) in his book The Virtual Community: Homesteading on the Electronic Frontier. Rheingold is the first to bring this use of the term to prominence and who provides an often-quoted definition of this phenomenon:

“...virtual communities are social aggregations that emerge from the net when enough people carry on ... public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace.”

(Rheingold, 1993: 5)

Note that Rheingold’s definition does not account for the need of the proximity of participants to one another or even the necessity for face-to-face interaction, all features long associated with traditional communities. Instead, his definition asserts that community is based on ongoing communication⁶⁶.

There are, however, other arguments against the very existence of virtual communities⁶⁷, centering upon the question of whether to be a community it must have a geographical space⁶⁸. Weinreich (1997), for example, rejects the notion of virtual community, because in his view,

⁶⁶ Graham (1999: 142) stipulates: “*If and where it is, an Internet group can be said to have the basic elements of a community.*”

⁶⁷ Some authors claim that so-called ‘virtual communities’ are a kind of ‘instant community’ that cannot obtain ‘true’ community qualities (see e.g. Wellman & Gulia 1997; Baym 1995; Etzioni 2000; Foster 1997; Weinrich 1997; Wilbur 1997, among others).

⁶⁸ Apart from ‘the geographical space’s argument’, Graham (1999: 142) describes one another in what follows: “*According to Stacy Horn, author of Cyberville, an ‘electronic salon’ such as Echo- the on-line group she established- can be described as a ‘virtual community’ (the combined term ‘virtual salon’ is the one she prefers). It is worth speculating on why she says this and what it means. Applying our earlier analysis of the concept of community, we can readily agree that the virtual salon meets the first two criteria. It is a subjective interest group: that is to say, the people who use it have material interests in common- the invention of more user-friendly software, the provision of more lines to and from America, for example- though they share these as Internet surfers, not as members of this or that particular group. Even taken together, however, these are not sufficient to make the electric salon a community: it may be an enclave⁶⁸, but it still needs what I have called constituting authority.*”

“... Community is a collective of kinship networks which share a common geographic territory, a common history, and a shared value system, usually rooted in a common religion.”

Weinreich (1997: 04)

Wood & Smith (2005) do not agree with Weinreich (1997) who advances the assumption that a community is geographically bound and that the people who share a community must interact face-to-face. For Wood & Smith (2005), communities of common interest, which *“exists not as a physical presence but as a shared understanding of interrelatedness among its participants”* (Wood & Smith, 2005: 123), such as that observed in the milieu of CMC⁶⁹ can be sustained without the benefit of any face-to-face initial meetings.

A virtual community on the Internet⁷⁰ or mobile telephony cannot, of course, share a common geographic territory in the traditional sense. However, CMC users feel that they belong to a virtual group when interacting through CMC. This idea is similar to Korenman & Wyatt's (1996) 'experiential' definition of a group on the Internet:

“The experiential measure of ‘groupness’ is the feeling of participants in the interaction that they

⁶⁹ A good example of such communities, according to Wood & Smith (2005:123), is the one maintained through the relationships among participants in eBay's community of commerce. Wood & Smith (2005:124) argue: *“why, then, people join them? As psychologist William Schutz (1966) explained, all people have a need for inclusion, a desire for the company of others. Virtual communities provide individuals with a means for acquiring that feeling of inclusion, especially among those individuals who seek the company of like-minded people. At the heart of the concept of community, then, is the quality of commonality (Fernback, 1999), after all, you might be the only person in your small town who collects Elvis Presley memorabilia, but there are many such collectors located across the country that you can meet online. Virtual communities thus allow people to transcend geographic boundaries and unite with others who share their common interests, whether that's watching a particular television series, promoting a social cause, or collecting original vinyl recordings of “Love Me Tender”.*”

⁷⁰ Wood & Smith (2005: 125) argue *“Although the Internet represents the latest medium to facilitate the construction of community, it is certainly not the first. Benedict Anderson (1983) supposes that newspapers were an earlier medium used to help establish what he termed **imagined communities**. Anderson explains that, like virtual communities, imagined communities emerged because of the intervention of mediated communication.”*

*are members of a group; a group is a group because
it feels like a group”*

(Korenman & Wyatt, 1996: 225-6)

As an adjunct to the discussion of virtual groups, we may mention the notion of a virtual settlement, as proposed by Jones (1997):

*“The existence of a virtual settlement demonstrates
the corresponding existence of an associated virtual
community and is analogous to the physical
infrastructure of a community in Real Life”*

(Jones, 1997:6)

Jones (1997), writing in the journal of *Computer-Mediated Communication*, establishes four criteria necessary for a virtual community to exist. According to Jones, virtual communities distinguish themselves from a simple online gathering when they feature: (i) a minimum level of interactivity, (ii) a variety of communicators, (iii) a minimum level of sustained membership⁷¹, (iv) and a virtual common public space (Jones, 1997). A virtual settlement, which CMC groups demonstrably have in their various places and spaces, could be said to fulfill the ‘geographical space’ criterion an offline speech community is said to have.

In fact, we all need a sense of community, whether it is bounded territorially or in the ‘placeless’ realm of virtual communities. However, the ‘placeless’ nature of virtual communities, as we have defined it, can be a transnational and/or a transcultural phenomenon. Perhaps our increasing participation in CMC will guide us to a clearer picture of offline versus online communities in Algeria and all over the world.

⁷¹Wood & Smith (2005: 122): “Without a sense of caring, there can be no sense of community.”- Anthony J. d’Angelo

1.4.3 A Netizen's Life

A netizen is an appellation Crystal (2001) uses and many others to refer to a regular citizen of the Internet. According to Crystal (2001: 3-4), netizens are:

“Those who already spend appreciable amounts of time online need only self-reflect; for those who do not, the self-descriptions of a ‘day in a netizen’s life’ are informative.”

(Crystal, 2001:3-4)

Here is a presentation of Wilbur's view concerning a netizen through his description of what a 'virtual community' means to him:⁷²

“For me it is the work of a few hours a day, carved up into minutes and carried on from before dawn until long after dark. I venture out onto the Net when I wake in the night, while coffee water boils, or bath water runs, between manuscript sections or student appointments. Or I keep a network connection open in the background while I do other work. Once or twice a day, I log on for longer periods of time, mostly to engage in more demanding realtime communication, but I find that is not enough. My friends and colleagues express similar needs for frequent connection, either in conversation or through the covetous looks they cast at occupied terminals in the office. Virtual community is this work, this immersion, and also the connections it represents. Sometimes it is realtime communication. More often it is asynchronous and mostly solitary, a

⁷² See also Naughton's account (1999: 143ff.).

sort of textual flirtation that only occasionally aims at any direct confrontation of voices or bodies.”

(Wilbur, 1996: 13-14)

Indeed, it seems most likely that the virtual sphere fosters netizen's role in a 'virtual society'⁷³, allowing netizens to feel involved rather than to advance actual participation. Therefore, we must agree with Cooley, who writes in 1909:

“[A] rapid improvement in the means of communication, as we see in our own time, supplies the basis for a larger and freer society...”

(Cooley, 1909: 55)

Virtual communities seem to be formed and reinforced thanks to the active involvement of its citizens. Citizenship via cyberspace has proven to demonstrate a sense of solidarity and contribution which has nevertheless been seen vanishing among offline citizens.

1.4.4 Internet's Potential for Human-to-Human Contact

Studies of online communities, dealing with issues like computer-mediated social support or online' social support, have sometimes argued that the Internet would weaken social involvement. However, relevant amount of analysts have demonstrated that online communication can provide esteem support and strengthen social bonds and social companionship among Internet users all over the world⁷⁴. Wood & Smith (2005) provide an example:

⁷³ A term I use to refer to societies developing over the Internet. I created this concept as reaction to a development of a society –mediated via Facebook-which has proven its presence during the Egyptian revolution, January 2010.

⁷⁴ See Burrows et al. 2000 ; Kraut et al. 2001; Kraut et al. 1998; Wellman et al. 2001; Cole 2000; Hampton 2001; among others. Gigon & Crevoisier (1999 : 159) argues : “*Internet, en tant que l'un des véhicules le plus répandu et le plus connu des TIC (Côté, 1999 : 127), est un outil particulièrement prometteur de mise en relation de personne à personne*”. Benford, et al., (2008: 15) add: “*The Internet may offer a unique form of social support, complementing that which is available from personal networks or local resources*”.

“According to the study’s report [The Pew study], “19 million Americans rekindled relationships...by sending email to family members, friends, former colleagues and others that they had not contacted in years. Fully 83 % of those who renewed contact with others have maintained those relationships...” (Rainie et al., 2002, p.5). Such a personal effect testifies ... to the ability of the technology to facilitate human-to-human contact through it all.”

(Wood & Smith, 2005: 9)

Although online communication offers some advantages over face-to-face communication, some analysts (e.g. Rheingold, 1993; Schwartz, 1994; McClellan, 1994) find that it is still important to outweigh the advantages and the disadvantages.

I suggest, ultimately, that closer attention should be given to deconstruct dichotomies of offline and online, real and virtual, individual and collective. I believe that the distinction of real and virtual community is not a useful one⁷⁵. An important part of research should involve the study of the new media’s community building⁷⁶, the continuum of communities, and the patterns this process has taken or might take.

More to be said on the research dimensions of the present study is detailed in what is coming right now.

⁷⁵ I hope that my comments are not going to be construed as protests against the non-corruption of the term ‘community’.

⁷⁶ Wood & Smith (2005: 127) argues: “Being part of a virtual community means more than merely having a group of people communicating online. Even in the tangible world, it is understood that the quality of community takes more than mere presence”.

1.5 What is this Research about?

1.5.1 The Research’s Skeleton

1.5.1.1 Delimitation of the Study

Title of the research

IS ENGLISH THERE? : INVESTIGATING LANGUAGE USE AMONG YOUNG ALGERIAN USERS OF INTERNET

The core data set for this research was supposedly going to be drawn from four major categories:

IS ENGLISH THERE? : INVESTIGATING					
Category one		Category two	Category three	Category four	
LANGUAGE USE	AMONG	ALGERIAN	YOUNG USERS	OF INTERNET ⁷⁷	
Linguistic analysis		Samples from different speech communities (North, South, East, and West) representing Algerians.	Young people who make use of Internet communication (e-mail and chat).	Asynchronous	Synchronous
				e-mail communication	Chat

Table 1.4: A Provisional Outline for the Core Data Set of the Research

Due to limitations in the availability of the core data categories⁷⁸, the core data for the present study is adapted to overcome the constraints⁷⁹ by proposing a new set of categories. Here are they explained in table 1.5:

⁷⁷ Because “It is virtually impossible to study the general features of all computer-mediated communication; different modes of CMC should be studied as individual registers taking into account their distinctiveness and discrete characteristics.”(Rulík, 2006:24). E-mail and chat are considered universal means of electronic communication. They are widely used in many social domains and hence can be representative of asynchronous and synchronous CMC respectively for this research.

IS ENGLISH THERE? : INVESTIGATING				
Category one		<i>Category two</i>	<i>Category three</i>	<i>Category four</i>
LANGUAGE USE	AMONG	ALGERIAN	YOUNG USERS	OF INTERNET
Linguistic analysis		Algerians belonging to the speech community of Oran)	Young people : University students at the department of English who make use of e-mail communication.	Internet / Asynchronous: e-mail communication ⁸⁰

Table 1.5: A Comprehensive Outline for the Core Data Set of the Research

1.5.1.2 The Scientific Method

It is generally agreed that the scientific method⁸¹ is the basis for all scientific investigation. The scientific method is best thought of as an approach which effectively distinguishes science from science. It is based on the following:

“Although some disagreement exists regarding the exact characteristics of the scientific method, most agree that it is characterized by the following elements:

- *Empirical approach*

⁷⁸ Category two, three, and four are reformulated and adapted to overcome the constraints. See Part two: chapter three for a detailed description on the WHY for such limited choice: 1-e-mail rather than e-mail and chat; 2-young Algerian university students at the English department who make use of e-mail communication rather than young Algerian users of e-mail communication; 3-the University of Oran rather than three or four universities representing the different regions of the country.

⁷⁹ The constraints are imposed by the medium and by social and ethical considerations. See Chapter Three.

⁸⁰ It is clear that the Internet can provide a diverse and extensive range of communication facilities both synchronous and asynchronous. However, due to technical limitations which have induced to unavailability of data mainly for chat communication, the sample size of the present study is rather concerned with the textual aspect of e-mail language which means other modes of communication such as chat discourse will be excluded.

⁸¹ *“The development of the scientific method is usually credited to Roger Bacon, a philosopher and scientist from 13th-century England; although some argue that the Italian scientist Galileo Galilei played an important role in formulating the scientific method. Later contributions to the scientific method were made by the philosophers Francis Bacon and René Descartes. ”* (Marczyk et al.,2005: 5)

- *Observations*
- *Questions*
- *Hypotheses*
- *Experiments*
- *Analyses*
- *Conclusions*
- *Replication* ⁽⁸²⁾”

(Marczyk et al., 2005: 5)

In this study, the researcher believes that the scientific method will provide a set of clear guidelines for collecting, evaluating and reporting information in the context of the research study⁸³.

1.5.1.3 In the Beginning

The genesis of this research lies in one question: What are we, as writers, doing to our language by virtue of communication technologies? I posed this question by focussing on contemporary language technologies and by observing⁸⁴ mainly language use in Internet, more precisely in e-mail communication.

⁸² According to Marczyk et al., (2005:15-16): “*One of the most important elements of the scientific method is replication. Replication essentially means conducting the same research study a second time with another group of participants to see whether the same results are obtained (see Kazdin, 1992; Shaughnessy & Zechmeister, 1997)...The importance of replication in research cannot be overstated. Replication serves several integral purposes, including establishing the reliability (i.e., consistency) of the research study’s findings and determining whether the results can be obtained with a different group of participants. This last point refers to whether the results of the original study are generalizable to other groups of research participants.*”

⁸³ See Cozby, 1993.

⁸⁴ “*An important component in any scientific investigation is observation. In this sense, observation refers to two distinct concepts -being aware of the world around us and making careful measurements. Observations of the world around us often give rise to the questions that are addressed through scientific research.*” (Marczyk et al.,2005:5)

In fact, with the explosion of ‘online’ language in Algeria, a simple human curiosity was pushing me to interpret observations I made on the way Algerian people use language when writing e-mails⁸⁵, and their attitudes towards such language use.

I observed⁸⁶ that Algerian users of e-mail communication are creative users of language. Their e-mails are adapted to suit the conditions of the communicative event and also the constraints imposed by the medium. Most of their e-mails deviate in many ways from the prescriptive norms of classical written language people are acquainted with: There is clearly use of unconventional forms of language; marriage of spoken and written language features in the same text, and also the writing of code switching- a well known linguistic phenomenon practiced by almost all language users in Algeria.

The second observation I made was their negative attitudes towards the language of e-mails. Many people, including members of my family, friends, colleagues, and mostly students, confirmed their usage of these new linguistic forms -I previously described- in their e-mail writings, but none of them has shown satisfaction about the style of writing they are involuntarily⁸⁷ adopting. Most of them argue:

“This new language has driven me to forget about the spelling of a lot of French words. This language is negative/bad”⁸⁸

These revelations raised another question: Can a language be positive or negative? In other words: Can we judge a language?

In the early twentieth century, a tradition arose in America whereby language was to be studied but not judged. The anthropologist Frank Boas devoted his life to

⁸⁵ E-mail is spelled differently by scholars and specialists: E-mail; e-mail, email...etc. In this study the following spelling - e-mail- will be adopted.

⁸⁶ In this research, observation played an important role in depicting most of young Algerians English university students’ linguistic practices in e-mail communication.

⁸⁷ E-mail users feel the obligation to adopt this new spelling in order to be understood by members of the same virtual community. (see CMC virtual community)

⁸⁸ Data collected from informal interviews.

demonstrating how sophisticated the languages and cultures of Native Americans were. His insistence that all languages are equally powerful remains a tenet; many linguists find it unseemly to say anything judgmental about language. But, I wonder why members of language communities evaluate language all the time. For example, I remember my teachers criticizing what I and my school mates say and write on the basis of the formal established norms of written and spoken language they know.

I think that trying to understand why Algerians judged e-mail language as being negative or as being altering linguistic norms can be beneficial as it will lead us to a better understanding of the nature of those changes and their potential impact on our linguistic and social lives.

To understand these linguistic phenomena, I decided to focus my concern not only on describing the textual properties of e-mail language but also to question to what extent this language is appreciated by its users?

I will hopefully go further and try to seek for possibilities of promoting English language use⁸⁹ in Algerian universities⁹⁰ through e-mail communication⁹¹. The study is, then, concerned with investigating e-mail language usage on the light of both linguistic and pedagogical contexts.

This research represents my take on the preceding issues. I build my case through argument, by reviewing other researchers' studies, and by presenting and analyzing data I gathered from the research sample.

⁸⁹ Working on English language promotions stems from the fact that the population in question is a population of Algerian university students of English. For further details on the 'WHY' for such sampling, see Part two, Chapter two: The Pilot Study Section.

⁹⁰ The research sample comes from one Algerian university which is the University of Oran.; for further details on the 'WHY' for such limited choice, see Part two, Chapter two: The Pilot Study Section.

⁹¹ I expect to find a corpus which contains a considerable amount of English language use which could be used, in return, as a proof supporting the possibility of promoting e-mail learning environments in Algerian universities among young English university students.

1.5.1.4 Research Questions (RQS)

1.5.1.4.1 Problem Statement

In simple terms, this thesis aims to contribute to answering a ‘*what*’ and a ‘*how*’ questions⁹², in relation to the linguistic practices found in young Algerians English university students e-mail language. The genesis of this research lies in three questions:

RQ1: *WHAT* are the linguistic practices used by young Algerian English university students in writing their E-mails? Does English figure out on the list?

RQ2: *HOW* do young Algerian English university students see E-mail language? Are their language attitudes positive or negative?

RQ 3: If English is there, ***HOW*** do young Algerian learners of English see opportunities for promoting English learning via Email communication in Algerian universities?

1.5.1.4.2 Sub-Problems

A number of sub-problems emanate from the above mentioned research question one:

- What are the main constraints that shape this ‘new’ linguistic form of communication?
- Is English used by young Algerian university students of English when exchanging messages via e-mail communication?
- Is E-mail communication *a written language*⁹³?
- Is E-mail communication *a spoken language*⁹⁴?

⁹² “The next step in the research process [after observation]involves translating that research idea into an answerable question” (Marczyk et al.,2005:7); Marczyk et al.,(2005:35) : further add “ Good research problems must meet three criteria (see Kerlinger,1973). First, the research problem should describe the relationship between two or more variables. Second, the research problem should take the form of a question. Third, the research problem must be capable of being tested empirically (i.e., with data derived from direct observation and experimentation).”

⁹³ I refer here to a type of language which does obey the rules of writing.

⁹⁴ I refer here to a type of language which does obey the rules of speech.

- Is E-mail communication *a linguistic free-for-all*⁹⁵, or are there rules that users either follow or violate (spoken versus written language norms)?
- Is language used in e-mail communication influencing offline writing? If yes, how is this influence seen by the users: Is it seen negatively or positively?
- Can e-mail learning opportunities offer to the English learner in Algerian universities an opportunity for promotion at the linguistic level?

1.5.1.5 Hypotheses

I propose the following hypotheses ⁹⁶which will be tested in the course of this research⁹⁷.

- *Hypothesis one*: Unconventional spelling could be found as one of the textual properties of the e-mail corpus.
- *Hypothesis Two*: English use will probably be relevant and considerable⁹⁸.
- *Hypothesis Three*: Young Algerian English university students will probably show negative attitudes towards e-mail language.
- *Hypothesis Four*: young Algerian university students of English will probably appreciate opportunities for English language promotion via e-mail communication.

⁹⁵ A term borrowed from Baron (2008:163) who uses it to refer to a type of language that is unique in itself i.e. language which does obey neither the rules of speech nor those of writing.

⁹⁶(Marczyk et al.,2005:8) argues: “A key feature of all hypotheses is that each must make a prediction...hypotheses are the researcher’s attempt to explain the phenomenon being studied, and that explanation should involve a prediction about the variables being studied. These predictions are then tested by gathering and analyzing data, the hypotheses can either be supported or refuted”

⁹⁷ Needless to say, the three hypotheses concern RQ 1, RQ 2, and RQ 3 respectively.

⁹⁸ I predict that I will not obtain the same results as the ones I found with a corpus of SMSs. In an unpublished MA dissertation, the researcher, Zitouni (2009), undertook a linguistic analysis of a corpus of SMSs produced by young Algerian university students- in the sub-speech community of Oran. The research revealed a low percentage of English language use among these texters (3%) compared to Algerian Arabic-ORSA- (96, 5%), French (94, 5 %) and Classical Arabic (12, 5 %). Zitouni (2009:100) argues that “*English usage (although restricted to 6 SMSs: 3%) is partly explained by the fact that some of the students were coming from a literary branch in which the English module is given impetus. The second reason for the use of English in Algerian texting may be ascribed to the following: ‘May be because we still lack proficiency in using English and even if we know this language there is fear that partners will not understand our SMSs, unlike Algerian Arabic and French which are the ‘lingua franca’ of SMS communication in Algeria’ (Source: Interview with Informant N°: 68)*”.

1.5.1.6 Aims of the Research

1.5.1.6.1 General Aim

As a general aim, this research wishes to investigate the general problem statements. This will hopefully help understand e-mail language and consider it not only, in relation to technology, but also as a promoter of language change.

1.5.1.6.2 Specific Aims

For this research, the following are identified as specific aims:

- To explore the significant textual properties of e-mail language
- To see the impact of the technology (e-mail communication) and society on the formation of this language.
- To consider the relationship between online and offline written language.
- To determine the main unconventional features characterising e-mail language.
- To survey young Algerians English university students attitudes towards e-mail language and reveal whether or not e-mail language is violating norms of traditional writing.
- To explore the ways in which e-mail communication could be used by young Algerian learners to encourage and facilitate English language learning in Algerian universities.
- To place e-mail communication in a competing position to other platforms of e-learning.

1.5.1.7 Motivation of the Research

To undertake this research, three motives have empowered me at each stage of the work preparation. I was motivated, firstly, by my curiosity to know more about the phenomena I personally observed. Secondly, pioneering research in this domain was something of a chance for me. In fact, I discovered, through readings and surveying literature in Algeria, that the phenomenon has not yet been explored in the same way I planned to do; I was, however, in front of a virgin terrain. The third motive for embarking in researching e-mail language in Algeria is the support I received from my supervisor and

from a number of scholars⁹⁹ and, colleagues and even students, who were interested to know about the outcomes of the linguistic investigation but also wanted to see the end of the story: how can e-mail exchanges exploited for the benefit of learning and teaching in Algerian universities?

1.5.1.8 Potential Relevance of the Research

Marczyk et al., (2005) argues:

“Engaging in research can be exciting and rewarding endeavour. Through research, scientists attempt answer age-old questions, acquire new knowledge, describe how things work, and ultimately improve the way we all live.”

(Marczyk et al., 2005: 27)

The importance of this research lies in the fact that it is hopefully a tentative to *acquire new knowledge, describe how things work, and ultimately improve our understanding of phenomena* as it represents an attempt to break new grounds in two ways:

- a) It will try to examine the nature of the language in an electronically-based communication medium and in languages different from English.
- b) It will make a tentative to respond to the many calls for further scientific trails to examine empirically e-mail language in non English-speaking countries that hitherto remains unexplored as compared to other Computer Mediated Communication modes¹⁰⁰.

⁹⁹ Support was provided mainly from Pr Mark Sebba (University of Lancaster , United Kingdom), Pr.Naomi S. Baron (American University , USA), Dr.Butheina Al Share (Jordan University, Jordan), Mr. Muhamed Al Khalil (Zayed University, United Emirates), Pr. Catherine Miller (University ex-en province, France), Mr.David Palfreyman (Zayed University, United Emirates), Pr. Susan C. Herring (Indiana University, USA), who supported my investigation through comments and a considerable amount of literature relevant to my research problem.

¹⁰⁰ See Herring (2003); CMC represents the abbreviation / acronym of Computer Mediated Communication in the coming literature.

- c) It will make proposals for the establishment and development of e-English learning situations in Algerian universities through the adoption of e-mail technology in pedagogical environments.

Although this dissertation will be one day officially completed, in many respects, I view it as draft. I hope that further studies, both mine and that of others interested in this topic will lead to refinements, new insights and expanded inquiry.

1.5.1.9 Implications of the Findings

Firstly, I hope to contribute to shifting the discussion about whether and how e-mail language is having an impact on offline language to a higher level. The empirical evidence makes it possible to weigh the pros and cons of this new 'linguistic beast'. At the same time, I hope to shed the light on the social forces that shape this type of communication.

Secondly, I hope to contribute to the pre-elaboration/proposal of an online syllabus design which will be transmitted to students through e-mail communication and destined to the promotion of English language learning/teaching in Algerian universities. I hope also to see this prospect syllabus transmitted to Algerians' decision-makers in the ministry of education whose actual concern is to promote e-learning environments at all levels of education.

1.5.2 Structure of the Research Work

The work is presented in two main parts. Each part is composed of two chapters as follows:

Part One: Theoretical Considerations

This part is destined to pave the terrain for the basic theoretical framework¹⁰¹ of this research. It is composed of:

¹⁰¹ The Literature Review chapter represents the core theoretical part of any investigation. It is an overview of the relevant literature which will outline the basic concepts required for an investigation into the different research questions.

Chapter One: An Overview and Rationale for the Study

- *Section one-Surveying the Terrain of Computer Mediated Communication*
- *Section two-What is this Research about?-is meant to summarize the different aspects of the research's skeleton and structure.*

Chapter Two: Literature Review

- *Section one- E-Mail Discourse (RQ1)*
- *Section two- Language Attitudes towards E-Mail Communication (RQ2)*
- *Section three- E-Learning through E-mail communication (RQ3)*

Part Two: Research Methodology and Findings

The aim of this part is to describe and justify the choice of methodology for RQ1, RQ2, and RQ3 and present the findings.

Chapter Three: Research Design and Data Collection

- *Section one-Issues in Corpus Design*
- *Section two-The Online Language Diaries*
- *Section three- The Interview*
- *Section four –The Questionnaire*

Chapter Four: Data Analysis and Findings

- *Section one: Analysis of the Online Language Diaries Results*
- *Section two: Analysis of the Interviews Results*
- *Section three- Analysis of the Questionnaires Results*

1.6 Chapter Summary

Because the aim of this research is to investigate the linguistic properties of e-mail communication, it was important - for the sake of clarity - to define e-mail communication and shed the light on Computer-Mediated Communication and its different mediums.

During the process of reviewing literature, I observed that most of CMC researchers have indicated the novelty of the media. CMC is considered to be the revolution of the century

that is gaining more and more significance in the lives of many people today. Thurlow et al. (2003) argue:

“The early map makers found out that you couldn’t, after all, fall off the edge of the earth. The first space travelers in the 1960s found out that humans could explore space, a journey only dreamt of earlier. In many ways, at this point in history, cyberspace has replaced space as the great unknown. As such it’s a topic surrounded by myth and reality, assumptions, suppositions and unanswered questions. It’s one of our societies’ great talking points at this moment in history”

(Thurlow et al., 2003: 2)

CMC is, in fact, a revolution not only at the societal level but also the linguistic one. Crystal (2001: x) states that *“if the Internet is a revolution, therefore it is likely to be a linguistic revolution”*. A supposition to draw from this position is that e-mail communication will probably follow the same path CMC is tracing, something I will try to check within the realm of this dissertation.

In this chapter, I tried also to portray the focus of this dissertation by providing an account of the research questions, hypotheses, the motivation and also the significance of the research. This is done to help the reader follow the different steps of the research with ease and be able to relate to the rationale that lies behind each step.

The next chapter will hopefully present a comprehensive overview of literature pertaining to the subject areas encompassed by the research questions: computer mediated communication and e-mail communication.

Chapter Two

LITERATURE

REVIEW

“Indeed, notwithstanding the remarkable technological achievements and the visual panache of screen presentation, what is immediately obvious when engaging in any of the Internet’s functions is its linguistic character. If the Internet is a revolution, therefore, it is likely to be a linguistic revolution.”

(Crystal, 2001 : viii)

(Morrison & Oblinger, 2002:5)

Chapter Two: Literature Review

2.1 Introduction

This chapter presents a comprehensive overview of the literature pertaining to previous outcomes in the field of e-mail discourse studies (EDS) from a linguistic and pedagogical point of view. Emphasis is put on doing some defining, some theorizing, and also some explaining¹. The rationale behind this is to sustain a need to learn about concepts, arguments and theories covered by specialists in Computer Mediated Discourse (CMD) and EDS so that to build an adequate base from which to move through the rest of the research².

This chapter proposes a discussion on CMD and EDS through the following sections:

- The first section- *E-Mail Discourse* - highlights research in relation to research question one³ (RQ1).
- The second section – *Language Attitudes towards E-Mail Communication*– reviews investigations which tackle issues related to research question two⁴ (RQ2).
- The third section - *English Language Promotion via E-Mail Communication* - highlight studies in relation to research question three⁵(RQ3).

¹ Thurlow et al. (2003: 13) argues: “We know that theory can be scary, but you’d be surprised at how much CMC theory actually connects with everyday communication and things you may already take for granted. After all, theory is just a way of trying to explain the world around us. Rather than making assumptions about what CMC is like.”

² Marczyk et al., (2005:32) considers that “once a researcher has chosen a specific topic, the next step in the planning phase of the research study is reviewing the existing literature in that topic area.” According to Thurlow et al. (2003:13), a review of the literature puts the researcher and the reader in a stronger position to : “critique the Central Issues, explore the Focus Areas, and apply all this knowledge in the fieldwork tasks”

³ RQ1 relates to the main studies which have investigated the linguistic practices of E-mail communication;

⁴ RQ2 relates to the main studies which have investigated language attitudes towards ED;

⁵ RQ3 relates to the main studies which have investigated aspects of English/ second/foreign language learning mediated via e-mail communication.

2.2 E-Mail Discourse (RQ1)

2.2.1 The Impact of Technology on Language

2.2.1.1 Information and Communication Technologies

Old-fashioned communication technologies like television and radio had an impact on language use. This impact has been judged insignificant as compared to Information and Communications Technologies (ICTs)⁶ (Bodomo & Lee, 2002; Blurton, 1999). Crystal (2001: 24) defines the Internet as

“... an electronic, global and interactive, medium and each of these properties has consequences for the kind of language found there.”

(Crystal, 2001: 24)

Bodomo & Lee (2002) suggest a number of characteristics which may distinguish between ICTs in this information age from old passive modes. Five characteristics of ICTs are identified:

1. Flexibility;
2. Connectivity;
3. Affordability;
4. Interactivity; and
5. Popularity⁷.

According to Bodomo & Lee (2002), these characteristics –mainly high degree of flexibility, connectivity and interactivity – are omnipresent in ICTs which most old-fashioned communication technologies fail to ensure.

2.2.1.2 The Move from Page to Screen

As technology has evolved, new devices have often been named by familiar words and concepts. The telephone was originally designed as a “harmonic telegraph”. What

⁶ICTs is an acronym which will be used in this research to represent ‘Information and Communication Technologies’.

⁷ The first four factors are first suggested by Blurton (1999) and the last one is added by Bodomo & Lee (2002).

today we call movies were first known as “talking pictures”. As the functions of computers expanded from storing data, creating documents, and enabling people to communicate through networking, again there was a need for new nomenclature. In the early days, a number of terms began appearing in the nascent literature to denote language appearing online: “Interactive Written Discourse”, “e-mail style”, or “electronic language”⁸. A few years ago, Crystal (2001) introduced the word “Netspeak”, denoting the ‘new’ linguistic features characterizing the range of Internet based language.

2.2.1.3 Language Change

The study of language gives special attention to aspects of variation which may lead to ongoing changes in the standard language. In fact, not all kinds of variation will result in changes in the standard language. But sometimes a particular development stands out above all others, and then it is well worth taking time to reflect on it.

The trend which is going to have a tremendous impact on languages all over the world during the 21st century is computer-mediated communications, and specifically the Internet.

While writing this chapter, a personal experience illustrated language change imposed by the adoption of computer mediated communications : I conducted a quick survey among 10 Algerians who make use of CMC, in which all of them reported that they use emoticons⁹ and that they ‘changed’ their habits in writing especially in their private CMC exchanges. Arcangeli (2000) argues:

“This entire changing universe which surrounds us must be "translated" into words (we are therefore all translators, in a broad sense). Since the objects to be described are continually changing, our language must be equally flexible and creative, so that the linguistic instrument through which we convey our

⁸ “Interactive Written Discourse”: Ferrara, Brunner, and Whitemore, 1991; “e-mail style”: Maynor, 1994, “electronic language”: Collot & Belmore, 1996; “Netspeak”: Crystal, 2001.

⁹ The effort to compensate for the limits of CMC environments has also led to the development of emoticons, as a substitute for the lack of a visual contact.

surroundings to others does not become quickly obsolete and inadequate. It is a kind of adaptation to the environment (not only to the natural world, but to the social, economic, psychological, and political environment as well) comparable to genetic mutation, but occurring a thousand times more quickly.”

(Arcangeli, 2000: 04)

In the digital era, language change is inevitable. It is argued that a discussion of language change and CMC should focus on observing certain new features of written language which are part and partial of the usage of a generation sometimes called the ‘digital natives’.

2.2.1.4 Discourse and Technology

It is time to ask: Why should we study discourse and technology? Wood & Smith (2005) argue:

“We focus on CMC because of its impact on all contexts...we approach these topics with a desire to understand the blurring of technology with our everyday lives. We study the sophisticated ways in which computer technology is integrated into our physical environments, interpersonal relationships, and even senses of personal identity...when we study CMC, we don’t just explore the use of technology in communication; we study the blurring of technology with our everyday lives.”

(Wood & Smith, 2005: 5)

Thus, this research aims to study CMC, but I do not want just to explore the use of technology in communication; I hope to shed the light on *the blurring of technology with*

our language. The next step is to examine a key component of CMD, the distinction between online language¹⁰ and offline language.

2.2.1.5 Online versus Offline Language

One of the products of CMC and mobile phone is new forms of language mainly referred to as ‘online language’ or ‘technobabble’ which include e-terminologies, acronymy and abbreviations. Another product of the technology is new Literacies. Digital literacy here refers to

“The ability to understand and use information in multiple formats from a wide range of sources when it is presented via computers”.

(Gilster, 1997:1)

In fact, the transnational research literature in the area of CMC and language has emerged since the mid 1980s but more consistently in the 1990s¹¹. Its prototypical domain is variably called Computer-Mediated Discourse (CMD) or ‘Interactive Written Discourse’ (IWD) (Ferrara, Brunner & Whittemore, 1991). Cook (2004) stipulates:

“If Crystal is correct in saying that the Internet constitutes a new frontier in human social interaction on par with the inventions of the telephone and telegraph, and even print and broadcast technologies (Crystal 2001), then those scholars of language use, language change, and ideologies of language must surely explore and

¹⁰ CMD and online language will be used interchangeably in this research.

¹¹ Thurlow et al. (2003:14-15) argue : *“Prior to the early mid-1990s, however, academic interest in the way that people interacted with, and communicated through, computer technology was still fairly exclusive and restricted mainly to practical concerns such as information processing, data transfer, hardware design, and what is known more generally as Human- Computer Interaction (or HCI); However? It’s only really been since the mid- 1990s that the fast –growing popularity and ubiquity of personal computers (especially for emailing, chatting and surfing the web) has caused CMC to become so attractive to scholarly attention.”*

interrogate the effects of these technologies on traditional modes of communication... To say "[i]f the Internet is a revolution, therefore, it is likely to be a linguistic revolution" may not be an exaggeration (Crystal, 2001: viii)."

(Cook, 2004:103)

Warschauer (2002) further adds:

"Any medium of communication as revolutionary as the Internet is bound to have a profound effect on language. Though many have noted the linguistic changes emerging in online communication, few have studied the phenomena and fewer yet have written about them in a clear and cogent manner."

(Warschauer, 2002: 1)

According to Androutsopoulos (2007), CMD enables all sorts of written communication¹². Androutsopoulos (2007) suggests that CMC writing is shaped by four main conditions:

- a. It is vernacular, in the sense of non-institutional writing that is located beyond education or professional control;
- b. It is interpersonal and relationship-focused rather than subject-oriented;
- c. It is unplanned and spontaneous; and
- d. It is dialogical and interaction-oriented, carrying expectations of continuous exchange.

These properties set supposedly the frame for a 'new-writing', which is accordingly going to revolutionize communication and language use among humans (Crystal, 2001). A deeper concern is then to question whether this revolution is at its end or rather carrying

¹² Including carefully drafted, subject-oriented and institutionally framed texts (Androutsopoulos, 2007).

more to be seen, as exemplified by Crystal's recent claim: "*the phenomenon is so recent ... that we might expect very little to have happened*" (2011: 57).

2.2.2 CMC Language

After introducing, in the last chapter, computer mediated communication, the focus now shifts to pulling on the insights of a variety of researchers and commentators on a subject which has been and still is the stock-in-trade of both Linguistics and Sociolinguistics: CMC and most precisely e-mail language.

2.2.2.1 Computer – Mediated Discourse

Perhaps the first detailed description of CMC language (or EMC¹³ language) is the one of the linguist Naomi S. Baron who published an article (1984) speculating on the effects of CMC on language change. Baron's research is soon followed by Murray's (1985) and Elkland's (1986) investigations.

It is, however, not until 1991, with the work of Ferrara, Brunner, and Whitmore (1991) Interactive Written Discourse as an Emergent Genre, that linguists begin to take serious notice of CMC language. The following years see the rise of a wave of CMC researchers, working on the description of the linguistic characteristics of CMC language. However, most of these researchers publishing in English venues have generalized about the language of CMC, whereas in fact they were describing computer-mediated English. Moreover, the German scholar Dieter Stein (2006) observes that:

*"A large body of research is simply not represented:
research that is not English...there is a danger of
misrepresenting the state of the art"*

(Stein, 2006:162-3)

In 2001, Herring proposes a label for CMC language. She refers to the study of such language as Computer Mediated Discourse Analysis¹⁴. She defines CMD as follows:

¹³ EMC stands for Electronic Mediated Language.

¹⁴ Computer-Mediated Discourse Analysis (CMDA). CMDA is an approach to the analysis of computer-mediated communication (CMC) focused on language and language use; it is also, according to Herring

‘Computer-mediated discourse is the communication produced when human beings interact with one another by transmitting messages via networked computers’

(Herring 2001:612)

Herring suggests that the study of the textual characteristics of CMC discourse has “*important consequences for understanding the nature of computer mediated language*” (Herring, 2001: 612). Crystal on the other hand labels CMC language ‘Netspeak’. He believes that:

“Netspeak is a development of Millennial. A new medium of linguistic communication does not arrive very often, in the history of the race.”

(Crystal, 2001:238-9)

2.2.2.2 CMD as a Communication Revolution

CMD has brought about new communicative circumstances, in which “*the words appear as lights on the computer screen*” (Daiute, 1985: xiii). Computer-mediated discourse is estimated by some scholars as a great advancement of “writing technology” (Ong, 1982, p. 81) achieved by altering the set of conditions in which symbols appear, and this is what Heim (1987) calls the “elements” of language. Heim distinguishes “element” from “medium” in characterizing word technology:

“Medium emphasizes the instrumental method for communicative interchange. Element emphasizes the conditions of symbolic expression and the implications of the mode in which things are represented.”

(Heim, 1987:102)

(2004) a set of methods grounded in linguistic discourse analysis for mining networked communication for patterns of structure and meaning, broadly construed.

Accordingly, Heim (1987) considers computer-mediated discourse as a written (typed) medium, but with a different language element, *the communication revolution element* i.e. the electronic element.

2.2.2.3 CMD as a Linguistic Revolution

Crystal (2001) states that:

“The linguistic consequences of evolving a medium in which the whole world participates- at least in principle, once their countries’ infrastructure and internal economy allow them to gain access- are also bound to be far-reaching. We must not overstate the global nature of the Internet/ it is still largely in the hands of the better-off citizens of the developed countries. But it is the principle which matters. What happens, linguistically, when the members of the human race use a technology enabling any of them to be in routine contact with anyone else? ”

(Crystal, 2001: 5-6)

Since the birth of CMC, researchers have been interested in its effect on human communication and language especially as it became a revolutionary medium¹⁵. Crystal (2001) notes:

“The electronic medium, to begin with, presents us with a channel which facilitates and constrains our ability to communicate in ways that are fundamentally different from those found in other

¹⁵ According to (<http://www.internetworldstats.com/stats.htm>) approximately 1.8 billion people use the Internet, as of December 2009. During the last decade, the number of users increased by 400% and further expansion is expected.

semiotic situations. Many of the expectations and practices which we associate with spoken and written language [...] no longer obtain. The first task is therefore to investigate the linguistic properties of the so-called 'electronic revolution', and to take a view on whether the way in which we use language on the Internet is becoming so different from our previous linguistic behaviour that it might genuinely be described as revolutionary."

(Crystal, 2001: 5-6)

The potential impact of computer mediated communication on various facets of language use is incalculable ; the way in which written language is produced by various CMC systems may "change not only the nature of writing as a process, but also the nature of language as an object" (Horowitz & Samuels, 1987: 26).

2.2.2.4 Previous Research on Computer – Mediated Communication

Many of CMC studies have been conducted in the fields of social psychology and communication (Kiesler et al., 1984; Sproull & Kiesler, 1991; Rice & love, 1987; among others).

Boonthanom (2004) presented two research streams as far as CMC is concerned: task-oriented models and social-emotion-oriented models. Task-oriented models suggests that compared to traditional face-to-face communication and telephone conversations, CMC has limited channels due to lack of audio or visual cues, and tends to be task-oriented and less emotional. However, the social-emotion-oriented models¹⁶ argue that CMC can transfer social information in a manner similar to traditional face-to-face communication¹⁷.

¹⁶ Such as the Social Information Processing (SIP) model presented by Walther (1992) which incorporates relational communication into CMC.

¹⁷ QiQiao (2009) explains the social-emotion-oriented models as a CMC setting where social identity and relational cues can be transmitted in the messages and the message receiver can decode the messages and develop impressions of the senders.

The social effect of CMC is considered as a prominent topic of research for CMC researchers. Short, Williams & Christie (1976) examined social context and interactivity in CMC and proposed the theory of *social presence*. They define it as:

“...the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships”

(Short, Williams & Christie, 1976: 65)

Social Presence Theory *considers* the extent to which a person is seen as a *real* person in CMC (Gunawardena, 1995). According to Short et al. (1976), CMC is less personal, lacking social presence in comparison with face-to-face communication due to the lack of non-verbal cues. However, a growing number of recent studies suggest that, with the use of emoticons, sounds, symbols and images, *the social presence criterion* of CMC is increasing¹⁸.

2.2.2.5 Previous Research on Computer – Mediated Discourse

An increasing number of scholars are inquiring into CMC from linguistic perspectives¹⁹. CMC has been considered as one of the fastest growing areas within the field of sociolinguistics, and a range of studies in the past few years which have been carried out are varied in their focus and approaches. Crystal (2001) argues:

“Fortunately, a few books and anthologies dealing with Internet language in a substantial way appeared between 1996 and 2000, and focused journals, notably the online Journal of Computer-

¹⁸ See also Walther (1994), Rourke et al.(2001) and Doering et al. (2007) . Walther (1994), For example, suggests that CMC users believe that text-based media is richer than telephone and face-to-face communications.

¹⁹ According to Herring (2008) : “ *The new language variety in the shape of typed text is —one of the most pervasive and visible manifestations of Internet use*” (Herring, 2008: 1). Infact, many scholars anticipate that online interaction will have a long-term effect on the evolution of language, but little linguistic research yet addresses this question directly.

Mediated Communication, began to provide a useful range of illustrations, associated commentary, and an intellectual frame of reference.”

(Crystal, 2001: viii)

Many earlier studies compared CMC with non-computer based forms of communication in an attempt to categorise the language as more oral or more written in its quality (e.g, Condon & Cech, 1996). Beauvois (1992), Kern (1995), Pellettieri (2000), Sotillo (2000), and Warschauer (1995), for example, studied the complex language production in CMC and compared it to face-to-face conversation.

Naomi S. Baron (2002), on the other hand, discusses CMC in relation to Natural Language Processing (NLP). In her Book's chapter "*Language of the Internet*", Baron (2002) questions how natural language and special coding systems are used in contemporary networked computing.

Literature on CMD is also present in research on language maintenance (e.g.,Clyne,1994 ; Clyne& Grey,2004) where researchers highlight the role of CMC in cultivating positive attitudes towards community languages and providing language input.

However, the research literature in English on CMC has focused almost exclusively on emergent practices in English, neglecting developments within populations communicating online in other languages. Some notable exceptions are studies of Code-Switching Among Expatriate South Asians on Usenet (Paolillo,1996) ; Language Choice Among Young Egyptian Professionals Using Various Forms of CMC (Warschauer, El Said & Zohry, 2002) ; Self-Presentation in Email in Greek (Georgakopoulou,1997) ; The Negotiation of Identity and Power an a Japanese Asynchronous Discussion Forum (Matsuda,2002) ; Use and Adaptation of Written Language to the Conditions of Computer-Mediated Communication (Hard of Segerstad, 2002); and Novice Language in SMS Communication: Linguistic Investigation of Young Algerians' Text Messaging in Oran(Zitouni, 2009). Hence, such studies have been relatively infrequent, they are

unpublished works (most of them are academic dissertations) and their findings have never been brought together and compared.

2.2.2.6 Research on the Linguistic Structure of CMC Language

Most CMC researchers have studied CMC language and focused on the relationship between the linguistic structure of CMC and non-standard properties²⁰. According to Herring (2001), most non-standard features in English CMC are deliberate choices made by users to

- Economize on typing effort
- Mimic spoken language features²¹
- Express themselves creatively

According to Herring (2001), users employ strategies (for e.g., abbreviations, acronyms, emoticons) that reduce the time needed to write messages, that substitute for the lack of paralinguistic and nonverbal cues, or that compensate for the limited number of characters in the case of SMS communication.

According to Yates & Orlikowski (1993), the mimicking of spoken language features in CMC leads to an unconventional orthography, such as textual indication of emphasis (e.g., “If an implementation DOES support vectors...”), informal words typically used in speech (e.g., “groove”, “stuff”), and conversational cadences usually combined with word choice and punctuation in order to stimulate oral communication, as in “Hmm, I see....”

As for the creative use of language, Herring identifies a category of informal, expressive lexical elements, such as *emili* (“email” referred to humorously, due to its resemblance to the proper noun Emile). These lexical items are common and convey a recreational, creative, ironic, or informal attitude (Herring, 2001).

²⁰ “CMC allows new forms of language in which the use of these new forms can be explained by the dynamic nature of the social contexts and practices” (Bodomo and Lee 2002:30).

²¹ Speech versus writing can be seen as one of the linguistic considerations that come into play when language is transmitted via CMC. However, I choose not to consider them in this chapter. I will hopefully discuss them thoroughly in Part Three, Chapter One.

2.2.3 E-Mail Language

Computer mediated communication is a ‘*supernatural* technological phenomenon’ which covers a wide range of issues, crossing several disciplines and having an unprecedented impact on human language. It is precisely this fusion between technologies and language that fosters my interest in this topic. Baron (2008) argues:

“Like typewriters and landline phones before them, computers and mobile phones convey language. But what does the language itself look like”

(Baron, 2008:28)

In fact, Synchronous Internet –based communication and mobile phone communication tell only part of the story of how electronically-mediated language is being created and conveyed. Asynchronous Internet –based communication is another major technology which is obviously having an impact on language use.

E-mail communication -as an asynchronous mode of CMC- contributes to the development of novel circumstances of language production, and to equally novel features of language.

In the coming sections, I shall provide a small overview of previous work carried out with regards to Research Question one: e-mail linguistic features. I shall try to present research which identified specific features of e-mail language which distinguish it from other traditional types of communication²². The objectives of these sections fall into two broad categories; to review literature both on unconventional spelling and the use of English in e-mail language.

²² Such as letters.

2.2.3.1 Previous Research on E-mail Discourse

Published empirical research on CMC and more specifically e-mail from perspective of linguistics does not seem to be long²³. Crystal (2001), when introducing his book, writes:

“In the last few years, people have been asking me what influence the internet was having on language and I could give impressionistic answers. [...]The media would ask me for a comment, and I could not make an informed one; when they insisted, as media people do, I found myself waffling; it was time to sort out my ideas, and this book is the result. I do not think I could have written it five years ago, because of the lack of scholarly studies to provide some substance, and the general difficulty of obtaining large samples of data.”

(Crystal, 2001: viii)

Research on e-mail linguistic practices has emerged only recently - by the 1990s - and comprises a small²⁴ corpus of work which is increasing in a vigorous manner²⁵ (e.g. Baron 1984, 1998, 2001; Cooper & Selfe, 1990; Collot & Belmore, 1996; Herring, 1996a, 1999, 2001; Davis & Brewer, 1997; Anis, 1998, 2000 ; Panckhurst, 1998; Paolillo, 1999; Gruber, 2000; Pemberton & Shurville , 2000; Crystal, 2001; Hancock & Dunham, 2001; Shortis, 2001, Hard of Segerstad, 2002; Berman, 2005; among others).

²³ As Ray Tomlinson (1971:43), looking back to early commentary, notes: “Perhaps the lack of comment is because e-mail is such a natural use of computer networks that no one considered that it required any research. The researchers were mostly concerned with how to get the bits from the sender to the recipients. E-mail as a social phenomenon was scarcely considered.”

²⁴Despite characteristics that make CMC advantageous as data for linguistic research, linguists were initially “*slow to consider computer-mediated language a legitimate object of inquiry*” (Herring, 1996a: 3). Moreover, until relatively recently (see, e.g., Herring, 2001, 2007), linguists have not taken systematic account of diversity across different forms of CMC.

Lee (2002:01) considers that “*The prevalence of text-based computer-mediated communication (CMC) has enormous impact on the growing amount of research into the distinctive features of the text-based CMC (e.g. Baron 1984, 1998, 2001, Herring 1996, Davis & Brewer 1997, Snyder 1998, Paolillo 1999, Crystal 2001).*”

In reviewing literature, there is a lack of interest in the study of e-mail linguistic properties from the scholarly community; only a limited body of work is found (e.g. Baym,1995,1998; Herring, Johnson & DiBenedetto,1995; Herring,1996b; Hamilton,1998; Davis&Brewer,1997; Lee, 2007; Durham, 2007; Baron, 2008; Schlobinski et al.,2001; Doring, 2002a; Ylva hard af Segerstad,2005; Yates,1996; among others), unlike that devoted to other CMC modes mainly IM and chat (e.g. Baron,1998; Cherny, 1999; Werry,1996). What then constrains research on ED?

Very often, research on ED has been handicapped by the unavailability of natural data. According to Baron (2008:16): “*We have very little tangible data beyond anecdotes*”²⁶.

Baron (2008) stipulates that research on e-mail is constrained by the lack of tangible/Natural data. Researchers are often hesitant to ask strangers for copies of their e-mail correspondence, perhaps for fear people will say no. As a result, the majority of empirical studies examined e-mails which were posted in public spheres such as electronic mailing lists called listservs (Herring, Johnson and DiBenedetto, 1995; Herring, 1996b; Hamilton, 1998), Usenet newsgroups (Baym, 1995, 1998) or electronic conferences, used mainly for academic courses or research (Yates, 1996; Davis&Brewer, 1997), where the researcher can pull off public data from the Internet.

Of the few studies that have been published on ED, most have centered on the use and function of e-mailing and only a small proportion on language use. For instance, Jacobson (1996), Werry (1996), Georgeakopoulos (1997) and Baron (1998), branch out from the identification of linguistic features of electronic genres to examining strategies by which participants convey their meaning in the context of e-mail communication or other CMC platforms.

²⁶ Baron (2008:237) writes in note 8 to chapter one that one of the exceptions [works published on e-mail] is Kalman *et al.* (2006).

2.2.3.2 E-mail Linguistic Properties

Blackman (2004), in describing language users in CMC, notes that people use a combination of their knowledge of language combined with their innate creative abilities to write an existing language in new and original ways.

Under reference to Crystal's book *language and the Internet* (2001), Berman (2006) states that Crystal praises E-mail writing as a powerful tool in CMC, stressing its impact on linguistics. In fact, the composition of the language of e-mails shows newly manufactured words with a high tolerance for orthographic derivations from normative language (Doring, 2002a)²⁷.

To look at previous research addressing the linguistic characteristics of e-mail novice language, I shall proceed referring to the coming broad categories:

- Neography
- Mode mixing
- Language mixing

2.2.3.2.1 Neography

The term 'neography' is used here as a shorthand to designate unconventional spelling in ED²⁸. Language in CMC is said to be abbreviated through the use of short forms. These forms produced on a written medium are not considered part of standard language according to Doring (2002a). Kaesesniem & Rantianen (2002) support Doring's claim. They add saying:

“(Text) messages often bear more resemblance to code than to standard language...the unique writing style provides opportunity for creativity.”

(Kaesesniem & Rantianen, 2002: 183)

²⁷ In their study, Schlobinski et al.'s findings confirms Doring's ones. They show that over 60% deviate from norm oriented writing.

²⁸ The two terms "neography" and "unconventional spelling" will be used interchangeably to refer to e-mail language's new properties.

For Herring (2001), the use of unconventional spelling in CMC is not proved to be - for most cases- errors caused by inattention or lack of knowledge of the standard language forms. She stipulates that the majority are:

“...deliberate choices made by texters to economize on typing effort, mimic spoken language features, or express themselves creatively”

(Herring, 2001: 615-616)

Janis (2007) confirms, together with Crystal (2001a), Danet (2001), and Raymond (1996):

“According to previous research, motivations for use of neography include to save time and typing effort through abbreviation, to make the message more expressive, to exhibit the user’s ego, to play language and communication, to contest standards, to express solidarity with the group, or to manifest adhesion to a counterculture(Crystal,2001a;Danet,2001;Herring,2001 ; Raymond,1996).”

Janis (2007:90)

Moreover, Herring (2001) adds that the use of these features- short forms- is a sign of informality that is used relatively depending on the communicative context. Here are some of the most prominent investigations researching the non-standard features characterizing ED.

LaQuey & Ryer (1993) compared e-mail and memoranda as both forms of written communication which are typically composed on a keyboard and both are asynchronous. They suggest that e-mail is structurally and stylistically different from other types of workplace communication.

Frehner's research (2008) can be considered as an exception once referring to research on CMC *Linguistic Economy Theory*²⁹ (LET). Contrary to synchronous CMC³⁰, literature on LET in asynchronous CMC and most precisely in ED is to a large extent rare; little research has empirically evaluated the extent to which such economic strategies occur in ED, where there is less temporal pressure on the message producer in comparison to synchronous CMC.

Panckhurst (1998a and b, 1999a and b) analyzed a corpus of 1285 e-mails collected from a sample of students and their teachers. She compared her corpus to other traditional modes of written communication. The objective of the research is to identify the main types of errors. She found two types: machines errors – conventional errors due to the constraints imposed by technology like doubling (*moment*), suppression (*rapeler*), interversion (*exactmeent*), substitution (*vouz*) of letters or of words. - and another type of errors she calls hazy errors . These are errors due to illiteracy regarding rules of language use (e.g. je voudrais savoir si on peut envoyer des messages à n'importe *qu'elle* personne).

Like LaQuey & Ryer (1993), Thomas Cho (2001) undertook a pilot study to investigate the linguistic features of e-mail and written memoranda in an academic workplace setting (university department in Australia).The pilot study focused on analyzing a variety of structural linguistic features, including the use of contractions, abbreviations, ellipsis ...etc. The results show that e-mail and memoranda—even when produced in the same workplace environment—are linguistically different varieties of communication.

Similarly to Pankhurst's research (1998a and b, 1999a and b), Volckaert-Legrier & Bernicot (2006) investigated errors in ED among teenagers. Their findings are characterized by an important proportion of errors which were systematically found in the corpus. Errors were identified as either orthographic or homophonique deviations.

²⁹ The temporal aspect of CMC is often linked to the concept of linguistic economy. Ferrara, Brunner & Whittemore (1991) and Murray (1990) identified various strategies of economical language use in synchronous CMC, such as ellipsis (in particular, omission of pronouns and determiners) and clippings. Similarly, Werry (1996) points out the common use of abbreviations, ellipsis, and orthographic reduction (e.g., *bb ppl*s for *bye bye peoples*) in Internet Relay Chat (IRC).

³⁰ See Condon & Cech (1996a, 1996b), Ferrara et al.,(1991), Ko (1996), Murray (1990), and Werry (1996).

Volckaert-Legrier & Bernicot (2006) suggests that their findings may reinforce the idea that e-mail language should be categorized as being a specific register.

2.2.3.2.2 Mode Mixing: E-mail on the Oral-Written Continuum

Cumming (1995) argues:

“With the explosive growth of the Internet to include just about anyone who is interested, researchers into Computer Mediated Communication (CMC) are beginning to notice that computer networking constitutes a new revolution in communication media, on a par with speech, writing and print.”

(Cumming, 1995:4)

One of the major questions asked about ED is whether it is more similar to speaking or writing (Georgeakopoulos, 1997). In fact, many of us question the nature of discourse in e-mail communication. Many opinions likened ED sometimes to speech, sometimes to writing, some other time to neither of them, and for most cases considered it to be both simultaneously³¹. In the next paragraphs, I shall highlight some research interested in discussing the following issues:

- Speech versus writing as an object of analysis in CMC and Non-CMC contexts;
- The nature of ED, in particular whether e-mail is akin to oral discourse or to written texts, or whether it is a different form³².

2.2.3.2.2.1 Speech versus Writing

2.2.3.2.2.1.1 Writing and Speech as Objects of Analysis

Although there were many calls³³, Linguists have been late³⁴ to realize that both written and spoken languages are worth their attention (Chafe & Tannen, 1987). The place

³¹ Some have criticized this oral/literate dichotomy, believing that it “*obscures the uniqueness of electronic language by subsuming it under the category of writing.*” (Poster, 1990). Biber (1988) argues that oral and written language should not be treated as polar opposites, but rather are comprised of dimensions which lie upon “*a continuum which cuts across various uses of language*” (Georgakopoulou, 1997:142).

³² See Kaye (1991) and Yates (1994). For more details on research investigating e-mail Oral-Written continuum see the coming section: *Language Attitudes towards E-Mail Communication (RQ2)*.

of written and spoken language in the field of linguistics is somewhat controversial. For more than two thousand years, linguists have taken written language as its essential object of study (Chafe & Tannen, 1987; Vachek, 1976; among others). However, with the coming of modern descriptive linguistics, the picture was completely reversed. Some of the influential linguists of the first half of the 20th century, including Bloomfield (1933), Tespersen (1922), and Saussure (1916) emphasize the primacy of spoken language over the written one³⁵.

The views on the issue of superiority, inferiority or equality of writing and speech have always attracted the attention of linguists and have brought more confusion than clarification in the matter. Here is a summary of some views:

³³ More than eighty years ago, Woolbert (1922:269) called attention to a linguistic problem: "*Speaking and writing are alike-and different. Just how like and how different has never been adequately stated*"

³⁴ Scholars outside of linguistics were the first to pay attention to the fact that speaking and writing both have their own validity. The first comparisons were undertaken by people in speech departments, who traced their interest to a statement by Aristotle: "*It should be observed that each kind of rhetoric has its own appropriate style. The style of written prose is not that of spoken oratory*" (qtd in Chafe & Tannen, 1987: 384).

³⁵ Written language is, in that sense, not to be counted as "real" language. Both European and American structuralists resorted to the written word essentially because they viewed it as useful only to the extent that they are tools used to transcribe cotemporary speech for use in analysis. For Chomsky's transformational school followers, who restrict their inquiry to the linguistic competence of the ideal speaker-hearer, written texts are irrelevant.

<p>A Superior View in Favor of Speaking</p>	<p><i>“Writing is not language but merely a way of recording language by means of visible marks...All languages were spoken through nearly all of their history by people who did not read or write ; the languages of such people are just as stable, regular, and rich as the languages of literate nations ”</i></p> <p style="text-align: right;">Bloomfield (1933:21)</p>
<p>A Superior View in Favor of Writing</p>	<p><i>“Language in its written form can be collected, stored, examined, manufactured, and analyzed”</i></p> <p style="text-align: right;">(Chafe &Tannen, 1987:383)</p> <hr/> <p><i>“Because its lacks not only intonation but also the gestures, facial expressions, and prospect of immediate feedback that assist spoken language, writing tends to be more fully explicit and less ambiguous than spoken language. Not only are syntactic and semantic relationships are usually clear, but written sentences tend to be structurally complete and free from the slips of the tongue, false starts, and other erroneous and extraneous matter that proliferate in spontaneous speech. Written language has other advantages. It is usually normative. Though pronunciations of words vary from region to region and change from time to time, spellings remain stable over time, spellings remain stable over time...the fact that written language is the primary and easiest language for computer is probably the best.”</i></p> <p style="text-align: right;">(Smith, 1991:8-9)</p> <hr/> <p><i>“Writing is a tool which extends and amplifies many of the functions of spoken language. Just as archaeologists can learn a lot about a culture by analyzing its tools, we can learn a lot about cultures and their languages by understanding their writing systems.”</i></p> <p style="text-align: right;">(Fasold & Connor, 2006: 429)</p>
<p>A Balanced View</p>	<p><i>“Large numbers of our people think they speak best when they ‘speak as they would write’, or according to the standard English of the books, and many quote the opposite rule ‘write as you speak’. It is of course obvious that, as the same human being writes as well as speaks the two kind of language behavior should often correlate, especially when they serve similar purposes. But some things are better said than written and other things simply have to be written and cannot conceivably form part of the give and take of conversation, or even be said aloud in intelligent company.”</i></p> <p style="text-align: right;">(Firth, 2003:50)</p>

Figure 2.1: Views on Writing and Speech

(Source: Bloomfield, 1933; Chafe &Tannen, 1987; Smith, 1991; Firth, 2003 Fasold & Connor, 2006)

Over the past few decades, a growing number of scholars (e.g., Baron,1981; Biber,1988; Chafe &Tannen,1987; Chafe & Danielewicz, 1987; Chafe, 1994; Crystal, 1995; Halliday, 1985; Harris, 2000; Linell,2001; Olson, 1994; Taylor & Olson, 1995) provided a substantial body of literature on the topic. Most of them conclude that speech and writing are alternative forms of language in their own right and that both of them are viable objects of analysis.

2.2.3.2.2.1.2 General Features of Speech and Writing

The relationship between ‘stereotypical’³⁶ speech and writing is intuitively understood but not always transparent³⁷. Is writing simply a transcription of speech? No. Is writing always formal and speech necessarily informal? Obviously not. Are there conventional distinctions between speech and writing that most people can agree upon? Yes.

Conventionally, writing tends to be more formal and speech more informal. In school, for instance, people are taught not to use contractions in writing. According to Linell (2001), speech and writing are two different ways of representing our experience. Linell believes that we can define basic parameters in terms of which written and spoken language generally differ from one another.

Here are some of the main differences between speaking and writing shared by most languages of the world provided by Baron (2008:47). (This list draws upon Baron’s own previous work (Baron, 2000, 2003), along with studies by Chafe & Danielewicz (1987) and Crystal (2001))

³⁶ Biber (1988) uses the notion of “stereotypical” speech and writing to refer to the most frequent types of speech and writing, which are face-to-face conversation and written exposition respectively.

³⁷ De Greve & Van Passel (1968:150) stipulate : “*Il est vrai que la distance qui sépare la langue parlée de la langue écrite diffère très sensiblement selon les langues. On sait assez qu’en latin la distance était très grande entre le latin dit « classique » et le latin dit « vulgaire ». Il en est de même, nous l’avons vu, pour Le français : ici on va même jusqu’à distinguer, -très justement d’ailleurs, - le français écrit, le français parlé et le français quotidien. Dans d’autres langues par contre, la distinction entre langue parlée et langue écrite, quoique toujours évidente, apparaît beaucoup moins nettement. Quoiqu’il en soit, si la comparaison formelle des éléments constitutifs respectifs de ce que nous continuerons d’appeler la « langue parlée » et la « langue écrite » me permet que l’établissement de distinctions d’ordre stylistique, cette comparaison n’envisage qu’un aspect du problème. Il en est un autre, plus essentiel, et qui se rapporte à une distinction de moyens de communication en tant que tels : l’un est audio-oral, l’autre est visuel. Et l’on pourrait ajouter : l’un est dynamique, l’autre est statique. Ou encore: l’un est passager, l’autre est permanent.*”

	Speech	Writing
STRUCTURAL PROPERTIES		
number of participants	dialogue	monologue
durability	ephemeral (real-time)	durable (time-independent)
level of specificity	more vague	more precise
Structural accoutrements	prosodic and kinesic cues	document formatting
SENTENCE CHARACTERISTICS		
sentence length	shorter units of expression	longer units of expression
one-word sentences	very common	very few
initial coordinate conjunctions	frequent	generally avoided
structural complexity	simpler	more complex
verb tense	present simple	varied (esp. past and future)
VOCABULARY CHARACTERISTICS		
use of contractions	common	less common
abbreviations, acronyms	infrequent	common
scope of vocabulary	more concrete more colloquial narrower lexical choices more slang and obscenity	more abstract more literary wider lexical choices less slang or obscenity
pronouns	many 1 st and 2 nd person	fewer 1 st and 2 nd person (except in letters)
deictics (e.g., here, now)	use (since have situational context)	avoid (since have no situational context).

Table 2.1: Differences between Speaking and Writing

(Source: Baron, 2008:47)

2.2.3.2.2.2 Speech versus Writing in CMC

Accustomed to dealing with two basic modalities of language-speech and writing-linguists classifying CMC language first asked: Is computer mediated communication a form of writing or speech?

By surveying literature on e -mail, SMS, bulletin boards, and computer conferencing, I found that as of the late 1990's, CMC was essentially a mixed modality³⁸, characterized by both oral and written-like language features.

“The global growth of computer-mediated communication (CMC) has led to changes in how language is used, including faster position and reading of texts (Baron, 2002) and diffusion of oral discourse features into written language (Werry, 1996; Yates, 1996)”

(Palfreyman & Al Khalil, 2007:43)

Warschauer (1999) further adds:

“The historical divide between speech and writing has been overcome with the interactional and reflective aspects of language merged in a single medium. It is precisely this feature, the combination of writing and speech, that led one prominent cognitive scientist to describe the internet as bringing about “the fourth revolution in the means of production of knowledge”, on par with the “three prior revolutions in the evolution of human

³⁸ Ferrara et al. (1991) examined electronic discourse and described it as an emergent register called Interactive Written Discourse (IWD) with unique feature. Ferrara et al. view IWD as a “hybrid” language variety which displays characteristics of both oral and written language, resembling speech and writing, but which is neither. This language arises out of a new social context in which a new appropriate form of expression is needed.

*communication and cognition: language, writing
and print”(Harnad, 1991,p.39).”*

(Warschauer, 1999: 6)

Baron (1998) argues that CMC language is mixed as such because it resembles speech in that it is largely unedited; it is generally informal; and CMC language can be rude and obscene. At the same time, it looks like writing because the medium is durable, and participants commonly use a wide range of vocabulary choices and complex syntax.

However, the situation is different for Crystal. In 2001, Crystal writes a book entitled Language and the Internet. In this book, Crystal investigated many types of CMC and compared these platforms against his own analysis of spoken versus written language. Here are some of his Findings that I summarized in the following table:

Criteria	Criteria Applied to Spoken/Written Communication		Criteria Applied to CMC
	Speech	Writing	CMC
Space / Time Relation	Time-Bound	space-bound	Time-Bound in Different Ways, Space-Bound with Restrictions
Spontaneity	Spontaneous	Contrived	Variable
Visual Contact	Face-To-Face	Visually Decontextualized	Visually Decontextualized
Structure	Loosely Structured	Elaborately Structured	Loosely Structured
Function	Socially Interactive	Factually Communicative	Socially Interactive with Restrictions, Variably Factually Communicative
Revisability	Immediately Revisable	Repeatedly Revisable	Immediately and Repeatedly Revisable
Richness	Prosodically Rich	Graphically Rich	Prosodically Rich in Different Sense, Variably Graphically, Rich

Table 2.2: Crystal's Criteria for Speech and Writing in CMC and Non CMC Contexts
(Source: Crystal, 2001: 26 – 28)

Coining the term 'Netspeak' to refer to language used in CMC as a whole, Crystal concludes that:

“Netspeak has far more properties linking it to writing than to speech...Netspeak is better seen as written language which has been pulled some way in the direction of speech than as spoken language which has been written down”

(Crystal, 2001:47)

In the following lines of the preceding quotation, Crystal (2001: 48) points out that Netspeak is also able to do things that neither speech nor writing can accomplish. He thus labeled CMC a "third medium" which shares characteristics of speech, writing, and electronically mediated properties.

Crystal's (2001) conclusions were based upon data drawn from his own and other researchers' empirical studies on the different CMC modes, but none of these studies analyzed e-mail samples³⁹. It is time, for this research and others, to try addressing this deficit.

2.2.3.2.2.3 ED is Speech, Writing, or Both?

Du Bartell (1995) researched the features of the messages of a mailing list. He proposes that features of writing and speaking are both allowed in the messages and the co-existence of written-like and speech-like features is due to the various constraints imposed by the computer.

Similarly, Baym (1996) demonstrated that both features of speech and writing are found in the messages of the mailing list. Baym (1996) considers that there are interrelated factors which influence the features of messages including institutional

³⁹ Rulík (2006) argues that it is impossible to study the general features of all computer-mediated communication; over-generalizations should not be practiced. In return, different modes of CMC should be studied as individual registers taking into account their distinctiveness and discrete characteristics.

context of work, topic, participant, gender and the social context, alongside with the UseNet medium itself.

Based on Biber's dimensions of language taxonomy that "*Electronic Language displays some of the linguistic features which have been associated with certain forms of written language, and others which are more usually associated with spoken language*" (Biber, 1988 : 21), Collot & Belmore (1996) undertook a quantitative linguistic analysis of an important electronic corpus. They claimed that Electronic Language most resembled personal and professional public interviews and letters.

Yates (1996) undertook a study on e-mail language in an academic conference environment. He explained that the expression of mood and tense (through modal auxiliary verb construction, such as the use of *can, may, must* etc. along with other verbs) is very common in electronic messages. Yates (1996) provides further evidence that features of electronic language do not always fall *between* speaking and writing, but instead can be heightened in the online environment.

Baron (1998), on the other hand, proposed a new way to look at e-mail as a creole language formed out of speech and writing through the introduction of technology. Baron argues that e-mail combines features and forms from both of its "parent" languages, speaking and writing, just as a creole language adopts components from each of two parent languages to form a new, distinct language. A creole language, according to Crystal (1997: 338), "*is a pidgin language which has become the mother tongue of a community*". Similar to creole languages, e-mail shows instances where it functions as a superior communication medium than either speech or writing (Baron, 1998).

Erboul & Bernicot (2009) in Raconter par Courrier Electronique: Une Etude de L'orthographe chez les Adolescents; worked also on looking at aspects of difference between e-mail discourse and traditional writing by analyzing orthography in ED of French teenagers. Erboul & Bernicot (2009) stipulate :

“Ce mode de communication se situe clairement dans le domaine de l’écrit par le code utilisé à travers un logiciel de traitement de texte et un clavier d’ordinateur. Cependant, d’un point de vue fonctionnel sa vocation est d’échanger de l’information très rapidement, voir de se substituer à l’usage oral du téléphone; le CE [courrier électronique] semble donc être un moyen de médiation tout à fait particulier défini à la fois par des traits de l’oral et de l’écrit (Gains, 1999; Baron, 1998).”

(Erboul& Bernicot, 2009 : 1)

Crystal (2001) predicted a tendency towards maintaining the main stylistic properties applied through e-mail communication. This means that the prescriptive tradition will fail in the attempt to establish a ruled governed set of e-mail language properties. Crystal (2001) further stipulates that ED is comparatively more influenced by the linguistic manners of its users, than by any style guide (Crystal, 2001).⁴⁰

2.2.3.3 Language Mixing in ED

In this section, literature on code mixing/code switching (hereinafter CM, CS) recognized in one of CMC asynchronous written modes (e-mail communication) will be examined.

2.2.3.3.1 Code Switching in the Global Context

Milroy & Muysken (1995:7) stipulate that *“perhaps the central issue in bilingualism is code switching”*. In fact, the issue of code switching did not receive much attention as

⁴⁰ Taking the relationship between e-mail writing and traditional writing into consideration, it is vital examining in a more elaborated way the following quote by Crystal (2001: 128) which gives an impression of the importance of e-mail writing in everyday life: *“The result will be a medium which will portray a wide range of stylistic expressiveness, from formal to informal, just as other mediums have come to do, and where the pressure on users will be to display stylistic consistency, in the same way that this is required on other forms of writing.”*

early as that of bilingualism. Several reasons are suggested by Milroy & Muysken (1995), such as too much focus on the language system instead of language use, the emphasis on the grammatical system and the lack of sophisticated recording equipments.

However, in the past thirty to forty years, studies on code switching of different languages have flourished. Benson (2001) cited nearly 1,300 articles on the subject in the linguistics and language behavior abstracts data based published in every branch of linguistics between 1990 and 2000.

Code switching⁴¹ attracted a considerable number of scholars including Gumperz (1982), Auer (1984, 1998), Heller (1988), Clyne (1991), Myers-Scotton (1993, 1998), Milroy & Muysken (1995, 2000).

The term *switching* has been first introduced by Haugen in 1953. Since then, scholars attempted to cover the topic of CS extensively and proposed accordingly different definitions and models to explain the phenomenon. Haugen & Gumperz (1982:59) define CS as “*The juxtaposition within the same speech exchange of passages of speech belonging to two different grammatical systems of sub-systems*”. Milroy & Muysken (1995:07), on the other hand, define CS as “*The alternative use by bilinguals of two or more languages in the same conversation*”.

By now, most studies of code switching worldwide⁴² and in Algeria⁴³ have focused on its use in informal, oral settings, but written examples also occur. Sridhar (1996) points out that: “*Contrary to what is often claimed, code mixing is not confined to speech: it is also found in formal writing*” (Sridhar, 1996:59).

⁴¹ The term “code switching” has been referred to as “code mixing”, “code shifting”, “language alternation”, “language mixture”, “language mixing”, and language switching” (Benson, 2001) though some have differentiated between these terms (Pfaff,1979), currently the one-word term “Codeswitching” or the two-word item “code switching” are the most commonly used (Benson, 2001) . However, to avoid terminological problems this study will use the following terms code switching, code mixing, and language mixing interchangeably to refer to ‘the alternate use of two or more languages or writing systems in a discourse’. No distinction is made between CS, code-mixing, and borrowing. As far as spelling is concerned , my personal preference is to spell code switching as two words, with white space between them, a practice I shall generally follow throughout the dissertation. Original spelling will be preserved in quotations and when paraphrasing scholars who routinely use an alternate Form.

⁴² Gumperz (1982); Auer (1984, 1998); Heller (1988); Clyne (1991); Myers-Scotton (1993, 1998); Milroy & Muysken (1995, 2000); Bright (1998); Gardner Chloros (1995); Heath (1989); Nortier (1990); among others.

⁴³ Bouamrane (1986, 1988, 2000); Bouhadiba (2000); Benhattab (2004, 2011)

2.2.3.3.2 Research on Code Switching in Writing

During the initial phase of research for this dissertation, I discovered that, in contrast to the large body of literature available on CS in oral language, little has been published on CS in writing.

Studies of CS have traditionally made use of spontaneous spoken data produced in informal conversational interactions, with somewhat less research having been done on CS in writing. According to Adams (2003), several multilingual contexts have observed CS in written media. He describes the phenomenon as follows:

“Mixed language texts combine two languages within a single utterance, often within a single utterance, often within a restricted space which may be as short as sentence clause or even phrase. A ‘mixed-language’ text usually displays code-switching. There may be multiple switches of language”.

(Adams, 2003:30)

In fact, there is a great variety of written data which involves more than one language within a text. There is data both old- from ancient and medieval times and new from traditional genres such as medical texts and formal letters, and from recent-still developing genres such as advertising and CMD .

Despite the variety of data, neither the differences and/or similarities between CS in writing and CS in speech have received much attention (McClure, 2001). Written language mixing remains relatively unexplored and under- estimated. Callahan (2004), in

her book Spanish /English Code Switching in a Written Corpus, notices that “*written code switching was often dismissed as inauthentic and artificial*”⁴⁴ (Callahan, 2004:01).

However, it would be misleading to say that there has been “hardly any” research in this area, since there is in fact a considerable body of work, some of it by linguists, some by specialists in literature, and some by people who are both.

Type of text	Examples of studies	Languages involved
Literary text		
Prose fiction	Timm 1978	Russian, French
	Callahan 2004	English, Spanish
Poetry	Flores 1987	English, Spanish
	Kachru 1989	English, Hindi
Plays	Jonsson 2005	English, Spanish
Non- literary Texts (print media)		
Newspaper columns	Moyer 200?	English, Spanish
Magazine articles	Mc Clure 1998	English, Spanish, Bulgarian
	Craedler 1999	English, Norwegian
	Mahootian 2005	English, Spanish
	Androutsopoulos 2004	
Letters to the Editor	Wren 1993	English, French
Advertising	Piller 2001, Ladousa 2002,	Various
	Piller 2003	English, Hindi
Classified Advertising	Angermeyer 2003 **	English, Russian
Non literary texts (informally produced)		
Personal letters	Craedler 1999	English, Norwegian
	Chen 2000	English, Chinese
Personal journals	Montes –Alcala 2000	English, Spanish

⁴⁴ This point is also made by many of the recent authors on this subject, e.g., Graedler (1999 : 327), Montes – Alcala (2005), Hinrichs (2005 :61), and some earlier ones Hodgson & Sarkonak (1987: 16), Seville-troika (1989 : 68).

Songs	Stole 1992	English, Danish
Graffiti	Adams and winter 1997 **	English, Spanish
Signs	Ladousa 2002	English, Hindi
Older texts		
Medieval medical writing	Pahta 2004	English, Latin
Old English, legal documents	Schendl 2005	English, Latin
	Schendl 1997	English, Latin
Poetry	Schendl 2001	English, Latin French

Notes :

* *unpublished MA thesis*

** *code switching is mentioned or discussed but is not the main focus of the paper.*

Table 2.3: Studies on Written “Code Switching”

(Examples of published and unpublished work relevant to written CS).

Written CS is distinguished by a number of characteristics:

1. It has no independent theoretical framework; all linguistic research to date which is not purely descriptive, has drawn on theoretical frameworks originally developed for spoken CS research, or occasionally on theoretical frameworks from other disciplines. For example, Callahan (2005) applies Myers- Scotton’s Matrix language frame model (1993)⁴⁵ to a corpus of novels and short stories by Chicano and Puerto Rican authors.

⁴⁵ In 1993, Myers- Scotton elaborated The Matrix language frame model. This model deals with CS at the sentential level. Basically, the principle behind this model is that there exists a hierarchy between the languages where CS takes place. There is a dominant language that she calls the Matrix Language (ML) and a dominated language that she calls the Embedded language (EL). According to Myers Scotton, when someone code switches, he is more proficient in one language than the other. This model is based on the morpho-syntactic analysis of CS.

2. Published research tends to take the form of stand – alone papers, which typically deal with a single set of data. Very few researchers have produced more than one or two papers on this topic⁴⁶.
3. A lot of research on written CS -it is difficult to know how much- remains unpublished. Mark Sebba (in press) argues that a study of CS using a corpus of magazines, personal letters, or more recently, e-mail, is a popular subject for MA dissertations in his department. He stipulates further that these unpublished writing alone would probably add up to a substantial data resource if they were accessible, but most are not.

2.2.3.3.3 Code Switching in CMC

Similar to real life circumstances, language contact phenomena-including aspects of language mixing- are taking place in new and unprecedented ways in the digital age. CMC has provided its users with possibilities for interaction at public and intimate levels. Building on the theoretical work developed for spoken discourse, linguists and sociolinguists are finding these to be an exciting opportunity for the discovery of the novel discursive behaviors taking place in CMD.

In the beginning, most scientific research on CMD focused on monolingual communities (e.g. Baron, 2000; Crystal, 2001, among others); the objective was to study the mixture between different styles of the same language. Later on, the focus shifted to the study of ‘*The Multilingual Internet*’⁴⁷ i.e., how bilinguals use their linguistic resources in CMC environments. Most CMD research⁴⁸ addressed some of the following issues:

1. Adaptations of writing systems in online environments;
2. Social interpretations of, and attitudes toward, such adaptation;
3. Language choice in multilingual contexts; and
4. Gender and language dynamics in CMC in non-English-speaking cultures.

⁴⁶ Montres Alcola (2005) and Schendl (2005) are recent exceptions.

⁴⁷ The *Journal of Computer-mediated Communication* has dedicated an issue on the topic of ‘The Multilingual Internet’ with a focus on language use in CMD, most precisely on instant messaging, e-mail and chat.

⁴⁸ For example the work of Danet & Herring (2003).

2.2.3.3.1 Over- generalizations

Various attempts have been made to study CS in CMC contexts (e.g., Paolillo, 1996; Androutsopoulos et al. 2001; Warschauer, El Said & Zohry, 2002, among others). Accustomed to dealing with CS, these linguists tried to apply models previously used in the analysis of oral CS in non-CMC contexts.

In a study on Chat rooms, Androutsopoulos et al. (2001) note that CS in CMC modes resembles face-to face conversational CS, an observation made by Jayantilal (1998), McClure (2001a), and Hinrichs (2006); but, what about e-mail?

In fact, these efforts at understanding CS in CMC tended to over-generalize about CMC, as if CMCs were a single homogenous genre or communication type. In the following lines, I shall explain why this over-generalization has been made and why it is not suitable for all CMC contexts.

2.2.3.3.2 Synchronicity versus Asynchronicity in CMC

Synchronicity is a relevant dimension for explaining why CMC researchers made observations on the likely possibility that code switching in CMC contexts is similar to that found in spoken language⁴⁹ and why they should not over-generalize about CMC.

In fact, CMC synchronous systems (e.g. chat and IM) are conversational-like types of communication: sender and addressee(s) must be logged on simultaneously⁵⁰ and various modes of “real-time” are characterizing the communicative event. Accordingly, the conversational-like dimension fosters the similarity between CMC written CS and oral CS. But what about CS in e-mail communication-one of CMC written, and more importantly, an asynchronous mode of transmission?

In CMC asynchronous systems (e-mail, SMS), for instance, users are not obligatory logged on at the same time in order to send and receive messages, rather, messages are stored on the addressee’s site (e-mail box) or mobile phone until they can be read like most traditional forms of writing.

⁴⁹ Foertsch (1995); Ferrara, Brunner, & Whittemore (1991); Georgeakopoulos (1997) claim that CMD has to fall in the middle of the continuum between spoken and written communication.

⁵⁰ They are together at the same time but virtually.

In addition, Asynchronous CMC is largely planned and non-spontaneous⁵¹ (Hinrichs, 2006), it encourages users to be more self-aware about the subtleties of communication. This reality claims the letter-like form of e-mail text and reject it belonging to the conversational scope found in CMC synchronous modes.

Following these arguments, it is suggested that there should be some limits to the extent to which researchers can apply findings from spoken discourse studies to "written speech" directly, and the same undoubtedly applies to research on written CS.

Accordingly, decision about whether CS in e-mail is oral or not needs to consider previous research on CS in writing. The following section provides a brief description of studies in the areas of CS and CMC. The focus is on covering basic terminology and describing important concepts in relation to CS in e-mail texts.

2.2.3.3 Code Switching in E-Mail Communication

Research on CS in CMD and in ED in general is still virgin territory. In fact, little research has been undertaken to understand the nature of written code switching in online language⁵².

Type of text	Examples of studies	Languages involved
Non literary texts (CMC)		
e-mail	Verra 1997*	English – Greek
	Warschauer, El Said & Zohry, 2002	Arabic- English
	Hinrichs 2005	English – Jamaica Creole
	Durham, 2007	Swedish
Bulletin boards	Sebba 2003	English –Creole

⁵¹ Hinrichs (2006) point out that unlike spoken discourse, e-mail interactions lack prosodic and paralinguistic cues. Users adapted themselves to these limitations by using emoticons and abbreviations to express unseen (and often unperformed) facial and bodily expressions.

⁵² Danet & Herring (2003) stipulate that written CS and other features of multilingualism in CMC remain understudied. Herring (1996) argues: “*There is a need for published scholarship on computer-mediated interaction in other languages, and on computer-mediated language that involves language mixing*” (Herring, 1996:10).

Chat rooms	Chan 1999* Androutsopoulos & Hiwenkamp, 2001**	English – Chinese German, Turkish
Web texts	Androutsopoulos 2004	German
Graphical multiuser virtual environments	Axelsson, Abelin & Schroeder, 2007 **	Swedish

Notes :

* *unpublished MA thesis*

** *code switching is mentioned or discussed but is not the main focus of the paper.*

Table 2.4: Previous Research on Code Switching in CMD

(Examples of published and unpublished work relevant to written CS).

Research which I found in this developing field has tended to:

1. Focus exclusively on English-speaking communities, neglecting development within populations communicating in other languages. Some notable exceptions are studies of Code Switching among Expatriate South Asians on Usenet (Paolillo,1996); Language Choice among Young Egyptians Professionals (using various forms of CMC : email and on-line chat) (Warschauer, El Said & Zohry, 2002); Language Choice on Mobile Text Messages Among Jordanian University Students (Al-Khatib & Sabbah,2008); Code Mixing of Chinese and English Internet Users (Lee, 2002). Such studies have been relatively infrequent and their findings have never been brought together and compared.
2. Concentrate mainly on the exploration of language mixing in most CMC synchronous modes, excluding asynchronous ones such as e-mail and SMS. The only research literature found on CS in e-mail communication are Language Choice among Young Egyptians Professionals (using various forms of CMC : email and on-line chat) (Warschauer, El Said & Zohry, 2002), Spanish-English Code switching in Email Communication, (Goldbarg, 2009), and Language Choice on a Swiss Mailing List, (Durham, 2007).

Here is some of the most influential research on E-mail discourse:

In the beginning, some researchers made tentatives to understand the nature of CS in asynchronous CMC language. According to Yau (1993), the picture was hazy about what is written CS and what is spoken CS as far as CMC text-based interactions are concerned. As a solution to this, Yau (1993) tried to investigate CS in asynchronous CMC by questioning the consciousness versus unconsciousness use of CS in these texts.

In fact, the typology proposed by Yau (1993) -who studied written English Chinese switching- was among pioneering research in the field of CMC language mixing. The typology is based on the *Conscious Versus Unconscious* use of CS among its users. The principle behind this typology is summarized in the following figure

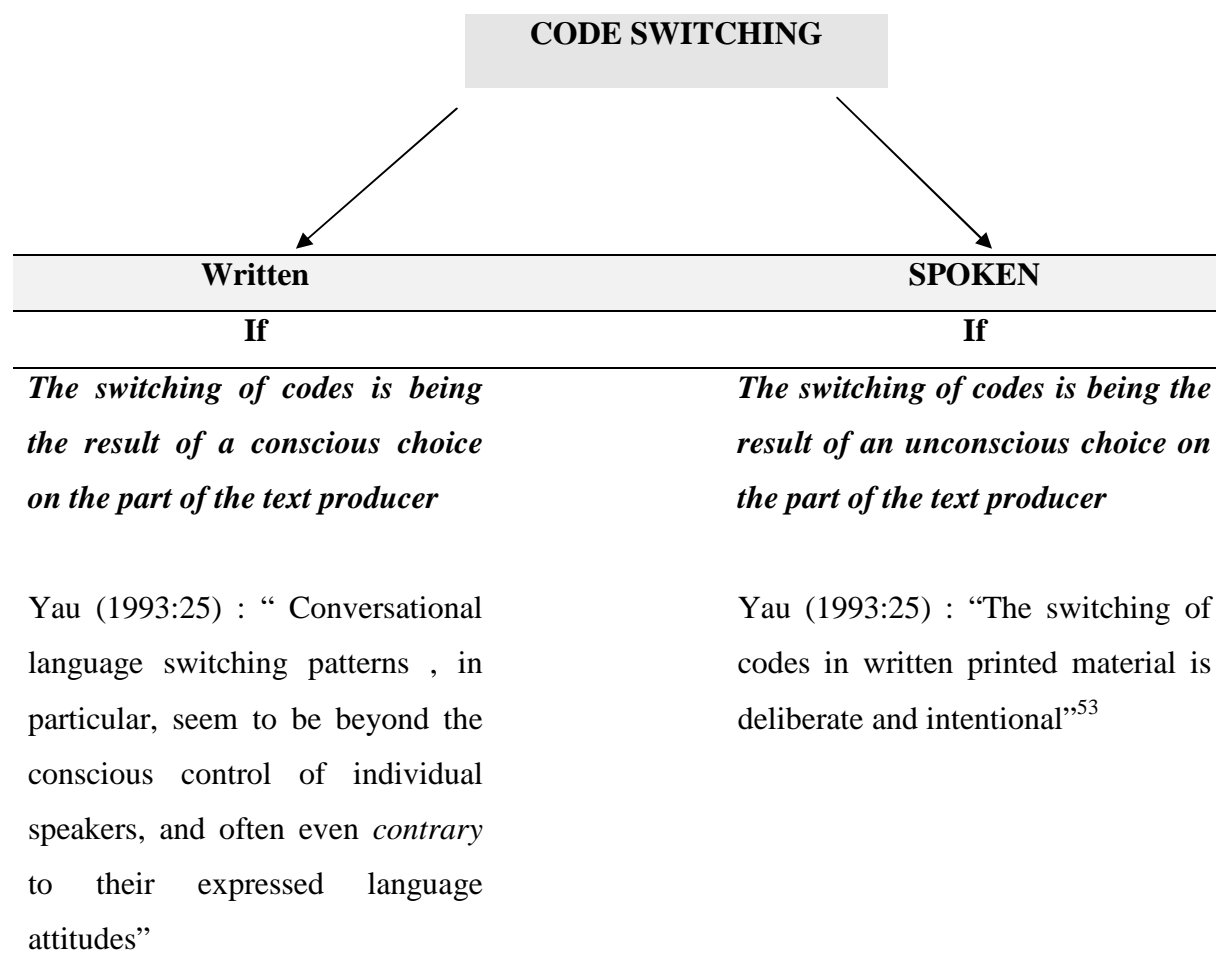


Figure 2.2: Code Switching Typology

(Source: Yau, 1993)

Georgeakopoulos (1997) studied e-mail communication in a group of Greek friends and colleagues. She found that CS from Greek to English served to lighten apologetic e-mails in her corpus. Georgeakopoulos (1997) asserts that by switching to English for a word or phrase during an apology, e-mail writers were able stave off a face-threatening act and reaffirm the intimate nature of the exchange.

⁵³ Bhatia & Ritchie (1999:241) supports Yau’s claims. They argue that bilingual speakers are “largely unaware of mixing and do not react to it unless they are consciously made aware of it by listeners”. Becker (1997) also stipulates that “Code switches are often triggered by unconscious factors, and consequently, bilingual speakers are often unaware of their spontaneous alternation between languages.”

Hinrichs (2006) analysed Jamaican Creole (JC) and Jamaican English (JE) written CS in e-mail communication⁵⁴. In his study, he found that JC is the marked choice. According to Hinrichs (2006), this contrasts with the trend in spoken communication in Jamaica, where JC is the unmarked choice. Hinrichs (2006) suggests that the cognitive cost of writing JC is greater than writing JE, because his study's participants were more familiar with JE's writing conventions and rules.

As with spoken CS, research on written CS has shown that English is associated with professional or formal contexts and the online context in general, Warschauer, El Said & Zohry (2002), in Language Choice among Young Egyptians Professionals (using various forms of CMC : email and on-line chat) studied young Egyptian professionals' online use of Arabic and English; They found that English was used much more frequently online and in formal e-mails than Egyptian Arabic or classical Arabic. Warschauer et al. (2002) reported that they switched to Egyptian Arabic when expressing highly personal content that could not be expressed in English. Warschauer et al.'s research (2002) exemplifies how situational switching functions in CMC- e-mail and on-line chat- and points to the dominance of English on the Web.

Durham (2007), in Language Choice on a Swiss Mailing List, examined how the language situation in Switzerland affects, and may be affected by, the choice of languages for Internet use. Durham (2007) focuses on language choices on a mailing list for members of a Pan-Swiss medical student organization. The researcher found that apparently English is the most readily understood and accepted language in mixed language groups. It is also found that the mailing list influenced the choice of language used.

However, the situation at hand is quite different from the simple concern of written CS research; what we have here is (more or less) problematic because of some disputes on the "nature" of the language of e-mail.

⁵⁴ He builds on the frameworks advanced by Myers-Scotton & Gumperz (see 'The Markedness Model', Myers-Scotton, 1983 and 1998).

In fact, research on how to characterize e-mail linguistically has not declared it as a uniquely written medium despite its asynchronicity⁵⁵. Rather, it is stipulated that e-mail language is not yet categorized as being either written or/ and oral. Claiming e-mail code switching as written or oral, will not be an easy task.

2.3 Language Attitudes towards E-Mail Communication (RQ2)

This section will highlight research on attitudes⁵⁶ towards language in e-mail communication. I shall proceed by scouring the existing literature on how e-mail language is evaluated by the scholarly community as far as the spoken versus writing continuum is concerned⁵⁷. Then, I shall end up with a discussion on how much risk ED can bring to norms of *correct usage*: can e-mail language endanger the standards of the written genre? If yes, how is this seen?

2.3.1 ED as a New Linguistic Beast

The mingling of speech and writing in ED is an observable phenomenon (Crystal, 2001). In fact, of the very few studies that have been published on the topic, researchers questioned what kind of linguistic beast is e-mail language? Is it 100% written; or may be 100% oral; or is it simply 50% oral and 50% written; or is it something neither written language nor spoken language can explain.

By surveying the burgeoning literature on how to characterize e-mail linguistically, a variety of views are discerned. These views fall mainly into the following categories⁵⁸.

⁵⁵ E-mailing is supposed to be an asynchronous mode of communication in which language is likely to resemble letter-writing form.

⁵⁶ McCroskey (2006) explains that attitudes refer to the affect component of a response or the way we “feel” about some stimulus.

⁵⁷ Crystal (2001: 6) considers that it is essential for a CMD researcher : “ ...to investigate whether the internet is emerging as a homogenous linguistic medium, whether it is a collection of distinct dialects, reflecting the different backgrounds, needs, purposes, and attitudes of its users, or whether it is an aggregation of trends and idiosyncratic usages which as yet defy classification.”

⁵⁸See Baron, 2001.

E- MAIL	AS	A form of writing (Letters by others means).
		E-mail as a form of speech (Speech by other means).
		E-mail as a combination of spoken and written elements (Mix and match).
		E-mail as a distinct style (e-style).
		E-mail as a still –evolving language style (Contact system).

Figure 2.3: Linguistic Views

(Source: Baron, 2001:04)

2.3.1.1 ED as a Form of Writing

This approach describes ED as being essentially a written message conveyed by a new electronic medium (Computer & Internet). Taylor and Harper (2003) define e-mail as follows:

“Letter, email, SMS are all written communication media which operate under the conditions of a temporal phase delay”.

(Taylor & Harper, 2003:11)

Similar to letter writing, the distance between caller and receiver can be used strategically to convey such resemblance. In relation to that, literature has shown that ED has been compared to letter writing, postcard writing or classic epistolary (Habluetzel, 2006; Hjorth, 2005. Kessler & Bergs, 2003). A question was raised: what is the nature of the relationship between e-mail writing and other forms of “classic writing”? Can ED be considered as “writing” at all?

Further, in the context of love messages⁵⁹ Kessler & Bergs (2003) observe that, except for frequent use of graphical signs (e.g., emoticons) and phonetic spelling, most asynchronous CMD resemble other forms of written language:

“Although users of email and SMS tend to use a more “simple style”, many love mails still contain some images, of the nineteenth century”

(Kessler & Bergs, 2003: 81)

Kessler & Bergs (2003) stipulate also that, while spelling and punctuation might differ, in terms of content, asynchronous CMD might not be so different from classic texts and letters. Habluetzel (2006:08) supports the latter idea and argues that letter writing and Asynchronous CMD (E-mail and SMS) share at least the following six characteristics.

- * Are based on absence;
- * Are personal (as opposed to public and collective and thus predisposed towards ‘love plots’);
- * Are asynchronous;
- * Offer the capacity to manipulate distance and proximity;
- * Can foster feelings of presence
- * Both expect reciprocity

She adds that most of these characteristics are closely interrelated and that despite the linguistic innovations and challenges, asynchronous CMD can also be seen as continuing a long tradition of personal letter writing.

On the same line of thought, Kortti (1999) claims that the resourceful use of abbreviations, words, and lack of punctuation appears to be a personal stylistic choice rather than an identification of speech-like characteristic in this language. Herring (2001) is of this opinion suggesting a continuum along which asynchronous CMD occupies a

⁵⁹ Hjorth (2005) argues that asynchronous CMD, like letters, find their application in rather specific situations as love letters. She stipulates also that asynchronous CMD “*continue a tradition founded by the role of the visiting card*” (Hjorth, 2005: 02).

position closed to writing (as is the case with e-mail), and synchronous CMD occupies a position closer to speaking (as is the case for IM and chat)

Baron (2001: 05), on the other hand, is disagreeing with the above arguments. She points out that “*There are aspects of asynchronous CMC (email, SMS) that remind us more of written language, but that don’t neatly fit into conventional molds*”.

2.3.1.2 ED as a Form of Speech

In this approach, Baron (2001) together with Ling (2004) argue that e-mail texts appear more like spoken than written language⁶⁰. Baron concludes this through a study she undertook to explore some of the linguistic attributes of asynchronous CMD. In her investigation, she tries to measure up asynchronous CMD characteristics against spoken language or non spoken language characteristics. She identifies the following similarities and differences:

Linguistic Parameters	Characteristics Generally Shared with Face-To-Face Speech		Characteristics Not Generally Shared with Face-To-Face Speech
Language Style	Informal Often avoid salutations Use contractions, slang	HOWEVER	Often <i>more</i> informal than face-to-face speech
Responses	Fast response time assumed	HOWEVER	Often don’t get acknowledgement for assistance rendered

⁶⁰ See Murray (1990), Yates & Orlikowski (1993) and Uhlířová (1994). See also Collot & Belmore (1996) or Yates (1996) for English, Anis (1998) or Panckhurst (1998) for French, and Fouser, Narahiko & Chungmin (2000) for Japanese and Korean, etc.

Audience Identity	Intended for limited, specified audience	HOWEVER	Can be forwarded to others without original sender's knowledge
Durability Assumptions	Senders act as if ephemeral (and often don't edit)	HOWEVER	Can print out Can edit Can reply with history

Figure 2.4: Comparison of Asynchronous CMC Characteristics with Characteristics of Face-to-Face Speech
(Source: Baron, 2001:04)

After extracting the differences and similarities, Baron uses the following arguments: (i) the inconvenience of writing a text on a small screen ,(ii) the massive use of reduced forms in asynchronous CMD, (iii) the overall high degree of informality; (iv) the use of dialect⁶¹; and more importantly the speediness of the exchanges⁶² to stipulate that asynchronous CMD formally differ from other types of writing and by consequence should be considered as a speech that happens to be written down for transmission purposes (speech by other means).

Similarly to Baron (2001), Yates & Orlikowski (1993) claim that ED has exhibit features of oral communication. Yates & Orlikowski (1993) studied the “memo genre” and compared it to ED. They observed that e-mail can be used to convey messages that would not typically be transmitted through memoranda (e.g., a one-word response to a question or suggesting a lunch date to a colleague). They suggest that ED composition

⁶¹ Informal data from asynchronous CMD users in Switzerland indicates that local dialects have been increasingly used in writing asynchronous CMD over the last few years (See Hard of Segerstad (2005) for data from Sweden).The same phenomenon occurs among English – speaking texts: see Mark Warschauer “LANGUAGES.COM: The Internet and Linguistic Pluralism” In Silicon Literacy: Communication Innovation and Education In The Electronic Age. 26-74 (London: Routledge, 2002).

⁶² Baron (2002:410) considers that asynchronous CMD “converts the monologue of writing into the dialogue of spoken give-and-take”.

resemble the oral genre than the written one. Yates & Orlikowski (1993) conclude their study with a call for empirical research.⁶³

2.3.1.3 ED as a combination of spoken and written language (Mix & Match)

Language and media specialists have now moved to more complex models. The “Mix and Match Approach” lines up the speech like qualities of ED in one column and qualities that are more like writing in another (e.g., Schlobinski *et al.*,2001; Lee, 1996; Yates,1996). Lee (1996) explains that people approach e-mail as

“A hybrid medium”, uniting rhetorical elements of both spoken and written communication. This result in a form of communication “between the telephone and the letter”.”

(Lee, 1996: 277)

In this regard, Wood & Smith (2005) stipulate:

“The practice of writing e-mail eschews the formality of traditional text. In this regard, e-mail is like the telephone in that there is a quality of orality, of transcribing the message as though one were uttering it from one’s lips. Yet e-mail is obviously like the letter because of the dominance of type in its presentation.”

(Wood & Smith, 2005:11)

Wood & Smith (2005) justify the hybrid-like nature of ED as follows:

*“ As you can see, the person who **posted**, or sent, this message wrote in a fashion that was far more*

⁶³Yates & Orlikowski (1993: 320) pinpoint that even if there are some research which has noted developments in the structural and linguistic features characterizing ED, without further empirical study it is not clear to understand the phenomenon.

conversational than the conventions of formal letter writing would dictate (i.e., a formal salutation like Dear Mr. Esposito). Through their practice, people have made the writing of e-mail a less formal, albeit no less textual, mode of communication.”

(Wood & Smith, 2005: 11)

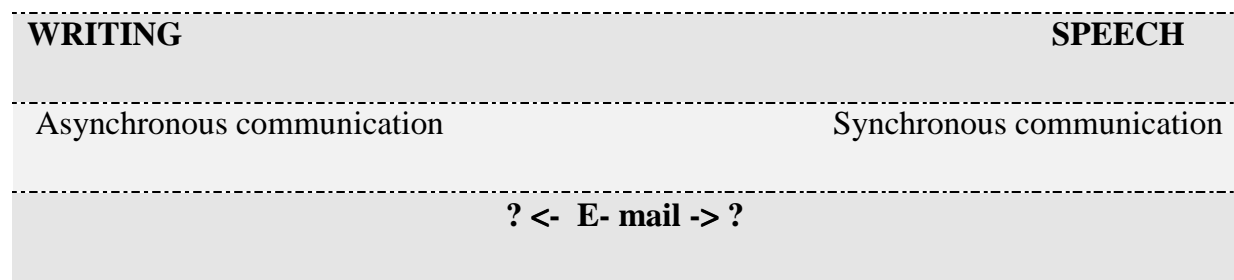


Figure 2.5: The “Mix and Match Approach”

Habluetzel (2006) observes that asynchronous CMD writers operate with a hybrid between writing and speech. On the one hand , their texts are full of semiotic characteristics representing the style of speech , but on the other hand, the phonetic writing in their asynchronous CMD is still a type of writing that is composed by hand (typed on a keyboard or a keypad) rather than mouth and received by eyes (reading) rather than ears.

Schlobinski et al. (2001) also regard language use in asynchronous CMD as a hybridization of written language and spoken language, judging this from the use of colloquial expressions, syntactical reductions and assimilations.

2.3.1.4 ED as a Distinct Style (E-Style)

A number of analyses (e.g., Collot & Belmore, 1996; Ferrara et al, 1991; Herring 2002; Maynor, 1994; among others) speak of “e- style”⁶⁴ as neither speech nor writing. It is different from writing in its immediacy and changeability (a traditional written text stays in place and remains the same. This is not true for e-mails in which language can be

⁶⁴ Electronic style is abbreviated as e-style

changed or reused, cut and pasted to create a new one), and different from speech in its inability to provide pitch, rhythm, loudness and other voice cues. Netspeak has far more properties linking it to writing than to speech

Under reference to his book Language and the Internet (2001), it is evident to notice that Crystal praises e-mail writing as a powerful tool in CMC:

“A cross between a conversation and a letter, e-mail is as fast as a telegram and as cheap as a whisper [...] a telegraph, a memo, and a palaver rolled into one [...] faster than a speeding letter, cheaper than a phone call [...] a strange blend of writing and talking”

(Crystal, 2001: 125)

In dependence on the quote, Crystal supports the genius of what he calls “Net speak” or “trans – linguistic drag queen”⁶⁵. He concludes his analysis of the spoken and written-like features of ED, in his work Language and the Internet, by arguing that ED is fundamentally different from speaking and writing : e-mail writing is “*formally and functionally, unique*” (Crystal, 2001: 125). Crystal (2001) suggests that ED shares in their properties, but it does neither speech nor writing can do⁶⁶. It is rather ‘*a genuine third medium*’ which may evolve as a novel variety of language, provided that it brings its own principles and standards which should be distinct from other media.

2.3.1.3.5 ED as a Still Evolving Language Style (Contact System)

“Contact system” approach argues that the unfolding of ED is very much like the development of a pidgin or Creole. While the system has an identifiable grammar, there is also broad variation across users and usages. Since the system is still undergoing

⁶⁵ Crystal and Ling cited in Hard af Segerstad, p 35.

⁶⁶ He exemplifies this by claiming that in chat you can communicate with up to 20 people simultaneously, “something not even the most adroit person could accomplish at a cocktail party” (Crystal 2001: 47-48)

considerable transformation, there is no certainty how it will end up. Thurlow et al., (2004) believe that

“Many would acknowledge that, to some extent, we are dealing with the “unknowable”, since the impact of the new media “revolution” remains immeasurable and hard to define”.

(Thurlow et al., 2004:09)

Seen through this model, it is too soon to tell if e-mail will eventually look, more speech- like or more like writing, or become a distinct genre (Thurlow et al., 2004).

2.3.2 Is E-mail Communication Deteriorating Language?

Kloučková (2010) argues:

“With the arrival of Internet language —which differs in fundamental respects from traditional conversational speech and from writing (Crystal 2005:1) the general public has become increasingly attentive to the relationship between written and spoken language (Baron 2005: 1). Another burning issue has been the effect of CMC (computer-mediated communication) on other —standard forms of language. Should it be viewed as a threat that induces corruption, or as a favourable and creative innovation? This issue does not concern exclusively English anymore since the proportion of other languages is rising and the Internet is becoming increasingly multilingual.”

(Kloučková, 2010: 7)

The present part of this study will focus on one of the above mentioned issue: to what extent is Internet's language -most precisely e-mail discourse-corrupts⁶⁷ or represents a threat to practices of 'good' usage in language.

2.3.2.1 Language as Rule-Governed Behaviour

Language is a human behaviour over which people historically paid particular and often excessive attention. For more than a century, practically all linguistic theorists have shared the assumption that human language is governed by laws or rules. Languages facilitate communication precisely because they can be described in terms of principles shared by members of a speech community. The fact that people agree-upon interpretations of words or phrases make it possible for them to use language in order to get their meanings across. Linguistic communication is generally successful because we understand one another's pronunciation or handwriting, agree what words are referring to, and share our comprehension of grammatical relationships in the sentences we speak and write.

However, with the arrival of CMC, the linguistic scene is not that rule-governed. CMC has promoted possibilities for language creativity. The fact that CMC users can create new sentences by adding on to old ones, can mix different languages in the same communicative situation, and can represent verbal communication on a written medium is by itself not surprising. What is much surprising is the fact the rules of most world languages offer to its users the freedom to combine expressions and words together in *new* ways with a space for creation and change⁶⁸; something language prescriptivists would never tolerate and often place constraints on this freedom. Trask (2007:8) suggests that "*Language change is always with us, as we have just seen, some people take exception to this fact, and even complain that something should be done about it.*"

⁶⁷ Baron (2008: 176) suggests that there is: "A deeper concern: that Internet language is corrupting the way we craft traditional writing or even speak face-to-face".

⁶⁸ Kuiper & Alla (2004:10) argue: "*So language provides a key to open the door to possible worlds, worlds which differ from the one we currently live in any way which we might imagine. By rearranging words into new sequences we can imagine the future, plan a space telescope or journeys to the moon, reconstruct the age of the dinosaurs as well as write letters to friends*". Kuiper & Alla (2004:13) further add: "*Language itself allows speakers to create new utterances whenever they choose. But this creativity is circumscribed by the social forces that influence the speaker.*"

2.3.2.2 Prescriptivism

In talking about how rules define language, linguists sharply distinguish between descriptive rules (what people in a speech community “know” about their language by virtue of growing up within that milieu) and prescriptive rules (what is conceived as being linguistically right or wrong). Smith (1991) argues:

“Like mathematical operations, language use is rule-abiding behaviour. Rules determine what arrangements of sounds or characters constitute words, what arrangements of words constitute well-formed phrases and sentences, and what arrangements of word, phrase, and sentence meanings constitute intelligible expressions.”

(Smith, 1991:4)

The “*Rightness*⁶⁹” *Ideology* stipulates that things shall be done in the ‘right’ way’ as far as language use is concerned. Milroy & Milroy (2004) describe the phenomenon as follows:

“Language is a much more complex phenomenon than table manners: it is also a much more central aspect of human experience. Whereas table manners are codified in handbooks of etiquette, ‘correct’ use of language is codified in handbooks of usage. It is probable that all speakers of English (and probably most speakers of many other languages) have a number of definite opinions as to what is ‘correct’ or ‘incorrect’ in that language they use. They may often look to ‘expert’ opinion, rather than to their own knowledge of the language, to decide.”

⁶⁹ This is a label I give to the ‘Prescriptivism View’ of language use.

(Milroy & Milroy, 2004: 1)

But, does everybody obey prescriptivism? Or are there some reservations? Here are some opinions:

Milroy & Milroy (2004) argue:

“If we want to know more about language as a universal phenomenon and the universal human capacity to use, then we must try to base our discipline on observed fact (as far as possible) and certainly not on a set of prejudices.”

(Milroy & Milroy, 2004:6)

Daniel Jones (1995), in the introduction to his English Pronouncing Dictionary stipulates:

“No attempt is made to decide how people ought to pronounce; all that the dictionary aims at doing is to give a faithful record of the manner in which certain people do pronounce. Although it is necessary to insist on the priority of description, it does not follow from this that prescription should never be studied at any point.”

Tpmasello (2003) notices:

“For remember that in general we don’t use language according to strict rules-it hasn’t been taught to us by means of strict rules either.”

(Tpmasello, 2003: 324)

Firth (2003) also adds:

*“ A ‘ spectrum of likelihood’: the idea of language being ‘right’ or ‘wrong’ is not always very useful. Too often we become obsessed with whether a piece of language is ‘correct’ or ‘incorrect’. As teachers we feel it necessary to provide absolute judgments when asked to do so. In reality there is a hard core of acceptability surrounded by a vast grey area. That grey area, however, cannot really be seen as ‘unacceptable’.... . The grey area does not contain ‘unacceptable’ language, rather ‘unlikely language. Michael Lewis has suggested the idea of a ‘spectrum of likelihood’. At one end of the spectrum is the area of ‘highly likely’ (acceptable) language; at the other end is an area of ‘very unlikely’ (unacceptable) language; and in the middle is a wide range of possibilities of varying likelihood (varying acceptability). In short, ‘likely’ or ‘unlikely’- which represent a **continuum**- are more useful concepts than the simple ‘right’ or wrong’ opposition.*

(Firth, 2003: 6)

It is important to highlight the fact that open public attitudes claiming the negative aspect of CMD may not always be identical with the views that people hold privately. Bolinger (1980) has had much to say about what he calls linguistic *shamanism*: he observed that

“...some language writers set themselves up as public guardians of usage, commenting on supposed mis-use of language and on supposed linguistic decline. These statements by guardians appear

*frequently in the press; general 'popular' attitudes
i.e. privately held attitudes of ordinary people."*

(Bolinger, 1980:1-2)

Opinions about prescriptivism have been strong ever since people engaged in language communication through CMC. This new speaking/writing means of language exchange has demonstrated an ability to be more than a mere means of communication or a tool facilitating the exchanging of messages. CMC is rather concerned with a 'way of being' picturing social, geographical and even political backgrounds

2.3.2.3 Prescriptivism in the Written Genre

The world of written language is overwhelmingly the domain of prescriptivism, which dictates how words are spelled, how punctuation is distributed, and what special formalities someone need to follow, including proper salutations in letters and clear transitions between paragraphs.⁷⁰

However, much of current research in linguistics concerns itself with the descriptive rules, dismissing prescriptivism⁷¹. All standard introductory textbooks in linguistics affirm that linguistics is a descriptive discipline and not a prescriptive one:

*"First, and most important, linguistics is descriptive,
not prescriptive. A linguist is interested in what is
said, not what he thinks ought to be said. He
describes language in all its aspects, but does not
prescribe rules of 'correctness'."*

(Aitchison, 1978: 13)

⁷⁰ Many of us would confirm that, when writing, we may look to dictionaries, grammars and handbooks as authorities on 'correct' usage.

⁷¹ Milroy & Milroy (2004: 3): *"The existence of prescriptive attitudes is well known to linguistic scholars, but in 'mainstream' linguistics of recent times scholars have generally claimed that prescription is not a central part of their discipline and even that it is irrelevant to linguistics. It has not been fully studied as an important sociolinguistic phenomenon"*.

Baron (2008), on the other hand, considers that the state of prescriptivism is not privileged among the scholarly community as most linguists' main focus is to study speakers 'natural' language. She argues:

“Since the majority of linguists study spoken language, the state of prescriptivism judgments in writing hasn't been on the radar screens of most practitioners in the profession.”

Baron (2008:168)

This is not true for CMC language: a new written medium which has received many claims about its negative impact on the standards of traditional written language.

2.3.2.4 CMC 'Break' the Rules

There is of course nothing new about fears accompanying the emergence of a new communication technology⁷² and new linguistic circumstances. The general response of most linguists and even politicians⁷³ to the prospects of language decline caused by CMC is characterized by active disquietude about language standards in CMC language⁷⁴. E-mail language is no exception.. There is an international perception that young users of e-mail are using degraded language. The new linguistic features of ED are often interpreted as being signs of “language deterioration”.

In fact, most e-mail users break or ignore the rules of orthography. For example, they can omit letters or spaces between words, and can use abbreviations and acronyms.

⁷² Crystal (2001:2) argues: “*In the fifteenth century, the arrival of printing was widely perceived by the Church as an invention of Satan, the hierarchy fearing that the dissemination of uncensored ideas would lead to a breakdown of social order and put innumerable souls at risk of damnation. Steps were quickly taken to limit its potentially evil effects.*”

⁷³ See Jacques Chirac's, the ancient French President, comment on the effect of The Internet on language, (*The Economist* 21/12/96:37).

⁷⁴ There are two approaches to the study of CMC: prescriptive and descriptive (Herring 2008: 1). The former approach is the one typical of educators and other people who try to provide the right direction in language development. The latter approach is taken by the scholars who observe Internet communication in the context of various disciplines without making any value judgments. The present thesis adopts the descriptive approach.

They know that breaking rules of written communication will be interpreted by their partners to be due to rapid typing and to time constraints⁷⁵.

To investigate the point -language decline of the English language in CMC- Thurlow (2006) analyzed more than 100 articles from the international English-language press, written between 2001 and 2005, on computer-mediated communication language. Scores of journalists are proclaiming that e-mail, instant messaging, and text messaging are bleak. A number proclaim that e-mail, instant messaging, and text messaging have created a whole new language, apart from Standard English.

“A new language of the airwaves has been born”

(Guardian, June 26, 2003)

“Not since man uttered his first word and clumsily held a primitive pencil nearly 10,000 years ago has there been such a revolution in language”

(Daily Post, September 26, 2001)

That new language is degraded:

“Texting is penmanship for illiterates”

(Sunday Telegraph, July 11, 2004)

“The English language is being beaten up, civilization is in danger of crumbling”

(Observer, March 7, 2004)

But worst of all, computer-mediated communication is contagious, polluting traditional writing:

⁷⁵ Crystal (2001:108-109) states that: *“Although this is a reaction against traditional perspective pedagogy, the effect is nonetheless to reinforce a highly selective view of what language is all about, by focusing on a tiny set of rules to the exclusion of the more general properties of language which characterize the maintext of e-mail messages. These properties result from the two chief factors which define the e-mail situation: the limitation imposed by the screen and the associated software; and the dynamic nature of the dialogue between sender and receiver”*

“Text chats are starting to bleed over into other aspects of life”

(National Post, January 4, 2005)

“Appalled teachers are now presented with essays written not in Standard English but in the compressed, minimalist language of mobile phone text messaging”

(Scotsman, March 4, 2003)

“The changes we see taking place today in the language will be a prelude to the dying use of good English”

(Sun, April 24, 2001)⁷⁶

In France, on the other hand, Jacques Chirac, the ancient French president, commenting on the effect of CMC modes on language - French in particular- bluntly called them

“A major risk to humanity”

(‘Language and Electronics: The Coming Global Tongue, The Economist, December 21, 1996: 37)

CMC spellings are controversial or prohibited in some French newsgroups. There is even a *Comité de Lutte Contre le Langage SMS et les Fautes Volontaires* (Committee Fighting Against SMS Language and Deliberate Errors), which claims to have more than 2,000 members. Its website displays the banner shown in Figure 2.6.

⁷⁶These quotations correspond to article numbers 45, 24,29,20,57,40, and 79 in Thurlow, 2006.



Figure 2.6: The Fight against SMS Language in France: Banned displayed on a French-language purist website. The text can be translated : “ IT’S A FORUM/ NOT A MOBILE : Here we speak a language human beings can understand....if you want your question to be answered, try to make yourself understandable too.”

(Source: <http://sms.informatiquefrance.com/>)

The use of CMC and its influence on the language and written expression of teenagers seems to have been also discussed in Finish media. Kasesriemi & Rantianen (2002) report that the exportation of SMS-like neography to formal written documents raises educational concerns. Teachers are naturally worried about acquisition of orthography. They presume that these elements will be transferred from CMC texts to more formal texts and worry about the consequences.

However, opinions about this concern are not shared. Veith (2005) maintains that CMC spelling is too recent to be responsible for the problem and that CMC spellings are not typically found in school papers. Marty (2001), on the other hand, notes the positive linguistic skills stimulated by CMC neography but worries about its negative influence on primary-level pupils. She suggests that writing class activities inspired by CMC processes could make mastering orthography easier.

In fact, many linguists are anxious that sort of “Netspeak”- as labeled by Crystal (2001)-will take over and that standards and norms of traditional written language will be lost, and creativity and expressiveness will be diminished (Baron, 1984; Hale, 1996). However, Herring (2002) argues that

“Social meanings appear to be conveyed effectively through CMC. Users achieve this in part through creative uses of language, such as novel spellings, repeated punctuation...designed to convey attitude, non-speech sounds and facial expressions.”

(Herring, 2002:04)

Crystal (2001) stipulates that children who spend their days sending messages on one of CMC modes are in no danger of becoming illiterates, his view help children *“consolidate their linguistic intuitions and make responsible linguistic choices”* (Crystal, (2001:128). Crystal confirms that people are sure of stylistic differences in language use. And that language use differs according to purpose and activity. People looking for a job will construct their e- mail quite differently than they would if e-mailing with friends.

En rapport with e-mail language, Schlobinski et al. (2001) point out that there is no degradation of language, which conservative language users always seem to believe, but rather writing adequately has become an art⁷⁷.

In her essay on the history and predictions concerning e-mail language use, Baron (2002) claims that attitudes towards ED are varied and contradictory.⁷⁸ For instance , Hale & Scanlon (1999), in their book Wired Style, advise on e-mail style and ask e-mail writers to disregard sentence structure, spelling, and punctuation since *“no one reads e-mail with red pen in hand”* (Hale & Scanlon, 1999: 3). Hence, Angell & Heslop (1994), in The

⁷⁷ In a final chapter, Crystal ends with a celebratory view of language online, concluding that neither linguistic quality nor linguistic diversity will be threatened by the Internet, but rather enriched by it.

⁷⁸According to Baron (2002), the vast number of books and Websites crafted in the late 1990s offering advice on e-mail style are contradictory.

Elements of E-Mail Style, claim that e-mail messages should be crafted using rules similar to Standard English grammar. Cunningham & Green (2002) suggest that people should ‘*treat e-mail as an opportunity to put your best foot forward*’ (Cunningham & Green, 2002: 20).

Is the matter of “the supposedly” bad influence of e-mail language on the standards of written language prevalent in Algeria? A question to be tackled within the frame of this investigation.

2.4 E-Learning through E-mail communication (RQ3)

2.4.1 E-learning: A Fashionable Mode of Learning

Learning is not the sole domain of any education system, whether schools or universities. Learning occurs parallel with traditional formal education in many platforms including computer mediated communication. Thurlow et al. (2003) argue:

“There is no doubt that those of us who are involved in education are facing the management of change. With the expansion of computer technology, we are witnessing dramatic changes in teaching and learning which, on the one hand, can be exciting but which, on the other hand, can be threatening and unsettling to the teaching profession. Will the internet, we ask ourselves, lead to a radical transformation of learning or merely to a better and different ways of doing the same things? How can we best help our students to engage with a force that is clearly significant in their present and future lives? Even if the computer is ‘just a tool’, how might its capacities alter the way that we interact with each other?”

(Thurlow et al., 2003: 9)

E-learning⁷⁹ has brought about a new fashionable system of education offering opportunities for ‘deep’ rather than ‘surface’ learning, Thurlow et al., (2003) explain :

“We are confronted here with an opportunity for ‘deep learning’, for a radical transformation of learning about ourselves, about others, and about the world we live in. In response to this opportunity we have set out to develop teaching and learning strategies which focus on a critical awareness of CMC as a powerful force in everyday social interaction.”

(Thurlow et al., 2003:11)

Thurlow et al., (2003) suggest that it is preponderant to encourage, on the one hand, students to adopt CMC different platforms in the learning process⁸⁰ and, on the other, invite teachers to propose effective teaching and learning strategies which can be incorporated through the use of computers into their teaching. However, finding the most effective ways of using computers for learning remains a challenge.

Thurlow et al., (2003) observe that many teachers manifest lack of stimulation towards the adoption of e-learning environments. This state of affair is attributed to two main reasons. Thurlow et al. (2003), suggest that the first reason is supported by the fact that many teachers, understandably, are afraid of ‘*the collaboration spirit between the teacher/learner dichotomy*’ CMC environments are offering; many of them find it hard to relinquish their perceived authority, something which can be exploited to create an

⁷⁹ E-learning is a process where the different CMC platforms can be used to engage in or/and promote learning and teaching environments.

⁸⁰ Thurlow et al., (2003: 10-11) argue: “*Part of the exploration of a changing social landscape requires us to revisit our role as educators. For example, teachers who are trained in linear writing need to learn how to value multimedia expression. Educationalist Gunther Kress (2003) reminds us that ‘the world shown’ is a very different world from ‘the world narrated’. Even the meaning of the term ‘literacy’ is being subverted by the dominance of the visual image in our students ‘lives. Students who cannot remember a single quotation from a canonical book have little trouble at all in ‘reading’ film text and understanding concepts like ‘genre’ and ‘iconography’. Their visual literacy often leaves us in the shade. Discussions surrounding ‘computer literacy’ in the 1980s and 1990s (focusing on practical skills like word-processing) have been dislodged by the growing realization that we need to ask our students to engage differently and much more critically with communication technology and to start getting them to ask some difficult questions.*”

exciting synergy in the learning process⁸¹. The other reason shows how much it is difficult, for a considerable number of teachers, to make use of CMC to support the teaching process, Thurlow et al. (2003)., put it as follows:

“Those who qualified to teach more than a few years ago may often had little or no training to incorporate the use of computers into their teaching, and many will have had ‘hit and miss’ experiences finding out what ‘works’ and what ‘doesn’t work’ in the classroom.”

(Thurlow et al., 2003: 9)

Levin & Arafeh (2002) are of the same opinion:

“The Digital Disconnect, a 2002 report by the Pew Internet American Life Project on middle and high school students, states that ‘educators often don’t know, don’t want or aren’t able to use online tools to help [students] learn.’”

(Levin & Arafeh, 2002: iii-iv)

I, along with many other language instructors, believe that traditional and online teaching are interdependent because of our changing society that is imposing on us adaptation at all levels including education.

⁸¹ Thurlow et al., (2003:10-11) notices that: *“Contrary to the traditional model of stand-up-in-front-and-talk (the ‘sage on the stage’ syndrome), teachers in classroom using communication technology will often find a dramatic change in classroom dynamics. The power shifts incontrovertibly and we are required to re-examine our attitudes to risk and control. The instructor in the CMC classroom does not always know better. More than a few of us will no doubt have experienced occasions when our students knew more than we did about the potential of the computer. An essential spirit of collaboration between teacher and learner in the computer classroom often means that the teacher also becomes the learner.”*

2.4.2 E-Learning Communities

Parallel to the notion of virtual communities and online social communities, a learning community is defined by Bielaczyc & Collins (1999: 271) as: “*a cohesive group which embodies a culture of learning in which everyone is involved in a collective effort of understanding.*”

According to Tinto (2003), there exist three elements which can be described as necessary to form a learning community: mutual engagement, shared repertoire and joint enterprise. Sherry et al. (1998), consider that the collaborative work carried out in a learning community develops a common ground of knowledge,

This study considers that the use of e-mail communication for language learning purposes by CMC users can be seen as a process which promotes the creation of an e-learning community mediated via e-mail communication.

2.4.3 E-mail: An Opportunity for Language Education

Online education can be seen as a virtual classroom that is at one's fingertips; it is a real-time accessible world for any language learner or teacher⁸². Salaberry (2001) insists on the need for a clear understanding of the virtual classroom by focusing on pedagogical concerns in CMC investigations.

This study is designed to examine the ways in which the use of e-mail situations might provide a supporting terrain for foreign language learning; in this case we are dealing with English. It is therefore important to highlight the scholarly community's vision regarding English/language education through CMC and most precisely e-mail communication.

⁸² In recent years much has been written about the Internet and its applications in the EFL classroom. Teachers interested in this area now have a number of sources from which to get practical ideas. Windeatt et al. (2000) and Teeler (2000) both provide practitioners with a wide range of 'recipe' type lessons for all levels of language learner. With *Internet English* (Gitsaki & Taylor, 2000) we see the emergence of an EFL course book focusing on the English needed to talk about the Internet and to conduct tasks on the Internet.

2.4.4 How good E-Mail is for Language Education?

Berman (2006) relates Crystal (2001) and Warschauer (1999), who both think of e-mail as an opportunity for language education rather than a threat:

“E-mail will then take its place in the school curriculum, not as a medium to be feared for its linguistic irresponsibility [...]but as one which offers a further domain within which the children can develop their ability to consolidate their stylistic intuition and make responsible linguistic choices”

(Berman, 2006: 3)

Research has demonstrated that e-mail has been explored by some language instructors in innovative ways and most results agreed upon its efficacy. E-mail is good enough for language education because:

E-mail	Technicalities
	<ul style="list-style-type: none"> ✓ is flexible ✓ has low costs ✓ rich in communication
	The learning process
	<ul style="list-style-type: none"> ✓ afford a fluid learning process • has been hailed as a potential solution to the problem of access to native speakers for second and foreign language learning.
	Teachers
	<ul style="list-style-type: none"> ✓ can be used easily even by teachers intimidated by computers. ✓ can help teachers become adept at using e-mail with their students.
Learners	
<ul style="list-style-type: none"> ✓ encourage students to use computers in a realistic way. ✓ encourage students to use computers in authentic situations. ✓ help students develop communicative skills. 	

- | |
|--|
| <ul style="list-style-type: none">✓ help students develop thinking skills.✓ can be used easily even by timid or inhibited students.✓ provides a sense of connectedness |
|--|

Figure 2.7: E-Mail's Advantages for Language Education

(Source: Hampel & Hauck 2004; Kötter 2001;

Wang & Sun 2000; White 2003, and others)

Electronic mail and CMC have helped second and foreign language learners to foster their feeling of inclusion and belonging to the target language's world on a scale that was never possible before. Here is some literature which describes how e-mail communication can be managed to achieve leaning incomes in situations where English is used as a second or a foreign language.

2.4.5 E-Mail: An Opportunity for Language Learning

As discussed previously, e-mail on the Internet allows language learners to experience learning and be able to communicate with native speakers of an unlimited number of languages. Wang & Chen (2007) suggest that E-mail can help foster vital learning communities in second language instruction.

In this manner, e-mail facilitates the learning of English for second and foreign language learners in a parallel way. It can also be used to ensure the reception of different English language resources for a variety of purposes⁸³. Such experiences can allow learners to participate in the culture of the target language⁸⁴.

In fact, Learning English through e-mail is a challenge for non-native speakers. Anderson & Garrison (1998) suggest that interacting only with learning materials in CMC learning settings is not enough. Quality interactions⁸⁵ between teachers and learners and

⁸³ For example, students can obtain through e-mail exchanges linguistic, historical, social, cultural, economic, political, and even geographical information from people living in the countries in which the target language is spoken.

⁸⁴ See Armstrong & Yetter-Vassot (1994).

⁸⁵ Wang & Chen (2007: 336-337) argue: "In the area of second language learning, interaction is commonly regarded as an integral part of a communicative language learning process (Gass 2003; Hall 1995; Lantolf 1994; Long 1996; Mitchell and Myles 1998; Ohta 1995; Swain and Lapkin 1995; Vygotsky 1978).

among the learners themselves are the key factors for successful learning (Anderson & Garrison 1998; Spencer & Hiltz 2003).

Tella (1992) conducted an interesting study on high school students in Finland and England. He studied the effects of a semester-long exchange between these students via e-mail. His results showed instances of collaborative learning for reading strategies and language production. Tella's findings (1992) offered key issues for foreign language teachers in the England, namely, explaining how e-mail and CMC provides real opportunities for learner autonomy and help develop students' intercultural learning.

Davis & Chang (1994), on the other hand, concluded a number of surveys and informal case studies of student writing during e-mails that for the majority of cases students' writing had improved in both fluency and organization. Their findings indicated also that students had a better understanding of English usage. Davis & Chang (1994) confirms that without a doubt e-mail can foster authenticity of the communication process and can help learners be aware of the languages they are learning.

Kroonenberg (1995), for example, employed e-mail in her English Second Language (ESL) classes at Hong Kong International School. Her findings support Davis & Chang's results (1994) in the sense that e-mail can provide authentic communication opportunities for ESL learners.

However, Salaberry (2001) suggests that most research focusing on the pedagogical aims of using CMC concentrates more on the technical aspects of the technology neglecting pedagogical purposes that lie behind such usage.

Central to the communicative approach is the notion that language is a tool for social communication and interaction. Extended from this notion, the characteristics of this approach can be summarized as follows:

- *an emphasis on using language for social interaction (Richards, Platt, and Weber 1985, 48),*
- *an emphasis on learning to communicate through interaction in the target language (Nunan 1991, 279),*
- *the introduction of authentic texts into the learning environment (Nunan 1991, 279; Balet 1985, 178-179),*
- *a focus not only on language but also on the language learning process itself (Nunan 1991, 279), and*
- *an emphasis on learning a second language as the mother tongue has been learned—that is, by using it in real-life situations (Balet 1985, 178-179). These principles are equally important for successful online language learning, and they require a pedagogy that incorporates synchronous forms of communication as well as asynchronous forms of communication”.*

Research on e-mail communication and its use in language learning has also questioned the domain of E-mail advising. As a matter of illustration, Altshul (2001) undertook a pilot project at the University of Sanford where he questioned the facilities offered by the technology to advise students and getting them to submit work electronically especially in cases when students are unable to get in touch with the professor. According to Altshul (2001), e-mail has not only proven its efficacy as a tool for the delivery of English courses but also demonstrated capacity for advising.

'The Tic-Talk Project' is a project which was proposed to investigate whether regular and structured use of email may help enhance learners' study of the French and English in four countries (Belgium, England, France and Senegal) with regard to developing learner autonomy and intercultural understanding (Fisher, 2004) . Results demonstrated a high level of response and cooperation from the part of the different learners.

With these issues and results in mind, the present project will hopefully try to cover some of the concerns described above but with reference to the Algerian context.

2.5 Chapter Summary

The purpose of this chapter is to give a theoretical background to this study. I have tried to survey and review major existing studies which are relevant to the various themes of RQ1, RQ2, and RQ3.

The most important literature has shown that the nature of e-mail discourse is principally not settled. December (1996) argues that there is no need for CMC researchers to get wrapped in splitting hairs about what CMC language is and what it is not. What should be worth studying is the observation of language change phenomenon. For the time being and for the purposes of this research, I will be rather cautious and keep neutral towards the different research findings that have been exposed. I will rather try to investigate e-mail communication in Algeria empirically and relate my findings to previous research.

As far as RQ3 is concerned, each of the highlighted studies, in the previous sections, has contributed to our knowledge of the pedagogical impact of e-mail use in second and

foreign language learning contexts. However, Kitade (2000) observes that the interactional features of language learning in online environments are being neglected, and recommends further research into how native and non-native speakers interact through CMC. In order to better understand how e-mail may be used for language learning, it is necessary to investigate the various characteristics of ED.

In the next Chapter (Chapter Three), I shall outline methods of data collection and analysis destined to best investigate key issues of the research questions.

Part Two

**Research
Methodology
and
Findings**

CHAPTER THREE
**RESEARCH
DESIGN
AND
DATA
COLLECTION**

Chapter Three: Research Design and Data Collection

3.1 Introduction

This work raises a number of practical and scholarly questions, ranging from the distinctive linguistic features of ED with specific concern to language use and language attitudes to ED and its probable role in creating and promoting an English e-learning Environment in Algerian universities. The present chapter gives orientations about HOW research is going to be conducted. It is structured as follows:

- The first section- *Issues in Corpus Design* – outlines general issues related to corpus design and the general plan for the research are exposed.
- The second section - *Case Research Methodology*¹- will delineate the research strategy and design chosen to best achieve the objectives of this study .

3.2 Issues in Corpus Design

3.2.1 A Threefold Research: What Data for Which Questions?

In defining the questions, aims and objectives which guide this piece of research, I felt a necessity to use three different data sets. Firstly, data observing the linguistic behavior of 167 young Algerian university students of English when writing E-mails (the aim is to investigate research question one). Secondly, data observing language attitudes of a sample of English university students of English towards e-mail communication (the aim is to investigate research question two). Thirdly, data investigating the attitudes of young Algerian university students of English towards perspectives of promoting English language use in Algerian universities through Internet communication-mainly through E-mail exchanges (the aim is to investigate research question three).

3.2.2 Research Instruments

In the present work, online language diaries are the research instrument used to approach the analysis of the e-mails from a structural point of view. Within this part, the

¹ In Case Research Methodology section, the researcher will expose the methods used empirically to test the research hypotheses with detailed descriptions of the main research tools and data collection process.

structural reality² of this language will hopefully be depicted by trying to consider the standard and non-standard features of e-mail language and question its 'novelty'.

The interview will be used as a research instrument to inquire language attitudes³ towards the use of non-standard features in the e-mails.

To approach research question three, the researcher will make use of Questionnaires: a research tool used to consider perspectives of promoting English language use (English language learning) in Algerian universities through spurring learners of English to adopt pedagogical activities in a virtual setting that is e-mail exchanges. This will hopefully be achieved by:

- Investigating the attitudes of students towards perspectives of promoting English language learning in Algerian universities through creating and designing activities via Internet communication-mainly through E-mail exchanges.
- Calling students to propose activities which best suit their expectations and their different learning styles.

To sum up, data will be gathered from three major sources: texts of e-mail messages, interviews, and questionnaire surveys. Methods of this research are varied but analytically purposeful and each of them complements the others to a certain extent.

Drawing from the above data, the main research dimensions of this investigation are exposed in Table 3.1

² Structural analysis will be concerned with investigating the way e-mail language is 'invented' i.e. its textual features.

³ Language attitudes: An attitude towards e-mail language-which is essentially a written medium of communication- is conceptualized to be the extent to which an individual views e-mail language to be a desirable practice that is not violating norms of written language (Luna & Perracchio, 2005b).

Dimension of study	Description
Theoretical assumptions	<ul style="list-style-type: none"> ⇒ Reality can only be approximated ⇒ Knowledge is constructed
Area of inquiry	<ul style="list-style-type: none"> ⇒ Cross-disciplinary involving information technology, linguistics, sociolinguistics
Purpose of inquiry	<ul style="list-style-type: none"> ⇒ To identify the general linguistic features of e-mail language ⇒ To identify aspects of code switching in the corpus ⇒ To seek greater understanding of the linguistic nature of e-mail language (spoken/ written/ hybrid)
Object of inquiry	<ul style="list-style-type: none"> ⇒ E-mail texts
Acquisition of knowledge	<ul style="list-style-type: none"> ⇒ Discovery of knowledge through interpretations ⇒ Extrapolation of findings to similar cases
Positionality of researcher	<ul style="list-style-type: none"> ⇒ Non-participation in composition of e-mails ⇒ Active interpreter of results through data analysis
Choice of data types	<ul style="list-style-type: none"> ⇒ Quantitative & qualitative data extrapolated from e-mail texts ⇒ Qualitative data from the interview's data ⇒ Quantitative & qualitative data from the questionnaire's data.
Presentation of research	<ul style="list-style-type: none"> ⇒ Interpretation of results from e-mail texts, interviews data and responses to the questionnaire.

⇒ Data reduction with descriptive statistics and graphical representations.

Table 3.1: General Dimensions of the Study

In each of these parts of research, the aim is to seek “genuine knowledge”⁴ through experimentation.

3.2.3 Research Methodologies in the Field of Computer-Mediated Communication

Much research in the area of CMD is based on small ad-hoc data sets. There is clearly a lack of standard guidelines for CMD corpus design and a lack of publicly-available CMD corpora (Beißwenger &Storrer, 2008). Androutsopoulos & Beißwenger (2008) argue:

“In terms of methodology, language-focused research on CMD has drawn on methods and key concepts from a variety of research traditions in linguistics (including pragmatics, conversation analysis, sociolinguistics, genre analysis, and the ethnography of communication), which have been applied fruitfully to study how individuals use linguistic resources to establish contacts, manage interactions, and construct identities within computer networks”

(Androutsopoulos & Beißwenger, 2008:14)

3.2.3.1 Quantitative versus Qualitative Framework of Study

There are two broad categories of research with which researchers undertake their investigations: quantitative versus qualitative methods. In many sociolinguistic studies,

⁴ Historically, most research efforts in the natural and social sciences were based on objectivist epistemology; reflecting the view of logical positivism (a term popularized by August Comte) which assumes that “ *Only verifiable claims based directly on experience could be considered genuine knowledge*” (Patton, 2002: 92)

researchers combine quantitative and qualitative methods⁵, since the two methods fill different functions⁶. Johnstone (2000) explains:

“The analysis phase of sociolinguistics research is often quantitative as well as qualitative. This means that analyzing sociolinguistic data often involves some counting , explicit or implicit, in order to answer questions about how often things happen, in addition to the descriptions that help answer qualitative questions about how and why things happen”

(Johnstone, 2000:37)

Research methodologies in the field of computer-mediated communication are quite diverse. Both qualitative and/or quantitative approaches are adopted. Here, in table 3.2, they are explained thoroughly

⁵ According to Pontes (2007: 16):*“In sociolinguistic research, various methods of research may be employed. One approach is to investigate, for example, how often particular linguistic phenomena occur in, for example, a set of interviews. This type of approach, where the results typically come in the form of statistics including numbers and percentages, is called a quantitative method (Johnstone 2000). A different approach involves analysing the data qualitatively, in order to reveal interesting issues behind the statistics. In a qualitative sociolinguistic analysis a researcher may discover additional information about how certain aspects of language are used and why.”*

⁶ Jones (2010) argues that both qualitative and quantitative methodologies can be employed by the researcher in an attempt to balance subjective and objective views of the topic.

Areas of Differences	Quantitative Research	Qualitative Research
Purpose of inquiry	⇒ Explanation of observed phenomenon ⇒ Hypothesis testing and refinement	⇒ Understanding of observed phenomenon ⇒ Emergent theory development
Role of investigator	⇒ Objective observer ⇒ Active manipulator of experimental setting	⇒ Active interpreter ⇒ Participant observer in naturalistic setting
Acquisition of knowledge	⇒ Use of quantitative, numerical data ⇒ Construction of knowledge, explanations of models ⇒ Generalization, theory building from results	⇒ Use of loosely structured textual data ⇒ Discovery of knowledge as interpretations ⇒ Extrapolation, theory building from results
Presentation of research	⇒ Data reduction using graphical visualization methods	⇒ ‘thick’ interpretations of results using quotes from data

Table 3.2: Dimensions of Quantitative and Qualitative Research

(Source: based on Sudweeks&Simoff, 1998: 33-36)

However, the research method followed in this study combines qualitative as well as quantitative approaches, since the data chosen for analysis is in the form of messages, which require initial quantitative analysis that in turn serves as a basis for further investigation and discussion within a qualitative paradigm.

“The need for varying degrees of interpretation as well as some breadth yet at the same time depth of knowledge led to the combination of quantitative and qualitative methods in tackling the research question with the aim of producing a richer more

complete description of the phenomenon than would be possible by a single paradigmatic approach. However as Yardley and Bishop (in press) note, “it should never be assumed that the insights derived from these methods will necessarily converge”. They offer the term “composite analysis” to encapsulate the way in which separate findings from different methodological approaches can be integrated with the “potential to yield complementary insights” generating a whole greater than the sum of its parts.”

(Benford, et al., 2008: 06)

I believe such an approach- the “composite analysis” approach - to be feasible and appropriate for the study of the language of e-mails in Algeria, in spite of reservations over the use of combined research paradigms.⁷

3.2.4 Case Research Methodology

For greater understanding of the linguistic properties of e-mail language, this study has recourse to one of the major research approaches in social sciences⁸. Case studies research methodology fits with this study theoretical positions that entail examination of phenomenon in natural settings. Sudweeks&Simoff (1998) regard case research approach as:

“Research in which the researcher has direct contact with the participants and the participants are the primary source of the data. It follows, then, that the primary methods used in case research are interviews and direct observations”

(Sudweeks&Simoff, 1998:35)

⁷ See Creswell, (1994: 7-8).

⁸ There are other approaches in social sciences like experiments, histories, archival analysis, and surveys (Yin,1994)

Additionally, Benbasat, Goldstein and Mead (1987) suggest that case research approach could be useful when there is a lack of strong theoretical basis for the topic investigated or when little is known about the phenomenon⁹.

This thesis defines case research approach as a process of inquiry involving the examination of “*a phenomenon in its natural setting, employing multiple methods of data collection to gather information.*” (Benbasat et al., 1987: 370).

3.2.5 The Sample

“*One of the important tasks for a researcher is selecting settings and negotiating access to the participants*” (Steyn&Vna Wyk, 1999:38). The study population for RQ1, RQ2, and RQ3 (for the learners) consists of first and second year Algerian university students of English , who are studying and doing research at the University of Oran¹⁰ - department of English. Data is collected from a sample of young Algerian users of e-mail communication. The sample is not chosen at random, but purposefully: the participants have to fit certain conditions:

- **Bi-literate subjects:** The subjects were at the very least bi-literate with ‘full’ literacy in the national language of education (Classical Arabic) and also varying degrees of literacy in French, in addition to a perfect mastery of the variety of Algerian Arabic spoken in the sub-speech community of Oran (namely recognised as Oran Spoken Arabic (ORSA)). As they all studied Classical Arabic (for a minimum of 9 years), French (for a minimum of 9 years), and English (for a minimum of 6 years) throughout the different school instruction levels (the primary, fundamental and secondary schools), the subjects are supposed to be in a position to use these languages as a medium of communication in e-mail messages if they choose to.

⁹ In the library of the University of Oran –My professional home, I did find nothing related to my research. I tried also to research the topic using the different Internet research engines but nothing has been found as far as the Algerian context is concerned. This does not mean, in anyway, that Algerian researchers did not approach the topic. The problem, however, lies in the fact that most scientific production made by Algerian scholars or experts is not electronically published and getting access to it is, for most cases, impossible.

¹⁰ The participants were recruited on a voluntary basis from the University of Oran which is located in Oran City and considered as one of the ‘best’ universities in the region.

- **Falling under the same age brackets [17-22]** : Age is taken into consideration as a criterion of demarcation between the informants. The participants for this research are rather young. This is done on purpose because I believe that the present age group can be considered as the ‘core’ group of people who are the most likely to perform e-mail communication¹¹. According to NetValue (2001b), the age group 15-24 accounts for the highest percentage of Internet users in the world (41.8%), followed by the group of 25-34 (26.7%). This certainly indicates that the youth constitutes the majority of Internet users in the world.
- **University students:** The rationale behind deciding that the sample for the research would be drawn from students in higher education comes from :
 - First, my assessment of their needs and opportunities. Most Algerian university students communicate publicly and privately and that would make it seem likely that they would need to access communication through e-mail communication. They are also the group that can be seen to be spearheading communication in all other networks of globalization mainly Internet communication (chat and instant messaging).
 - Second, the fact that there was no other alternative in the sense that the researcher did not succeed in collecting data from young Algerians belonging to other social affiliations (i.e., not necessarily university students¹²).
- **English students:** The rationale behind choosing this sample is twofold:
 - This population is of natural interest to me and readily accessible as I have been teaching in the Department of English for about 5 years. Most of the

¹¹Green (2002: 02) observes: “*With greater access to technology than ever before, today’s youth are coming of age with the rapid growth of the Internet and global adoption of mobile phones and other wireless devices. Social connection and communication have always been of fundamental importance to teenagers*”. Li (2007:01) adds further: “*In the past few decades, various modes of CMC have been gaining popularity among youngsters (Fujii & Baron, 2005).*” In fact, the significance of this group as a consumer group is perhaps more pronounced than ever.

¹² See Part two, Chapter two: The Pilot Study Section.

students, if not all, have been my students and getting data from them was not a hard task¹³.

- The 'English student' variable was preponderant for RQ3 that is offering a pedagogical dimension to this research.
- **LMD¹⁴ students:** At the time of the study, the population from the Classical System was not representative: I did find no first year students and only few second year students.

3.3 The Online Language Diaries

This section proposes the research protocol for RQ1 which will test hypotheses using data obtained from E-mails provided by a sample of young Algerian university students in the discipline of English from University of Oran.

3.3.1 Recalling the Research Question

3.3.1.1 Problem Statement

RQ1: *WHAT* are the linguistic practices used by young Algerian university students of English in writing their E-mails? Does English figure out on the list?

From RQ1 emanates the following sub-problems:

- 1) What are the main constraints that shape this 'new' linguistic form of communication?
- 2) Is English used by young Algerian university students of English when exchanging messages via e-mail communication?

¹³ Being accessible to me, I could ask them for their e-mail addresses, full names and even phone numbers without fearing refusal as I am part of the teaching staff of the department. In fact, these information (names and phone numbers) were, later on, used for the follow-up interview data collection process to get in touch with the interviewees who were inaccessible to me (see Part two, Chapter two: Stage I and Stage II).

¹⁴ LMD stands for Licence-Master-Doctorat. It is a new process of education which has been implemented since 2004 in most European and Algerian universities-including the University of Oran- for the purpose of uniformising the educational system all over the world. It is a universal system which offers to Algerian graduate and post graduate students the opportunity to pursue research abroad without fearing the non-validation of their degrees.

3.3.1.2 Hypotheses

I propose the following hypotheses which will be tested in the course of this research.

- *Hypothesis one:* Unconventional spelling could be found as one of the textual properties of the e-mail corpus.
- *Hypothesis Two:* English use will probably be relevant and considerable.

3.3.2 Data collection procedure

3.3.2.1 The Research Tool

Witmer *et al* (1999:146) point out that “*on-line research demands methods specific to the medium*”. In this study, online language diaries are used to investigate the textual features of the e-mails and look at aspects of English language usage within this corpus¹⁵.

3.3.2.2 The Pilot Study

In the first stages of the data collection process, the researcher asked for the support of some of the colleagues, friends, members of the family, and even former students who generously accepted to send the online language diaries to the participants and ask them to return data to an electronic address (lmdphoneticslinguistics@hotmail.fr). This latter was created purposefully by the researcher for the sake of this research i.e., to gather data from the participants.

3.3.2.3 Procedure

Following a protocol commonly used elsewhere in the world (e.g. Herring 2001, Crystal, 2001; Anis, 2007) when analyzing textual features of e-mail messages, I and my research partners sent online paper diaries¹⁶ to male and female participants. The

¹⁵ This work is about study of text (discourse in the form of written captured *in situ* by means of the online language diaries) not talk (discourse in the form of spoken language).

¹⁶ Online diaries (or online language diaries) are instruction sheets given to students who accepted to offer their e-mails for investigation. This text-based form of data collection will provide the researcher and the reader with more tangible evidence of the language used and observed, and draws our attention to how this kind of language use changes continually. The online – electronic- mode of data collection, on the other hand, will be implemented to ease the burden on participants, thus encouraging a better response rate.

participants were asked to record only one email message¹⁷ they sent over the past twenty-four-hour period.

In the course of this textual data collection, the following criteria had to be satisfied:

- Each sample message should be:
 - one-to one exchange i.e. only two participants are involved ;
 - asynchronous i.e. sent to someone who was not supposed to answer it immediately after reception¹⁸.
- Because up to now, no devices are available to researchers that allow the direct capture of e-mail texts, I and my research partners instructed participants to copy the e-mail text literally.

The online language diaries have also offered data concerning demographic information of participants (gender, age), their level of education, their linguistic competences, and their identities for those who did not mind to give them¹⁹. The instruction part of the online language diaries was written in 'simple' French to overcome misunderstandings.

Table 3.3 and Table 3.4 summarize data obtained from Stage I and Stage II of the Pilot study which was unexpectedly of no benefit for the data collection process.

¹⁷ I did not ask for more than one e-mail message because I wanted them to easily be able to fill in the online diary.

¹⁸ I did this to exclude any possibility of dialogic exchanges and this to confirm asynchronicity of the media.

¹⁹ See a sample of the online language diaries in Appendix one.

		The participants					
Stage I = Failure	Data provided by	Region	Age brackets	Level	Number of participants (total number : 162)	Results (in terms of data collection: 13)	Observations
	A colleague	Sétif	17-22	No distinction	45	9	Most of the data collected was unnatural.
	A member of my family	Algiers	17-22		31	1	
	A former student	Bechar	17-22		45	3	
	A friend	Tiaret	17-22		25	0	
	The researcher	Oran	17-22		16	0	

Table 3.3: The Pilot Study, Stage I

		The participants					
Stage II = Failure	Data provided by	Region	Age brackets	Level	Number of participants (total number : 133)	Results (in terms of data collection: 19)	Observations
	A colleague	Setif	17-22	University students from The English Department	31	0	Most of the data collected was to a great extent natural.
	A colleague	Blida	17-22		25	2	
	A former student	Adrar	17-22		37	0	
	The researcher	Oran	17-22		40	17	

Table 3.4: The Pilot Study, Stage II

As a result to data obtained from the pilot study- Stage I and Stage II, it was found that the online language diaries collection process was unsuccessful during Stage I and Stage II. This happens mainly due to the fact that e-mail text collection is technically a complex form of data collection. In fact, e-mails sent from one computer to another are difficult to collect because the process requires the collaboration of the sender.

In order to fill this gap [the collaboration of the participants during data gathering], I have tried, during Stage III, to organize an online collection of data but after ensuring the participants' consent.

3.3.2.4 Ethical Issues

To address ethical issues²⁰ inherent in any research work, careful consideration should be given to the research topic, the needs of the participants and the method of data collection.

In fact, e-mail users' group selected for the study display characteristics of private communities.

*“Private communities are recognized as ‘public’
participants who can (and do) engage in ‘private’
forms of interaction”*

(Waskul & Douglass, 1996: 132)

To determine the private/public nature of CMC communities, king (1996:126) argues that *privacy* is “The degree to which group members perceive their messages to be private to their group”

²⁰ Ethics in research refers to the obligation and accountability of the researcher to both the individual participant and society as a whole (Bromseth, 2002). According to Marczyk et al., (2005:233), ethical principles “are intended to ensure that researchers consider all potential risks and ethical conflicts when designing and conducting research. Moreover, these principles are intended to protect research participants from harm (Sieber & Stanley, 1988).”

Within this environment, however, we are in a moment in which ethical responsibilities of the researcher have to be delineated. As Jacobson claims, when carrying out research on CMC, the researcher must be aware of “*the identifiability of human subjects, the conceptualization of privacy, and difficulties associated with obtaining informed consent*” (Jacobson 1999:139).

In fact, ethical decisions in this study were governed by a set of guidelines referring mainly to what is known as *Informed consent*. Ryen explains *Informed consent* as being a process whereby

“Research subjects have the right to know that they are being researched, the right to be informed about the nature of the research and the right to withdraw at any time

(Ryen, 2004: 231)

In response to the ethical concerns raised, the following actions and principles were implemented:

- 1) Informed consent was obtained from participants by asking them to agree²¹ provide their e-mails for investigation. Although informed consent could be obtained prospectively or retrospectively (Eysenback&Till, 2001), I decided to ask participants’ consent before the conduct of the study²². I did this because I believed that since participants were not obliged to give out their data, the problem of unnatural data could be eliminated.

²¹ “... Regulations governing the rights of the research subjects do not specifically address the issues raised by new media. These regulations are typically implemented by universities and other research institutions. For example, the Michigan State University (MSU) University Committee on Research Involving Human Subjects offers the following statement as part of its policy: “Every person has the right to determine what shall be done to him or her, what activities he or she shall engage in and what risks he or she will take. Consequently, research on human subjects cannot be carried out without the subjects’ competent, voluntary, and informed consent. (www.msu.edu/user/ucrihs).” (Levine & Scollon, 2004:148).

²² According to Levine & Scollon (2004: 148): “The conventional wisdom suggests that participants must consent before the research begins”.

- 2) The email address for online language diaries data collection process was separate to the researcher's personal account, and had an impersonal username.

3.3.2.5 Authenticity and Relevance

To ensure also authenticity and relevance of the data collected, I attempted to record only one e-mail to facilitate the process of data collection and analysis and to avoid the occurrence of mistakes²³.

The collection of one e-mail text per participant has passed through the following dynamics. First, I started getting consent from participants. They were, in fact, invited to attend a meeting²⁴ at the University of Oran-Department of English (my professional home) to explain the online data collection procedure²⁵. During the meeting, the researcher asked for the consent of the students to provide their e-mails for the research and explained how online language diaries should be filled²⁶. The researcher further asked those who agreed²⁷ to participate in the investigation to provide their e-mail addresses so that the researcher can send them the online paper diaries to be completed and sent back to the researcher²⁸.

²³ Here I am referring to mistakes made by e-mail writers if they do not copy correctly word –for-word the e-mails. In fact, during the meeting, some of the first year LMD students –mainly female students, were unable to fill the language diary electronically; so, I proposed to them to copy the e-mail message word-for-word in a printed language diary I gave it to them before they left the meeting.

²⁴ For the researcher the meeting was destined to ensure the data collection process. For the student, the meeting is a lecture entitled: "How to undertake research in linguistics: perspectives and practice". During the meeting/lecture the researcher explained how scientific investigation is undertaken by the linguist and proposes to the students to be involved in the researcher's investigation as a practice activity for what has been discussed within the meeting/lecture.

²⁵ I expected more than 167 students to attend the meeting.

²⁶ In addition to an oral presentation, It was made clear on Information Sheet n°1 (see Appendix one) how participants should proceed to fill in the online language diaries and to what extent their participation will be on a voluntary basis and may be withdrawn at any time and without giving a reason. The researcher promised that all the participants' real names will remain protected through anonymity and that the transferred e-mails will be kept securely on a stand-alone home computer. Through the steps outlined above, the researcher sought to overcome the issues of privacy, inaccessibility and inconvenience cited by Yates (1996:30).

²⁷ In this study the fact that the subjects were asked to volunteer to receive the online language diaries was mainly destined to improve the rate of response. The participants were provided with Information Sheet n°2 (see Appendix one) where they can write their e-mail addresses to confirm consent.

²⁸ Douglas Harper has argued that the "...new ethnography asks for a redefinition of the relationships between the researcher and the subject. The ideal suggests collaboration rather than a one-way-flow of information from subject to researcher" (Harper, 1998:35).

After that, I began gathering data from the informants electronically or online by receiving data via the following electronic address imdphoneticslinguistics@hotmail.fr²⁹. Data gathering process took approximately 4 months- from January 2012 until April 2012.

3.3.2.6 Time management

The data was collected from January 2012 until April 2012. A total of 57 out of 167 students sent their e-mails to an electronic address³⁰ provided by the researcher during a meeting hold with the participants before the beginning of the data collection process.

3.3.2.7 Amount of Data

The process of data gathering ended up with a total of 57 e-mail messages out of the 167 expected e-mail messages³¹. In terms of the amount of data to be collected, it is important to consider the nature of e-mail communication. E-mail exchanges constitute a continuous means of communication which is available to the user 24 hours/ 7days – as long as the computer is switched on and Internet connection is available. Therefore, there has to be some sort of limit as to how much data should be collected³². Although this means that a limit on the amount of data collected could result in a limit in the amount of data available for analysis, I believe that whether to obtain one thousand of e-mails or one hundred of e-mails, the one hundred data may indeed be no less limited in terms of scope for analysis than its larger counterpart³³.

²⁹ For those students who preferred the printed version of the language diaries, I did receive nothing from them.

³⁰ imdphoneticslinguistics@hotmail.fr is created purposefully by the researcher for the sake of this research; it was first used during the pilot study and then reused for Stage III of online diaries data collection process.

³¹ Not all the participants, who offered consent (167), have sent back the online language diaries despite the fact that enough time was reserved to this research step (Data gathering process took approximately 4 months- from January 2012 until April 2012)

³² I have asked only for one e-mail and this because I was afraid to lose the participants' collaboration. Biber (1998) argues - “ *The size of a corpus does not relate exclusively to the number of words but also to —the number of sample texts from different categories and the number of words in each sample*” (Biber 1998: 249).

³³ Rulík (2006) suggests that it is a matter of fact that many linguistic features can be objectively analyzed on a relatively small text samples. Biber (1990, 1998) finds that counts are relatively stable across 1,000-word samples from a text. The present corpora reach nearly 900 words whereby approximating the specified requirements regarding the overall size of a corpus.

		The participants			Number of participants (total number :	Results (in terms of data collection:	Observations
Stage	Data provided by	Region	Age brackets	Level			
III = Success	The researcher	Oran	17-22	University students from The English Department	167	57	Most of the data collected was to a great extent natural.

Table 3.5: The Pilot Study, Stage III

The following tables summarize demographic data as well as linguistic backgrounds of the participants collected from data provided by the online language diaries.

Age	17	18	19	20	21	22
Out of 57 informants	19	21	13	2	2	0

Table 3.6: Demographic Matters

(Source: Online Language Diaries)

Languages in Algeria							
	Classical Arabic (CA)	French (Fr)	Berber (Br)	Algerian Spoken Arabic (ORSA)			
Out of 57 informants	Yes , I write it	Yes , I speak it	Yes , I write it	Yes , I speak it	Yes , I write it	Yes , I speak it	57
	57	33	57	57	0	3	

Table 3.7: Linguistic Matters (Degree of Competence in Languages)

(Source: Online Language Diaries)

3.3.2.8 Data processing

Since there were no prior textual analysis of Algerian e-mail texting, that I was aware of, my first goal was to start mapping the territory. I knew to look at the standard landmarks: message length-in terms of characters numbers and words numbers and how many sentences there were per text transmission. But there were other linguistic features that intrigued me as well. And so I also analyzed different sorts of lexical shortenings, and also the written-like language features versus the spoken-like language features, together with the use of code mixing in these texts. Some of the overall details of punctuation will be also expected for analysis (use of question marks, periods, dashes ...etc).

The data is, then, analyzed both using quantitative (percentages calculated and represented in the form of charts and graphs) and qualitative (interpretation of results) methods of analysis.

3.4 The Interview

This section is an account of the methodology employed to address RQ2 and test its hypotheses. Consideration is given to issues of ethics and feasibility which inform the design of this study.

3.4.1 Recalling the Research Question

3.4.1.1 Problem Statement

RQ2: *HOW* do young Algerian university students of English see e-mail language? Are their language attitudes positive or negative?

3.4.1.2 Sub-Problems

- 3) Is E-mail communication *a written language*?
- 4) Is E-mail communication *a spoken language*?
- 5) Is E-mail communication *a linguistic free-for-all*, or are there rules that users either follow or violate (spoken versus written language norms)?
- 6) Is language used in e-mail communication influencing offline writing? If yes, how is this influence seen by the users: Is it seen negatively or positively?

3.4.1.3 Hypotheses

- *Hypothesis One:* E-mail communication will be probably seen as written medium of communication.
- *Hypothesis Two:* Young Algerian university students of English will probably show negative attitudes towards e-mail language.

3.4.2 Data Collection

3.4.2.1 Research Tool

In this study, the interview ³⁴ is used to survey language attitudes of young Algerian university students of English towards the nature and the influence of the language they use in their e-mails on the standards of writing³⁵.

3.4.2.2 The Sample

Data will be obtained from interviews provided by a sample of young Algerian university students in the discipline of English from University of Oran.

3.4.2.3 Procedure

In order to obtain a more in-depth understanding of young Algerians' goal for use of e-mails and attitudes towards the language in e-mail communication, 10 face-to-face individual and semi-structured interviews were directed for this research³⁶.

Six main points of the on-going of the interviews have to be specified:

- 1) The interviews were run on a one-to-one basis. Though the idea of a group interview may sound more informal, it would not be a good idea for this study. The major objective of one-to-one basis was to allow the informants to talk to the researcher freely without fearing intervention or critics of a third person.
- 2) A semi-structured interview was adopted for the study as it avoids the imposition of a predefined structure on informants. It allows the participants to steer the focus of discussion as compared to a structured interview, minimising the influence of the researcher's own agenda. The researcher will try, in this study, to guide the

³⁴ See Appendix Two.

³⁵ Benford, et al., (2008) argue that the method of investigation is determined by the research question, and interviews are more suited for gathering information which is more attitudinal in nature, as is the case in the current study. Chen & Hinton (1999: RC) point out that interviewing provides the researcher with flexibility in data gathering and the ability to adjust and meet the needs and to probe area that may arise during a discussion.

³⁶ The objective of the interview is to test hypotheses for research question two.

subjects using a protocol of topics, whilst being sufficiently flexible in terms of the content, wording and order of questions, thus allowing the participants more freedom in how they show their attitudes towards E-mail communication and permitting unanticipated themes to emerge, be discussed and noted.

- 3) The duration of these interviews is an important factor. In most cases, the interviews lasted for about 15 to 20 minutes maximum.
- 4) The interviews started after I achieved the online language diaries collection process³⁷. In fact, the 10 Young Algerian e-mail users who participated in the interviews were very productive users³⁸. These students were chosen on the basis of their abundant use of neography in their e-mails³⁹. (The data sources that comprise the interviews are summarized in Table 3.8)
- 5) The interviews were conducted in an informal setting⁴⁰ (University hall). In this relaxing atmosphere, it was hoped that the interviewees would be more willing to share their thoughts and opinions about the use of e-mail language by referring to their own experiences.
- 6) The language medium of the group interview is determinant in the responses and the behaviour of the informants; this is why the interviews were conducted in the local variety: Oran Spoken Arabic (ORSA)⁴¹. Moreover, I tried not to impose any specific rules on their language choice. Instead, the subjects could choose whatever code they preferred, so that the reality of the problem could be reflected.

³⁷ The interviews started by September 2012. The period between July and September 2012 allowed me sufficient time to analyze students' language diaries and compile them to find out the ten most active users of neography in this corpus. In fact, I needed time to collect and analyze messages statistically to find out 10 –e-mails where the use of unconventional spelling was mostly prominent.

³⁸ The interviewees represent a subgroup from the sample already used for the online language diaries data collection process. I selected from the total number of the online collected language diaries 10 diaries (i.e. 10 participants) in which there were the highest number of words and use of unconventional spelling.

³⁹ According to Groves et al., (2004:315) "*selecting the right interviewees is an obvious way to maximize the interview's quality*". I believe that the choice of the interviewees, for this study, is mainly destined to "maximize the quality of the results".

⁴⁰ The interviews were in the form of informal conversations in order to create a relaxing environment facilitating the sharing of their e-mail communication experience. According to Li (2007:02): "*It is preferable to run the interviews like a friend-to-friend chat. Such an atmosphere would make the informants feel more comfortable and they would be willing to share more information for the study.*"

⁴¹ I feared the use of French during the interviews because I judged that the results would be mistaken with factors such as formality that might be of a devastating impact on the informal setting chosen for the interviews.

Interviewees	Demographic information		E-mail data
	Age	Sex	Number of words
Interviewee 1	21	Male	28
Interviewee 2	21	Male	26
Interviewee 3	20	Male	29
Interviewee 4	18	Female	48
Interviewee 5	20	Male	18
Interviewee 6	18	Female	32
Interviewee 7	19	Female	39
Interviewee 8	20	Male	41
Interviewee 9	20	Male	24
Interviewee 10	21	Male	34

Table 3.8: Demographic Data and e-mail Linguistic Habits of the Interviewees
(Source: Interviews Data)

3.4.2.4 Informed Consent

Once I found potential participants for the interviews, I approached them by email to see if they were still interested in taking part in the second stage of the research and being interviewed; this was done to ensure the principle of informed consent. According to Groves et al.(2004) :

“Many people think the purpose of informed consent is to protect human subjects of research, including respondents, from harm. As a result, the argument is often advanced that if there is no risk of harm, there should be no need for obtaining informed consent. But as noted above, the real purpose of obtaining consent is to give respondents and other subjects meaningful control over information about themselves, even if the question of harm does not

arise. For example, informing potential respondents of the voluntary nature of their participation in an interview is essential to ethical survey practice, even if this leads some of them to refuse to participate.”

(Groves et al., 2004: 379)

I then organised individual interviews with them. In fact, it is important to pinpoint that the subjects helped a lot this research because of their cooperation. During online textual data collection, anonymity was not respected: I discussed the aim of the follow-up interview during the meeting and students gave their consent to provide their full names, e-mails and even phone numbers in case of need.

3.4.3 On-Going of the Interviews

Themes of interests and simple guiding questions were designed in relation to what the whole interview process aimed at. The interviewees were supposed to talk about their attitudes towards e-mail mediated language. I first asked each participant to give comments on his/her neography practices (such as abbreviations, emoticons, punctuation ...etc) just to enhance conversation, and after that I asked each candidate a series of questions⁴² (see Table 3.9: The Interview's Phases).

The method of the interview was the same for all interviews, that is, it consisted principally in an interaction interviewer-interviewee and interviewee-interviewer under the form of discussions that lasted 15 to 20 minutes.

⁴² A number of questions had been set to partially guide the whole interview process. The questions were mainly related to: 1-the interviewees' e-mail texting habits such as the frequency of using e-mail communication; 2- their attitudes toward this technology and the language use; 3- their attitudes towards written versus spoken features of e-mail language; 4- their general feelings toward this particular style of language. At the same time, in order to maintain a reasonable degree of flexibility, extra questions relating to the informants' answers were sometimes added.

	The Interview's Phases				
	Introductory questions	Content questions			QsMs ⁴³
Questions' dispatching	Q1, and some QsMs	Q2, Q3,Q4, Q5, and some QsMs	Q6	Q7 and some QsMs	For example : Qs1, Qs2, Qs3
Time management	Administered during the first 5 minutes	Administered during the last 10 to 20 minutes			Administered within the interviews' phases
Aim	To enhance conversation and pave the way for content questions	Investigating the written versus spoken nature of e-mail language	Investigating constraints of language usage in e-mail communication	Investigating attitudes towards the language of e-mails	Ensuring and maintaining a reasonable degree of flexibility during the conversations 'turns

Table 3.9: The Interview's Phases

During the interviews, I took handwritten notes of key points. In addition to that I tried to tape record⁴⁴ the interviews to avoid missing relevant information and to obtain

⁴³ Questions or comments imposed by the turns of the conversations, for example: **Qs1:** Do you have trouble with spelling when writing a letter? **Qs2:** Do you have trouble with spelling when writing an e-mail? **Qs3:** Is correct spelling important to you when writing an e-mail?

⁴⁴ Tape recording was destined to avoid missing objective data, according to Rulík (2006: 21): "In face-to-face situation, researchers encounter effects of a phenomenon known as the observer's paradox. The presence of observers affects the communication making it almost impossible for observers to record objective data".

spontaneity and originality of data⁴⁵. However, the interviewees did not know they were being recorded⁴⁶ as a solution to the observer's paradox⁴⁷.

3.4.4 Data processing

During data processing, the draft notes of the interviews were then typed and summarized according to different topics. The identities of the interviewees were also coded according to gender (M/F) followed by a number. For example, *F1* refers to "Female Student No.1"; *M2* refers to "Male Student No.2", and so forth.

The findings and their implications of the interviews are presented in Chapter Four. The findings are considered in the context of relevant research and literature, as well as the methods of data collection used.

3.5 The Questionnaire

This section highlights the research protocol which will hopefully best suit the objectives of research question three. Using data obtained from questionnaire surveys provided to a random sample of young Algerian university students in the same discipline i.e. English, I sought to consider a pedagogical concern.

3.5.1 Recalling the Research Question

3.5.1.1 Problem Statement

RQ 3: If English is there, *HOW* do young Algerian learners of English see opportunities for promoting e-English learning via Email communication in Algerian universities?

⁴⁵ Erington (1985:21-22) argues that: "*There is no substitute for the data of actual spontaneous language usage for sociolinguistic study*".

⁴⁶ Groves et al.(2004:379) do not agree with the researcher, he stipulates that: "*...obtaining respondents' permission to record an interview should be standard practice, even if no harm is likely to come to them as a result.*"

⁴⁷ Labov (1972) reports a problem encountered when collecting naturally occurring data. According to him, subjects may alter their linguistic and communicative choices as a response to the feeling of being observed. He named it the "Observer's Paradox". Trudgill (1992:57) explains this paradox: "*...as soon as people realize that their language is the focus of attention, they will tend to speak in a less natural and vernacular manner*"

3.5.1.2 Sub-Problems

- Can e-mail learning opportunities offer to the English learner in Algerian universities an opportunity for promotion at the linguistic level?

3.5.1.3 The Hypotheses

- Young Algerian university students of English will probably appreciate opportunities for English language promotion via e-mail communication.

3.5.2 The Research Tool

According to Hamel et al., (2008):

“Vouloir sonder les jeunes qui évoluent aujourd’hui dans l’orbite sociale requiert sans conteste l’utilisation de méthodes propices à l’obtention de leur collaboration aux enquêtes. En effet, à l’ère de l’individualisme en vigueur dans les sociétés dites postmodernes, obtenir la participation de quiconque aux recherches conduites ... n’est pas une mince affaire, et ce, pour diverses raisons. “

(Hamel et al., 2008: 01)

The choice of the research tool was not an easy task. However, I decided to collect data for research question three through a different method of data collection: it is a questionnaire survey. The purpose of designing a questionnaire was twofold. On the one hand, I sought to investigate attitudes of students towards perspectives of promoting English language learning in Algerian universities through integrating a virtual learning environment which will be mediated via Internet communication-mainly through E-mail exchanges. On the other hand, I wanted to collect, from the part of the students, a rich corpus of suggestions and proposals⁴⁸ for a design of an online syllabus which will be

⁴⁸ I choose to consider the students’ suggestions and proposals because I believe that the design of any syllabus should consider many variables among them: the learners’ learning styles, the learners’ needs and the learner’s expectations.

exploited by both learners and professors to support the traditional offline learning/teaching process.

Following these objectives, I planned a self-administered questionnaire⁴⁹ - the student's questionnaire (see table: 3.10).

The Student's Questionnaire	
The setting	University of Oran, department of English
The population	A random sample of young Algerian university students of English were given a questionnaire to be filled.
The questionnaire's way of administration	An online questionnaire ⁵⁰ .
Number of participants	A minimum of 100 students

Table: 3.10: The Student's Questionnaire

3.5.3 The Questionnaire's Parts

The introductory part of the questionnaire contains a welcoming message and explains the purpose of the study to the respondent, this included: title of the study, the details of the questionnaire, brief instructions and a time approximation it would take to complete the questions, the researcher's contact details, as well as the subjects' rights to privacy, confidentiality and security of data storage. (See The Questionnaire's Information Sheet in Appendix Three). Here are the general parts of the questionnaire:

⁴⁹ Fundamentally, there are two types of questionnaire: self-administered and interview-administered. A self-administered questionnaire is chosen for this study due to time and financial restraints and because it can be completed by the participants on their own without necessary intervention of the researcher.

⁵⁰ An online questionnaire and not a printed questionnaire because I wanted to question whether there is willingness and readiness from the part of students to engage in online activities. I expected to have a feedback contrary to the data obtained during the online language diaries data collection process which was supposedly a 'private' data.

	Part One	Part Two	Part Three
The Student's Questionnaire	The questionnaire's information sheet	Questions surveying attitudes towards perspectives of promoting e-English language learning via E-mail exchanges.	Questions asking for proposal of activities which may be undertaken under the umbrella of e-mail exchanges to raise students' willingness to learn English.

Table: 3.11: The General Parts of the Questionnaire

3.5.4 The Questionnaire Layout

During the preliminary phase of the preparation of the questionnaire I put emphasis mainly on the following points:

- The quality of questions: All questions were destined to answer research problem three.
- The order of questions: I tried to order the questions to improve the logical flow of topics.

The questionnaire was developed and presented as a multi-page questionnaire. Questionnaire one contains 17 questions. However, Questionnaire two is composed of 6 questions.

3.5.5 The Pilot Questionnaire:

Before the actual questionnaire survey, a pilot survey was carried out in order to eliminate poor design features, to determine the length of completion time, and to foresee possible problems that may occur in the data collection process of the Students' Questionnaires.

Gillham et al., (2001) explains:

“This [The pilot stage] is the first phase of questionnaire development before you have an actual questionnaire to try out Collecting and analyzing data at this stage can be time-consuming and needs to be kept under control, but even on a small scale can be an eye-opener”.

(Gillham, 2001:19)

The questionnaire was subject to two sets of revisions in the course of piloting, resulting in the final version, as shown in appendix three.

3.5.5.1 The Paper-and- Pencil-Questionnaire versus the Online Questionnaire, Which one is the one?

In the first step, an online questionnaire was sent to 6 informants⁵¹. I planned the administration of an online questionnaire for this study because I surveyed an important number of previous research on CMD suggesting the online format of a questionnaire as it encourages greater honesty of response compared to the paper and pencil version (see Joinson’s experiments, 1999).

However, I did receive no single online questionnaire from the part of the subjects. For this reason, the researcher chose the printed version of the questionnaire⁵² to be administered to the students⁵³.

3.5.5.2 A Multi-Page Questionnaire

The second group to pilot the questionnaire was a 5 members group who filled a printed questionnaire rather than an online one. It took between 20 and 25 minutes for the questionnaires to be completed. Some verbal feedback was obtained from the group, although this was quite limited.

⁵¹ The informants were 6 selected young Algerian university students of English who took part in the online language diaries data collection process.

⁵² It refers to the "traditional paper-and-pencil-questionnaire".

⁵³ This step resulted in the first revision of the Student’s Questionnaire.

As a result of the feedback obtained from the pilot's participants, the following issues emerged for consideration:

- It was found that the original questionnaire which was 4-page long and contained 23 questions was practically too long for the informants
- Completion time was too long
- The large number of questions could greatly increase the difficulty in reaching the desirable number of informants and collecting adequate data.
- There was too much repetition
- Ranking type questions were confusing

With these in mind, and also as a result of further reflection by the researcher, the following amendments were made⁵⁴:

- The sections were reordered and the questionnaire divided into two separate shorter parts: Questionnaire one and Questionnaire two.
- The number of questions was limited to 11 which sounds reasonable.
- The appearance of the questionnaire on 2 pages was more attracting

By planning these changes, the aim was that the process of completion would be as smooth as possible and less time consuming.

3.5.6 The Actual Population

For the Students' Questionnaire, the researcher chose to work on the following:

⁵⁴ This step resulted in the second revision of the Student's Questionnaire.

	The Student's Questionnaire
The population	A random sample of young Algerian University students of English.
The setting	University of Oran, Department of English.
Age	17 – 23 ⁵⁵
The questionnaire's way of administration	A printed questionnaire
Number of participants	95 students

Table: 3.12: The Actual Students' Population

3.5.7 Timing for the Questionnaire

The data was collected from September 2012 until October 2012. In fact, it was important to me to plan for the distribution timing of the questionnaire- 4 months after the online language diaries data collection processes. The rationale behind this was to avoid attract the attention of the participants to the different linguistic issues discussed within the previous process of data collection; I judged that this may affect the pedagogical aim of research question three. Filling in the questionnaire took, according to most students, an average of 10 up to 15 minutes.

3.5.8 Administration of the Questionnaire

I decided to distribute the student's questionnaire and provide its guidelines to the subjects during the make –up exam sessions. More than one hundred students were present during these sessions which were held during the beginning of September up to the end of October. This mode of administration was chosen for various reasons; including low cost in terms of time and with the potential of reaching more participants than surveys conducted via online contact⁵⁶ .

⁵⁵ These age groups are considered as the most likely candidates to represent interest in English language use through CMC (Wardhaugh, 2006). The mean age of the respondents is 20.5 years. Gender data was purposefully extracted from the corpus for future research perspectives.

⁵⁶ As far as this research is concerned, online language diaries data collection has already proved that it is a time consuming process which has less potential to reach a considerable number of subjects: only 57 out of the 167 of the subjects send responses, 110 of them did not, (see the pilot study).

3.5.9 Consent from the Participants

It was also made clear – in the questionnaire’s information sheet- that participation was on a voluntary basis; that respondents were free to pass over questions they did not wish to answer; and that they may withdraw at any time and without giving a reason. Completion and return of the questionnaires by voluntarily respondents was also taken as informed consent.

3.5.10 Content of the Questionnaire:

3.5.10.1 Language of the Questionnaire:

The questionnaire consists of a number of questions which were originally written in English. The researcher provided also French and Classical Arabic versions of the questionnaire. This was done to minimize the possibility of misinterpretation. Furthermore, the researcher tried to reduce ambiguity in question interpretation by trying to ensure clarity of language and expression⁵⁷. However, all participants chose the English version of the questionnaire and some of them answered questions 10 and 11 using French.

3.5.10.2 The Questionnaire Sequences

In the revised version of the questionnaire, Questionnaire one contains 8 questions and Questionnaire two is composed of two questions. The participants were first asked to state their age, gender and their educational level. The following item questions have been sequenced as follows:

Q1: Do you use Internet?

Q2: Where do you use the Internet?

Q3: Do you use e-mail communication?

Q4: How often do you use e-mail communication?

Q5: With whom do you exchange your e-mails?

- *Aim of Question one, two, three, four, and five: Setting the terrain for investigation: The general communication behavior of the participants.*

⁵⁷ Benford, et al., (2008) pinpoint that clarity and precision of expression are important when designing a questionnaire.

- Q6:** Do you use English in the language of your e-mails?
- Q7:** If yes, do you think that e-mail exchanges using English can help you learn the English language effectively?
- Q8:** If yes, what can you learn through e-mail exchanges using English?
- Q9:** Do you think that you are able to use e-mail communication effectively to improve your English competences if your professor asks you to do so?
- Q10:** Propose only ONE activity that you can do with your professor through e-mail communication to learn English and you think will be good for you to improve your English.

➤ *Aim of Question six, seven, eight, nine, and ten:* Targeting RQ3 objectives.

3.5.10.3 Types of Questions

The questionnaire is made up of two types of questions:

- **Open-ended questions:** Serve to gather responses that could not be foreseen. Such responses constitute rich descriptions (freedom of expression through explanations and illustrations) that add to the credibility of the findings.(Figure 3.1)

Questionnaire Two:

Q10. Propose only ONE activity that you can do with your professor through e-mail communication to learn English and you think will be good for you to improve your English.

.....
.....

Figure 3.1: Open-ended Survey Questions

- **Closed questions :** In closed questions, the nominal measurement scale with dichotomous categories (Figure 3.2) is used to express ‘yes’ or ‘no’ answers, while the ordinal scale itemized categories (Figure 3.3) enable respondents to express judgments on behaviours they personally make or observe in other users’ habits.

Questionnaire One:

Q1. Do you use Internet?

- Yes, I do No, I do not.

Figure3.2: Nominal Measurement Scale with Dichotomous Categories

Questionnaire One:

Q5. With whom do you exchange your e-mails?

- Classmates Family Members Professors Close friends
Professionals
- Other (specify):.....

Figure3.3: Ordinal Scales with Itemized Categories

3.5.11 Dynamics of the Questionnaire

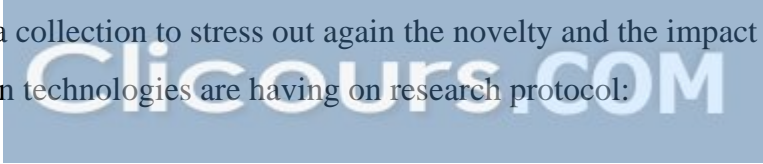
At the close of the survey, most respondents (95%) returned the questionnaire to the researcher hand in hand. The return process was achieved 10 to 20 minutes after the respondents received the questionnaires.

The answers were obtained from the questionnaires and were checked for completeness and accuracy. *Completeness* pertains to whether a response is present for each question that should be answered. *Accuracy* refers to whether answers are “logically correct and acceptable” (Aaker et al., 2004: 263) given the possibility that respondents may deliberately provide false information to mislead or because of their boredom to answer all questions.

The answers were found to be largely complete, while there were no patently nonsensical responses found because the respondents were very cooperative. The treatment of the data is discussed in the coming chapter.

3.6 Constraints on the Data

In this section, I will pinpoint on some of the constraints that I met throughout the process of data collection to stress out again the novelty and the impact these new communication technologies are having on research protocol:



- The online language diaries and the online pilot questionnaire did not achieve the researcher's expectations⁵⁸
- The online language diaries data collection process was time consuming : From January 2012 up to April 2012
- Expectations to get a large data set for the questionnaires and the online language diaries were not met⁵⁹
- Problems of data quality: completeness and accuracy, mainly for the online language diaries and interview. The major disadvantage of asking participants to select and forward their e-mail messages and send them using the online language diaries was that by allowing participants to self-select messages, it increased the chance of getting unnatural data: the spelling test could have been spoiled by a spell checker. I could not check with the informant his/her way of copying data and verify whether the data is reproduced faithfully or not. With this in mind, I could do nothing to solve this problem because up to now there is no technology which helps capture e-mail natural data without the consent of the texter. Instead, I did not draw conclusions based upon what is missing from the e-mail corpus⁶⁰ of the study. Rather, I focused on what is displayed in terms of language behavior and strategies.
- Impossibility to check seriousness or honesty of answers
- Low response rate typically for the online language diaries data.
- Problems of motivated respondents during the online language diaries data collection process

⁵⁸ Students who did not send me back the online language diaries were probably influenced by the following reasons: 1- they were unable to fill it and send it back; 2-They did not access Internet; 3 – The University did not provide them , at the time of the research, with Internet connection or a computing room for practice matters; 4- ; for financial reasons; 5-They did not give their own mails; 6- they provided false electronic addresses; 7-no motivation to embark in the research .

⁵⁹ “A prevailing part of research in the field of computer-mediated discourse (CMD) has so far been based on small data sets and the research has been somewhat difficult due to —the lack of standardized guidelines for CMD corpus design and lack of publicly available CMD corpora” (Androutsopoulos et al., 2008:1).

⁶⁰ A corpus is a collection of linguistic data which is seen to be representative of a certain type of text, interaction or discourse (Yates, 1996:103).

- Computer literacy problems during the online language diaries data collection process⁶¹
- Respondents' literacy problems typically for the questionnaires and interviews' data.
- The collection of text data through the online language diaries was one of the most difficult parts in this study. Most of the informants were highly cooperative in filling in the questionnaires and sharing their experience about e-mail language usage in interviews, but when they were asked to provide some actual text data, most of them (110) were reluctant and did not share their messages although they have provided consent at the beginning of the data collection process. I believe that one of the major reasons for their unwillingness may be that e-mail is deemed a very private means of communication. E-mail is mainly sent between friends and lovers and they may use it to communicate with each other about various things which they do not want others to know. Although the contents of the messages often concern everyday matters such as time and venues of a certain meeting which may not be deemed to be secrets, users may still sense an invasion of their privacy when asked to share their messages.

3.7 Chapter Summary

In this chapter, I have provided data on what should be collected and how it should be in terms of data for corpus analysis. I adopted a triangular approach through which data is to be gathered from different sources (online language diaries, interviews, and also questionnaires). I also supported my investigation with combined qualitative and quantitative methods for the collection and analysis of data most appropriate to be employed to investigate the different research questions.

Once the data collection campaign was traced I showed how these data should be analyzed and interpreted.

⁶¹ I did ask the computing professor to teach students, during the computing session, how to send an attached document to help them send back the online language diaries without problems. However, poor achievement in answering the language diaries research protocol may be, according to the computing professor, assigned to the fact that computing classes, at the department of English-university of Oran- are for most cases, if not all, theory classes without any single manipulation of computers.

The next chapter will hopefully provide a picture of what has been discovered on the subject matter in order to, finally, try make tentative statements about the nature of language in Algerians' e-mail communication.

CHAPTER FOUR

DATA

ANALYSIS

AND

FINDINGS

Chapter Four: Data Analysis and Findings

4.1 Introduction

This chapter reports the findings from several data collected in this study including: online language diaries, the interviews and the questionnaires. The results are presented in three principal sections relatively proper to divergence in terms of data. The first section concerns those data taken from the online language diaries, the second section reports the data from the interviews while the final section will present results from the questionnaires' material. It is hoped that the rich data I found from the different research tools will provide foundation for discussion of the three research questions which are investigated throughout this research.

4.2 Analysis of the Online Language Diaries Results

4.2.1 Method of Data Analysis

The analysis of the online language diaries was directly undertaken by reading the e-mail messages that were sent to the research's e-mail address during an observation period panning four months. Approximately 57 e-mail messages were available for analysis

The first part of analysis looked at length issues (number of words, characters, sentences, and numbers). Next I examined language use that was followed by analysis of the different sorts of unconventional spelling (including phonetic transcriptions, simplified language, syntactical and lexical short forms...etc.) and graphical representations in the corpus mainly emoticons and sentence punctuation (overall punctuation, use of question marks and periods were researched).

4.2.2 Length

I started by calculating length of each e-mail text. In the corpora, e-mail text averages 14.7 words. The average number of individual characters (including letters, numbers, and punctuation marks per transmission in the texting data) was averaged almost 93 characters each. The e-mail corpus was not larger because most of the e-mails included abbreviations

Next, I looked at the average number of sentences appearing within e-mail texts. Because commas and periods were sparse and sometimes haphazard, I could not always rely upon standard punctuation to help distinguish between stand-alone sentences and elements of larger sentences. Accordingly, I tried to rely more on the semantics of the messages to make judgment. The e-mail corpus showed that 80 % of the e-mails had more than two sentences; the average number of sentences per e-mail was 2.8. Here is a summarizing table of the main findings:

Message Length-in terms of			
Per E-Mail Transmission	Average Characters Numbers	Average Words Numbers	Average Sentences Numbers
	93	14.7	2.8

Table 4.2.1: Standard Landmarks of the E-mail Corpus
(Source: Online Language Diaries)

4.2.3 Language Use in ED

Before I start analysis, it is important to portray the linguistic situation in Algeria as it will be useful for discussion on language choice in e-mail communication.

4.2.3.1 Languages in Algeria

In a multilingual society, each language fulfils certain roles and represent distinct identities, and all of them complement one another to serve “*the complex communicative demands of a pluralistic society*” (Sridhar, 1996:53).

In Algeria, for example, the linguistic situation is characterized by the existence of different language varieties (Algerian Arabic¹, Classical Arabic, Berber, and French) each of which play an important role in the Algerian sociolinguistic reality.

- * **Oran Spoken Arabic (ORSA)** : Oran is located in the north west coast of Algeria in which Oran spoken Arabic is the main Arabic variety used there. It is a variety that is considered as “low” and non-prestigious. ORSA is essentially oral (non-codified variety) and is used in informal contexts: at home, with friends and relatives, on the electronic media, as well as on the different types of entertainment especially Rai songs. Its respective position vis-a vis- the standard language (Classical Arabic) is a clear case of diglossia².
- * **Classical Arabic (CA):** Classical Arabic is the national and official language of the country. It is the literary language that is used in the Qur’an and used in formal contexts mainly administration, education, court, the nation’s press, media outlets, and also religion. Classical Arabic is used relatively with little variation throughout the Arab world. It is mutually comprehensible in writing or speech.
- * **Berber³(Br):** Berber is the most ancient linguistic variety that exists in the whole Maghreb. It is called as such referring to the Berber linguistic minority which make use of it. This variety has never been attributed prestige or formality status like most standard forms despite some efforts destined to the codification of the language variety. This state of affair is mainly attributed to the domination and

¹ There exist several regional varieties in our country referred to as Algerian Arabic. However, because the participants of this research derive from the speech community of Oran, definition of Algerian Arabic will be more describing Oran spoken Arabic rather than any other variety of Algerian Arabic.

² According to Ferguson (1959), diglossia is a situation whereby two distinct, but genetically related varieties are in use in a speech community, as is the case in all Arabic speaking countries. According to Fishman (1970), the superimposed or socially more important variety is labelled as the ‘high’ variety (H), and the non-standard is labelled the ‘low’ variety (L). In Algeria, diglossia obtains between classical Arabic and the various regional dialects and Tamzight (including Berber, Chaoui, Mzabi, and Tergui)

³ I choose to describe Berber rather than the other Tamazight’s varieties simply because the Berber variety (Tamazight’s variety spoken originally by Algerian users in Tizi Ouzou, Bejaya , and El Bouira) counts as the most predominant variety of Tamazight spoken in the sub-speech community of Oran.(Benhattab,2004)

marginalization of other varieties, namely Arabic and French. The usage of the Berber variety is, in fact, limited to the family circle and friends.

- * **French (Fr):** French is a prestige language in Algeria as it is associated with western values and is thus linked with success, stylishness, richness and academic achievement. Both written and spoken French play vital roles in the linguistic scene. Written French is a formal communication tool, especially in the ‘high’ domains of society, for instance, in the government, teaching materials, in the professional language of business, and technical and electronic communication. However, French is rarely used in informal conversations alone among Algerian users. Speaking French as such will be interpreted as signalling social distance, power or “*Takabour*” (meaning “acting” or “putting on airs”). Hence, ORSA or a mixed-mode between ORSA and French is preferred in informal communication.

4.2.3.2 Languages in E-mail Communication

The quantitative analysis of results obtained from the online language diaries has revealed various percentages as to the use of different languages in e-mail communication

ED Languages	Number of e-mails
<i>Algerian Arabic</i>	54
<i>French</i>	49
<i>English</i>	25
<i>Classical Arabic</i>	6
<i>Berber</i>	0

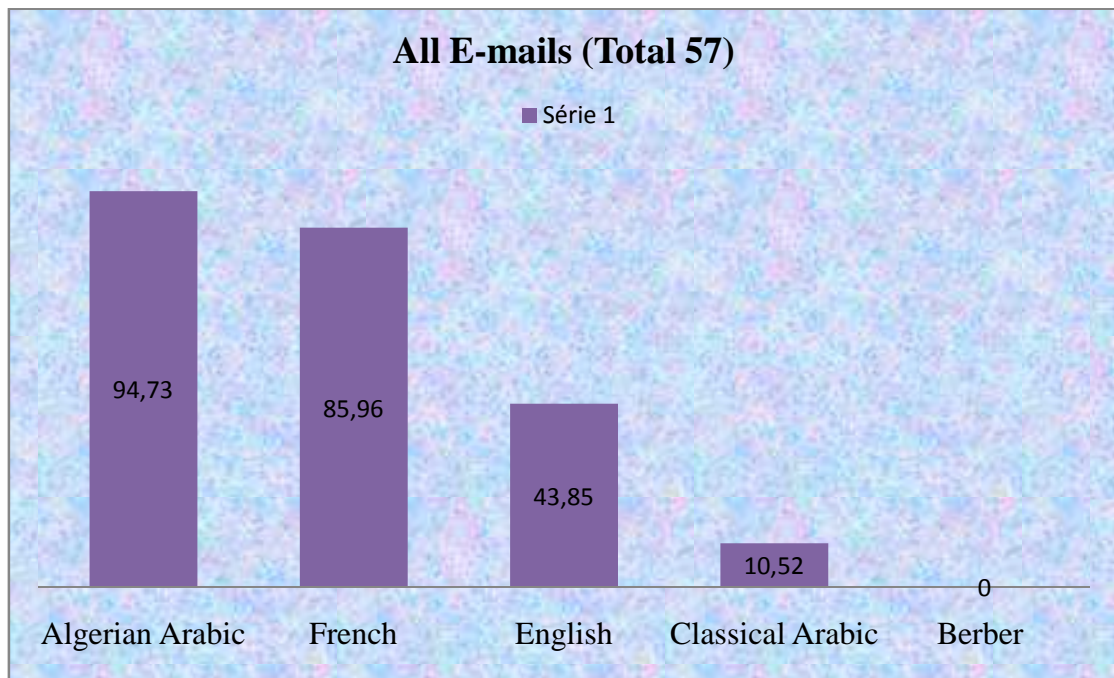


Figure 4.2.1: The Use of Languages in the Corpus
(Source: Online Language Diaries)

In the data from Figure 4.2.1 there was interesting evidence on the spoken-like nature of e-mail language. E-mails tended to be more frequently used in Algerian Arabic (all the e-mails contained the variety of ORSA). The prevalence of Algerian Arabic use in SMS communication bears out Crystal's point which stipulates that it '*...display(s) several of the core properties of speech*' (2001:29). One of the most distinctive features of ED from the corpus appears to be the forms of spelling that are constantly used in colloquial language i.e. in the variety of Algerian Arabic used in Oran (ORSA). The graphs indicate that as far as the Algerian variety (ORSA) is concerned, it is found to be attributed the highest percentage (54 e-mails: 94, 73%) of use in the e-mails. This is explained by the fact that Algerian Arabic is the variety of daily conversation and social interaction. They use it in e-mail to strengthen the idea of informality and probably to approximate spoken language easiness to communicate information.

French usage is attributed, according to the results, a secondly-ranked position (85, 96%) after Algerian Arabic. This can be explained by the fact that the respondents are

educated persons who make use of French at the most diverse moments: with the teacher, in the lecture, with friends, when chatting on the Internet, and why not in e-mail.

English is ranked the third with 25 e-mails (43, 85 %). This can be explained by the fact that all students were coming from a speciality where the English language is given impetus. The second reason for the use of English in Algerian ED may be ascribed to the place English is gaining among young Algerians who became more and more interested in the lingua franca they use when communicating online. It can be also seen as *'a language which ensures an image of modernity and academic achievements'* (Source: Informant N°: 36). For the other proportion who did not succeed to provide English in their e-mail messages, most of them argued: *"may be because we still lack proficiency in using the language and even if we know English there is fear that partners will not understand our e-mails, unlike Algerian Arabic and French which are the 'lingua franca' of e-mail communication in Algeria"* (Source: Informant N°: 21)

As far as classical Arabic is concerned, results show that 10.52% of the messages (6 e-mails) contained classical Arabic sentences represented solely with the famous form of greeting *Asalm Alaikum*⁴ ('Peace be upon you'), and yet which was not written using the original Arabic writing system. Despite their full mastery of written and spoken Classical Arabic (100% of participants with full mastery of written CA, and 57,89 % with Full mastery of spoken CA) most informants show their unwillingness to use CA in their e-mails, may be because of the formality nature of the language which does not help much sustaining personal relationships

Not surprisingly, Berber scores only 0% (0 e-mails). This is probably due to the fact that Berber speakers are minority speakers who use Berber as their in-group variety, but in case of communication with non-Berber e-mail users they may resort to other language varieties mainly Algerian Arabic or French⁵.

⁴ It appeared with different spelling forms : *Asalm Alikum, Asalm Alaikum, Asalm Alaykum*

⁵ In his study on *Aspects of Code Switching, Code Mixing, and Borrowing in the Speech Community of Berber Speakers in Oran*, Benhattab (2004) argues that Berber speakers in Oran believe that Algerian

4.2.3.3 Representation of Languages in E-mail Communication

Theoretically speaking, language use in e-mail should be close to written literature⁶ and fare more different from that of everyday communication⁷ as we are dealing with “purely” written media. However, findings are opposing conventions. Crystal notes (2001:29), despite being “*expressed through the medium of writing, [emails] display several of the core properties of speech.*”. Anecdotal evidence prior to this study had indicated that young Algerian students often write Algerian Arabic (ORSA)- an informal non-codified language variety- ‘in French’ whilst sending e-mails- i.e. they write Algerian Arabic employing Roman characters⁸, and attempt to replicate the sounds phonetically ‘in French’.

4.2.3.3.1 Romanized Algerian Arabic

Although there is no standard writing of Algerian Arabic, in order to represent it in ED, young Algerian users have created a number of strategies involving different combinations of French writing system and numbers to either create Algerian Arabic spellings or directly translate the intended Algerian Arabic expressions into a morpheme-to-morpheme manner⁹. The identified strategies are summarized in what follows.

- * **Numbers:** In the corpus 70 % of e-mails were found to be produced using numbers together with Roman alphabet to replicate Algerian Arabic sounds especially the voiced pharyngeal fricative which was represented by the number 3. This was done for the sake of brevity and convenience.

Arabic followed by French are considered to be the most practical varieties for use after the Berber language.

⁶ In written literature, it is expected that forms of standard and formal language should be used.

⁷ In spoken language, it is expected that people make use of more informal and non-standard forms of language.

⁸ Algerian Arabic is not the first language which was ‘Romanized’. In the history of the Greek language, the idea of writing with the Roman alphabet dates back to Byzantine times (Giofyllis, 1980).

⁹ The use of romanized version of Arabic in CMC is not unique to Algeria. A detailed discussion of linguistic features of romanized Gulf Arabic chat is found in Plafreyman & Al Khalil (2007).

Number Used	Arabic Sound	Phonetic Description	Example	Translation
7	ح	Voiceless pharyngeal- fricative	<i>Tro7i m3aya</i>	‘Will you go with me’
77			<i>Sa77a</i>	‘OK’
3	ع	Voiced pharyngeal fricative	<i>3chia</i> <i>Na3arfah</i> <i>3omri</i>	‘Afternoon’ ‘I know him’ ‘My lover’
5	خ	Voiceless velar fricative	<i>5ribtiha</i> <i>5bar chbab</i>	‘You destroyed it’ ‘Good news’
2	ء	Glottal stop	<i>Masa2 el</i> <i>kheir</i>	‘Good evening’
8	د	Non- emphatic voiced dental (or denti- alveolar) stop	<i>8irha w</i> <i>foutni</i>	‘Do it and let me peacefully’

Table 4.2.2: Numbers representing Algerian Arabic sounds

(Source: Online Language Diaries)

* **Romanized Algerian Arabic Sounds:** In the corpus, 100% of messages were found to be produced using Roman alphabet; no other writing system was recognized.

Particle in ED	Translation	Example
<i>Win rak ya sahbi</i>	Where are you? Dear friend we missed you	<u>Win rak</u> ya sahbi 8 mssd u
<i>Rani karha wahdi</i>	I feel fed up alone	<u>Rani karha wahdi</u> , matjich
<i>Jibili</i>	Bring the book with you tomorrow	<u>Jibili le livre tomrw</u>
<i>Fouwetti tbib</i>	Did you consult the doctor	<u>Fouwetti tbib</u> wela mazel
<i>Bsahtak</i>	Congratulations for the party	<u>Bsahtak l party</u>
<i>Rana rayhine</i>	We are going to to the Credish library tomorrow	<u>Rana rayhine lel credish</u> <u>tmrw</u>
<i>Twahechtek</i>	I miss you	<u>Twahechtek bezaf</u>
<i>Bkheir labass</i>	(I am) fine, without problems	Washrakoum <u>Bkheir labass</u>

Table 4.2.3: Romanized Algerian Arabic Sentences

(Source: Online Language Diaries)

In fact, the use of Roman characters to represent Algerian Arabic has attracted my attention to the different representations of Arabic sounds within the corpus. I observed that although ‘Arabic’¹⁰ does have a very developed set of characters for writing, none of the texters in the material (0% messages) has represented Algerian Arabic sounds using the original Arabic system of writing. A question had to be raised at this stage: What this state of affair is due to?

¹⁰ When the term ‘Arabic’ is used between inverted commas, the meaning is the language which is considered the standard variety of Arabic that is Classical Arabic. The reason behind this label is my need to show to the reader that Algerian Arabic and Classical Arabic are both Arabic varieties which share a considerable number of sounds.

The problem of handling the Roman script to encode the Arabic language in e-mail communication among young Algerians is appearing to embrace a number of reasons falling under two axes : The first one describes reasons related to the technology itself and the second one is more concerned with the decisions made by those who adopted that technology .

In point of fact, the first factor is ascribed to those who invented keyboards for CMC. Early planners of CMC tools were generally Americans, and were implicitly thinking only about how to facilitate communication in English, they did not anticipate the problems that might arise when speakers of other languages tries to communicate online. The text-transmission protocol on these tools-the computer and the mobile phone- is based on the ASCII character set¹¹. This character set is based on the Roman alphabet and the sounds of the English language.



!	"	#	\$	%	&	'	()	*	+	,	-	.	/	
0	1	2	3	4	5	6	7	8	9	:	;	<	=	>	?
@	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
P	Q	R	S	T	U	V	W	X	Y	Z	[\]	^	_
`	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	{		}	~	

Figure 4.2.2: The ASCII Character Set
(Source: <http://www.cs.tut.fi/~jkorpela/chars.html>)

¹¹ ASCII, an acronym for ‘American Standard Code for Information Interchange’, was established in the 1960s, and contains 128 seven-bit codes (unique combinations of 1’s and 0’s), 95 of which are available for use.

The second factor is part and partial, due to the non-availability and for most cases incapacity to make use of them. This was due to the fact that Algeria, contrary to other Arab countries like Gulf countries, has not encouraged the spread of keyboards with Arabic scripts that enable e-mail writers of, let say classical Arabic or Algerian Arabic, to do word processing. It is, however, only in the last seven years (the beginnings of 2001) that Arabic scripts keyboards have become increasingly widespread in Algeria due to some media and economic needs and the installation of a vague of middle-east immigrants coming mainly from Syria and Egypt for job seeking purposes.

Another motive for the use of Roman characters in ED would be the believe most of e-mail users share on the facility they have in manipulating ASCII-lized keyboards. Most of them argue that, even with the availability of Arabic scripts keyboards, they will resort to Roman characters keyboards because they became acquainted with them. Being acquainted means here having the capacity to type French much rapidly than Arabic. A question to be raised here: How do young Algerian e-mail users communicating in ‘Arabic’- a language with different sounds and a different writing system to the Roman scripted languages- adapt to the ASCII environment?

Throughout material, I observed that young Algerian e-mail users succeeded to adapt the medium to suit their communicative needs. To this end, they tried to represent Algerian Arabic consonant and vowel sounds using the Roman characters that best replicate the former sounds. Examples of this use include the following:

Percentage of users	Symbol Used	Arabic Sound	Phonetic Description	Example	Translation
100%	<i>a</i>	ﺀ	Voiceless glottal stop	<i>Salam</i> <i>alikum</i> <i>antoum</i>	‘Peace be upon you’ ‘You’
100%	<i>b</i>	ﺏ	Voiced bilabial stop	<i>bsahtek</i> <i>bach dertiha</i>	‘Congratulations’ ‘With what did you make it?’

100%	<i>t</i>	ت	Non-emphatic voiceless dental (or denti-alveolar) stop	<i>Twahechtini</i> <i>Taba3tah</i>	‘Did you miss me?’ ‘ I followed him’
41%	<i>j</i>	ج	Voiced alveolar (or palato-alveolar) affricate	<i>haja</i>	‘Something’
59%	<i>g</i>			<i>mangich</i>	‘I will not come’
100%	<i>h</i>	ح	Voiceless pharyngeal fricative	<i>Wahdou</i> <i>Nhawass</i> <i>shakitte</i>	‘Alone’ ‘I am looking for’ ‘ Need’
100%	<i>kh</i>	خ	Voiceless velar fricative	<i>Wahdoukhra</i> <i>chakhassak</i>	‘Another one’ ‘What do you need?’
100%	<i>d</i>	د	Non-emphatic voiced dental (or denti-alveolar) stop	<i>Didou</i> <i>Diri Iquraa</i>	(Nickname) ‘Switch on iqraa channel’
100%	<i>r</i>	ر	Voiced alveolar rolled	<i>Rani fi ligmo</i> <i>brouhek</i>	‘I am in the IGMO University’ ‘Because you, yourself,...’

100%	<i>z</i>	ز	Emphatic voiced dental fricative	<i>Imtiaz</i> <i>zahrah</i>	'Excellence' 'His chance'
24%	<i>ss</i>	س	Non-	<i>Nhawass</i>	'I am looking for'
31%	<i>s</i>		emphatic	<i>Mansitch</i>	'I did not forget'
45%	<i>c</i>		voiceless dental fricative	<i>mancitekch</i>	'I did not forget you'
57%	<i>ch</i>	ش	Voiceless	<i>Chriki</i>	'My partner'
43%	<i>sh</i>		alveolar (or palato- alveolar) fricative	<i>Shoufi</i> , <i>mthablinich</i>	'Listen, do not turn me crazy'
100%	<i>s</i>	ص	Emphatic voiceless alveolar fricative	<i>sayi</i> <i>tsoumi</i> <i>3achoura</i>	'Enough' 'Do you fast on achoura?'
72%	<i>d</i>	ض	Emphatic	<i>dhalmak</i>	'He was unfair with
28%	<i>dh</i>		voiced (or denti- alveolar) stop	<i>ydrobha</i> <i>daymen</i>	'you' 'He beat her every time'
100%	<i>t</i>	ط	Emphatic voiceless alveolar (or denti- alveolar) stop	<i>matebtache</i> <i>toulbihali</i>	'Do not be late' 'Ask her a favour for me'

100%	gh	غ	Voiced velar fricative	ghir nebghik	‘Only’ ‘I love you’
100%	f	ف	Voiceless dental fricative	Fach jebtiha tfahmek	‘With what did you bring it’ ‘Will explain to you...’
100%	k	ق	Voiceless uvular stop	Kara3tlek netlako	‘I waited for you’ ‘We will meet...’
100%	g		Voiced velar stop	Gae3 galbi	‘All’ ‘my heat’
100%	k	ك	Voiceless velar stop	rani hakamha bel messak Ki raki	‘Everything is all right with me’ ‘How are you?’
100%	l	ل	Voiced dental lateral	layla sa3ida Asalam alikum	‘Good night’ ‘peace be upon you’
100%	m	م	Voiced bilabial nasal	draham makench	‘Money’ ‘Nothing’
100%	n	ن	Voiced alveolar nasal	Nrouhou ensemble mansitekch	‘We will go together’ ‘I did not forget the past’
100%	h	ه	Voiceless glottal fricative	karha hawoudili	‘I feel fed up’ ‘Bring me’
100%	w	و	Voiced bilabial glide	wel darwak	‘And the...’ ‘Now’
100%	y	ي	Voiced palatal glide	‘Lyoum sbah ’	‘Today morning’ ‘Do you love me?’

'tebghini'

Table 4.2.4: Algerian Arabic Consonant Sounds Representations
(Source: Online Language Diaries)

Vowel Sound	Symbol Used	Example	Translation
/a/	<a>	<i>Hadi chaba</i>	'This is something interesting'
/a:/	<a>	<i>Kiraki</i>	'How are you?'
/i/	<i>	<i>kidertiha</i>	'How did you make it?'
/ei/	<ei>	<i>nseit</i>	'I forgot'
	<i>	<i>Elkhir rah</i>	'goodness went away'
/i:/	<i>	<i>Khass imanek ykoun kbir</i>	'You need have a strong faith in God'
	<ou>	<i>Gouilha tji</i>	'Ask her to come'
/u:/	<oo>	<i>Kount nshoof fik m3andek matatbi</i>	'I saw you, you do have no argument'
	<o>	<i>Assalam alaiko(u)m</i>	'Peace be upon you'
	<u>		
	<ou>		

Table 4.2.5: Algerian Arabic Vowel Sounds Representations
(Source: Online Language Diaries)

4.2.3.3.2 English

The other interesting result of the study was the considerable amount of English (85, 96%) used by participants which was codified through Roman scripts. There were, in the corpus, mixed messages written in ORSA, English and/or French. Others were entirely

produced in English without some kind of interference of Algerian Arabic or French. It was also observed that these e-mails are not ready-made ones; they are, on the contrary, the creation of the users themselves. Here are some of the e-mails which were entirely produced in English.

E.g.1: *For the whole of the world you are somebody but for me you are the whole of the World...*

E.g.2: *if 100% of people love you be sure that I'm one of them...if 99% hate you be sure that I'm the 1% which love you...if 100% hate you be sure that I'm dead...!!!...*

E.g.3: *Good mrng, darling I missd you so much this wk...!!!...*

E.g.4: *Gd day: and also Gd lunch, do not forget, CU...!...*

E.g.5: *to be happy you need to be healthy and wealthy...*

E.g.6: *Do you love me? I need you for my life why u d nt answr mI calz*

4.2.3.3.3 French

French use was not restricted to sentences where French was the only prevalent language. Rather most e-mails which contained French were mixed messages combining not only French but also Algerian Arabic particles, as it is illustrated in the following example

Particle in ED	Translation	Example
<i>Bonne nuit</i>	'Good night'	<u>Bonne nuit</u> chriki smahli je vien de rentré bassah mansitakche
<i>Bonne chance pour ton bac</i>	'Good luck for your BAC examination'	<u>Bonne chance pour ton</u> bac nchallah dayman ver le succé
<i>je pense à toi</i>	'I think of you'	Nebghik é <u>je pense à toi</u>
<i>Que dieu soit avec toi</i>	'I wish god will help you'	<u>Que dieu soit avec toi</u> oukhti,3adam alaho ajrakoum

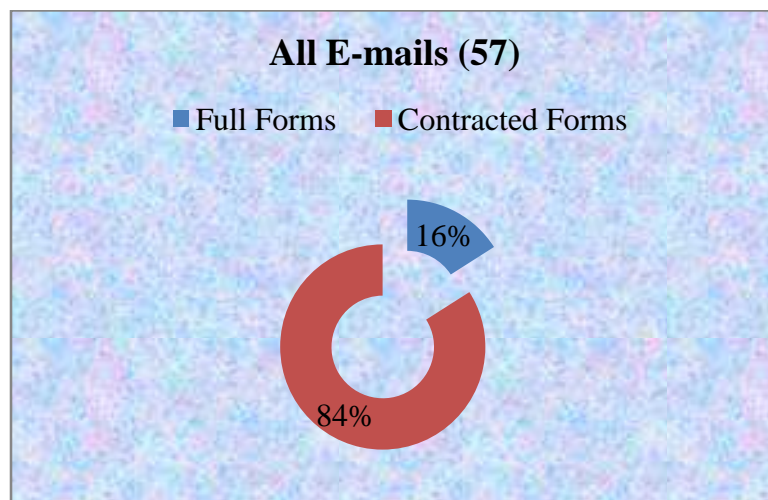
<i>Je veux venir</i>	'I want to come'	Bonjour, faiza <u>je veux</u> <u>venire</u> chez toi le soir, bip moi si c oui.
----------------------	------------------	---

Table 4.2.6: Examples of French Language Use

(Source: Online Language Diaries)

4.2.3.4 Neography

Some of the participants have written out full words and sentences (16%), but the majority (84%) ensured that their texts are economical as possible by using their own language conventions and short cuts. The technical restrictions of text messaging have led to the development of language short forms in Algerian SMS communication.



NB: Contractions include abbreviations, acronyms, phonetic spelling, and numbers

Figure 4.2.3: Full Forms versus Contracted Forms in the Corpus

(Source: Online Language Diaries)

This section presents a typology of neographic transformations observed in the Algerian SMS corpus. These are categorized into four broad categories: phonetic spelling, syllabograms, logograms, and graphical representations. Each of which comprises subtypes.

4.2.3.4.1 Phonetic Spelling

From the material, I observed that e-mail users have also taken advantage of different phonetic spellings in order to transcribe different examples of standard pronunciation of the French language words in their e-mails. All the following examples are extracted from the corpus.

- * *Reduction of qu to k* : this phenomenon has been mostly documented in the grammatical words qui (“who”), que (“what” or the conjunction “that”), and quoi (“what”). However it occurs in other contexts as well (e.g., example 17).

E.g.1 : SLT jesper **ke** tu passé 2 bon vacance, nchoufek fel 3chia, tu ma manké

(Salut, j’espère **que** tu as passé de bons vacances, je te verrai l’après-midi, tu ma manqué.)

“Hello, I hope you spent good holidays, I shall see you in the afternoon, I missed you.”

E.g.2 : a **ki** tu tu va doné l’exposé, oubli fayçal

(A **qui** tu vas donner l’exposé ? surtout pas Fayçal.)

“For whom are you going to give the exposé? Forget about Fayçal.”

- * *Substitution of k for c*

E.g.4 : Slt **komen** va tu ?

(Salut, comment vas-tu?)

“Hello, how are you doing?”

- * *Substitution of Z for s*

E.g.5 :slm tu vi1 kan tu ve. bizou

(Salut, Tu viens quand tu veux. Bisou.)

“Hello, you come when you want to. Kiss.”

- * *Simplification of digrams and trigrams:* In the consonantal domain, the digram *ss*, which is the transcription of /s/ in intervocalic position (a simple *s* would be pronounced [z]¹²), is reduced to *c* following the vowels *e* or *i*.

E.g.6 : bsahetkum dakhla, moi **oci** g repri lé cour

(felicitations pour la rentrée, Moi aussi j'ai repris les cours.)

"Congratulations for school entrance. Me too I'm back at school."

In the vocalic domain, *au* and *eau* are reduced to *o*, as is shown in example 7; *ai* is reduced to *é* (example 8) or less often- to *è* (example 9). *Eu* is reduced to *e* (example 10)

E.g.7 : je meclate avec mon nouvo portable !

(Je m'éclate avec mon nouve**au** portable !)

"I'm having so much fun with my new mobile."

E.g.8 : si tu na vréman rien a fair, arwahi n3almek tchatchi

(Si tu n'as **vra**iment rien à faire, vient je vais t'apprendre à tchatcher.)

"If you really have nothing to do, come and I will teach you how to chat."

E.g.9 : je te lèss gro bisou.mimich kit adore tré for

(Je te **lais**se gros bisou. Mimich qui t'adore très fort.)

"I must leave you big kisses. Mimich who adores you so much."

E.g.10 : dacor si tu peu pa 1 otr foi kan tu ve

(D'accord si tu ne peux pas une **aut**re fois quand tu **ve**ux.)

"If you can't another time whenever you want. "

- * *Substitutions of certain digrams for others :* A phonetic reduction of *oi* gives *wa*

E.g.11 : Appel **mwa** a 20 h

(Appelle-**moi** à vingt heures.)

"Call me at 8 p.m."

- * *Deletion of silent letters for consonants :*

E.g.13 : je ne **sai** pa pkoi tu ne répon **jama**i¹³

¹² Phonetic pronunciations are given in square brackets [] using the International Phonetic Alphabet. Phonemes are given between / slashes/.

(Je ne sais pas pourquoi tu ne réponds jamais.)

“I do not know why you never answer”

- * *Deletion of clitic forms*: I also found deletions that affect clitic forms such as pronouns, prepositions, and determiners. In example 14, *profit b1 d ton voyage* and *On s tien* show natural deletions generalized among most speakers of French in Algeria

E.g.14 : profit b1 **d** ton voyage on s tien o couran matenseche je t’aime.

(Profite bien de ton voyage on se tient au courant .n’oublie pas :je t’aime.)

“Just enjoy your trip. We will keep in touch, do not forget: I love you.”

- * *Amalgamated spellings*: some sequences of words are written without the commas or spaces that normally separate them. The words involved are syntactically linked.(see example 15)

E.g.15 : jvs vérépa, madéconiche ?

(Je ne vous verrai pas? Ne déconne pas.)

“I will not see you? Do not be foolish.”

Amalgamated spelling can also contain features that signal phonostylistic variation. In example 16, *chui* for *je suis* shows the transcription of an informal pronunciation: the deletion of [ə] allows the assimilation of the voiced spirant [ʒ] to the unvoiced spirant [s] , which should produce [ʃs], difficult to articulate; the result is a lengthened [ʃ], represented simply by *ch*.

E.g.16 : **chui** pa né en 90 mé en 93

(**Je (ne) suis** pas né en 90 mais en 93 !)

“I was not born in 90 but in 93! ”

¹³ In these examples, the letter printed in bold characters in the original is the letter that precedes the missing one; in the orthographic form, it is the missing letter.

- * *Consonantal Skeletons*: The French written word has a heavy consonantal framework like English¹⁴ and also Arabic¹⁵. But a specific feature of the French written is that some of its consonants do not have any phonetic counterpart, as in the final *s* of *vous*. Many of the consonantal skeletons I find in my corpora do not include all consonants. Nonetheless, the first and last consonants of the written word, are almost preserved, for example, for the transcription of *toujours* (“always”), “*tjs*” “*tjrs*” are more typical than *tj* and *tjr*, although all appear in the corpus. Sometimes, all the other letters are eliminated (example 17, *vs* for *vous*; example 18, *ac* for *avec*). In particular, the nasals *n* and *m* are generally omitted (e.g., *lgtps* for *longtemps*, “a long time”)

E.g.17 : **vs** me manké mé GRAV. décrochi 3lia fel 3chia

(Vous me manquez mais grave. Réponds à mon appel l’après-midi.)

“I seriously miss you, answer my call in the afternoon.”

- * *Substitutions of certain digrams for others* : A phonetic reduction of *oi* gives *wa*

E.g.18 : khassak trouhi **ac** souad oci w manbe3d dicidei ^ 3 ^

(Tu as besoin d’aller **avec** souad aussi et après tu pourras décider.)

“You have to go also with souad and after that you can decide.”

4.2.3.4.2 Syllabograms

The second category of neography in this typology is the use of a letter or a number to represent the phonetic sequence that constitutes its realization in spoken language, known as a syllabogram. For example, the number 2 [dØ] can be used for the sound [də] or even for the spelling *de* in a context where the final *e* would be silent in spoken language (example 19)

E.g.19 : g pa eu le temps **2** vérifié sa avec tou le mon**2**

(Je n’ai pas eu le temps de vérifier ça avec tout le monde.)

“I did not get the time to check that with everybody.”

¹⁴ It has been demonstrated that a short text written in French or English deprived of all vowels can be read rather easily (see masson,1999, for French)

¹⁵ The Phoenicians alphabet, which is the common origin of all alphabets, was exclusively consonantal, as are the Hebrew and Arabic alphabet.

E.g.20 : éceke tji **2m1**

(Est-ce que tu viens demain ?)

“Will you come tomorrow? ”

Syllabogram often allow a drastic reduction of the number of characters as it is shown in the examples 21,22,23

E.g.21 : **ct** pr savoir si ya 1match ta3 bola ljem3a wela la

(**C’était** pour savoir s’il y a un match de football le vendredi ou pas.)

“It was to ask if there is or not a football game on Friday. ”

E.g.22 : l3arss **c** bien passé a par kil yavé tro **2** ghashi

(Le mariage **s’est** bien passé a part qu’il a eu trop **de** monde.)

“The wedding was well except there were too much guests.”

E.g.23 : **2** rien mai **c** la vérité tesstahli

(De rien mais **c’est** la vérité, tu mérites.)

“You are welcome but it is the truth, you deserve ”

E.g.24 : ca sera donc tjs 1 plaisir **2te** revoir !

(Ça sera donc toujours un plaisir **de te** revoir !)

“So will always be a pleasure to meet you again! ”

4.2.3.4.3 Logograms

The third common category of neographhy is logograms. I use the term here somewhat broadly, applying it not only to word signs (@, \$...), but also to single-letter abbreviations or acronyms made up of initials.

In my corpus, **1** is used for the numeral *un* (one), but also for the indefinite article *un* (a), thanks to the homonymy of these two words.

E.g.25 : On se voi pa a 13h pr prendr **1** cheese ? nkara3lak

(On se voit pas à 13h pour prendre **un** cheese ? je t’attendrai.)

“Are we or aren’t we going to meet at 1 pm to have a cheese hamburger? I shall wait for you. ”

The plus sign (+) is often used as the equivalent of the very common adverb “plus” (“more”, “most”; example 26). The colloquial expression *à plus*, derived from *à plus tard* (“see you later), written as *a+*, is a frequent message closure (example 26)

E.g.26 : n + t voir c ma mor. Je pense kil fo ke je te voi mnt atend moi a +

(Ne **plus** te voir c'est ma mort. Je pense qu'il faut que je te vois maintenant .Attend moi à **plus**.)

“To not see you, is my death. I think we need to meet right now .Wait for me see you Later. ”

Single-letter abbreviations (e.g, *k* for *que*, *t* for *tu*) are not frequent, possibly to avoid confusion with syllabograms.

Phrasal acronyms are also not much used. Cases of s.v.p (s'il vous plait =”please”), r.a.s.(rien à signaler, old fashioned military formula meaning “nothing to report”), and a few others appeared to be there in the e-mail corpus. The acronym to express loud laughter is mdr (mort de rire), literally “dead from laughing” (example 27), used only in electronic communication. It is very frequent in Algerian chat but appeared only once in Algerian ED.

E.g.27 : bessah c trop, je croyé ke ta cop ct toi ! **mdr**

(mais c'est trop, je croyais que ta copine c'était toi ! **mort de rire**)

“It is too much I thought your friend was you! lol¹⁶ ”

4.2.3.4.4 Graphical Representations

4.2.3.4.4.1 Emoticons

Unlike face-to-face talk where emotions can be expressed visually (by facial expressions) or auditory (by stress and loudness), text-based CMC often takes place without any face-to-face interactions between participants. Therefore, emotions (Emotional-icon) are often expressed by using icons . The introduction of the so-called emoticons has peppered electronic communication. Old Emoticons¹⁷-such as [;. (],[^.^], [@ . @] which are representations of body language [crying],[in good mood],[bored] respectively can change the meaning of an e-mail just as much as body language can change the meaning of verbal communication in spoken discourse. In fact,

¹⁶ LoL=“laughing out loud” is the English acronym to express the French acronym “mort de rire”

¹⁷ Many CMC users would prefer the new version of emoticons because the old one is time-consuming because it is created with stokes.

inserting emoticons in computer-mediated messages is fairly universal (Crystal, 2004). Emoticons are very popular in Internet language among young Algerians; in the E-mail sample, various emoticons were found.






Meaning	Old emoticons	New emoticons
Sad, Displeased	: - (: = (
Shocked, Amazed	: - O	
Kiss	^ 3 ^	
Sleepy / Bored	@ . @	
Joking	=P	

Table 4.2.7: Some Old and New Emoticons.¹⁸

4.2.3.4.4.2 Punctuation

Punctuation is a traditional feature of standard written language, as it is an integral part of the majority of day-to-day writing activities. However it appears that in the corpus of research, punctuation is often omitted and rarely conformed to. To summarize the cases where there was no sentence punctuation, I provide the following statistics.

¹⁸ For more examples of emoticons see Annex One.

	No Sentence Punctuation
Message-final sentences	88%
All sentences	71%
Sentences not at the ends of messages	56%

Table 4.2.8: Overall Punctuation
(Source: Online Language Diaries)

4.2.3.4.4.2.1 Capital Letters, Apostrophes, and Full Stops

Here is an example (from the corpus data) on a case of proper name which lack a capital letter at the beginning:

E.g.30 stp mostafa cé tro i just wnt to knw 3lah rak dirli haka

(STP Mostapha, c'est trop c'est juste pour connaitre la vérité, pourquoi tu me traite comme ceci .)

“Please Mostapha, enough is enough, I just want to know why are you treating me in this way.”

I believe that the lack of capitalisation for proper nouns results from the need to write both quickly and efficiently. In e-mail communication, unlike many other written genres, one would not be punished nor corrected for grammatical errors. Therefore it is possibly no surprise that capital letters are often omitted as they neither less time consuming, nor are they wholly necessary either.

Further, in line with the notion of lack of punctuation in e-mail language resulting from the desire to type quickly and efficiently is the way in which apostrophes and full stops tend to be omitted in ED:

E.g.31 Goulilha merci beaucoup c etait magnifique

(Dites lui, c'était magnifique!)

“Tell her it was magnificent!”

I believe again the reasons for this lack of punctuation stem from the need for speed typing in ED in order to maintain the pace of the conversation. Grammar is a distinct feature of standard written language therefore with it appearing to be lacking in ED, a written domain, it suggests that the language is not written language in the truest sense of the word. Patricia Wallace (cited in Crystal, 2001) reported that in CMC “*we can see language in its most primitive form...it’s spontaneous...naked form*” (p.169). This I believe is true of what I see happening in terms of punctuation.

4.2.3.4.4.2.2 Questions and Exclamation Marks

Another instance in which punctuation is used in non-standard forms in ED is the way in which the use of question and exclamation marks are exaggerated:

E.g 32 Pourquoi tu ne décroche pa __, tu é fâché ?????!???

(Pourquoi tu ne décroches pas le téléphone ? Est-ce que tu es fâché ?)

“Why you do not want to answer my phone calls? Are you angry with me?”

This example shows how punctuation and question marks are used excessively in an ungrammatical way. However, motivations behind the uncommon use of punctuation can be attributed to the representation of prosodic elements in ED. For example, it is hard to tell where emphasis is placed on utterances. One way in which this is achieved is by placing exclamation marks or question marks at the end of an utterance to indicate emphasis.

4.2.3.4.4.2.3 Use of Periods and Hyphens

A further way in which the lack of spoken language features are compensated for is the use of periods and hyphens in e-mail communication to simulate pauses and pace of face-to-face conversation. It is interesting to see users of e-mail attempting to rein act these features of spoken language through the written medium. Ways in which this is done are shown below:

E.g.33 Manich kada ngoule...gouilha tji 3andi darwek

(Je ne peux te dire. Dis lui de venir me voir maintenant.)

“I cannot tell you. Tell her to come to see me right now”

The example above is a selection from the data, which show how periods and hyphens are used to create a sense of spoken delivery. I believe that this spoken-like delivery puts across the image that the writer is consciously thinking about what to say, thus further giving an impression of spoken conversation.

4.3 Analysis of the Interview Results

The interview for this study aimed to answer RQ2 and some sub- questions. The results are summarized below according to the interview’s main axes.

Axe I: To enhance conversation and pave the way for the content questions

Interview’s Question 1: *How often do you use e-mail communication a week?*

On a regular basis	Not always	Never
Interviewees 1; 2; 3; 4; 6; 7; 8; 9; 10	Interviewee 5	No Interviewee

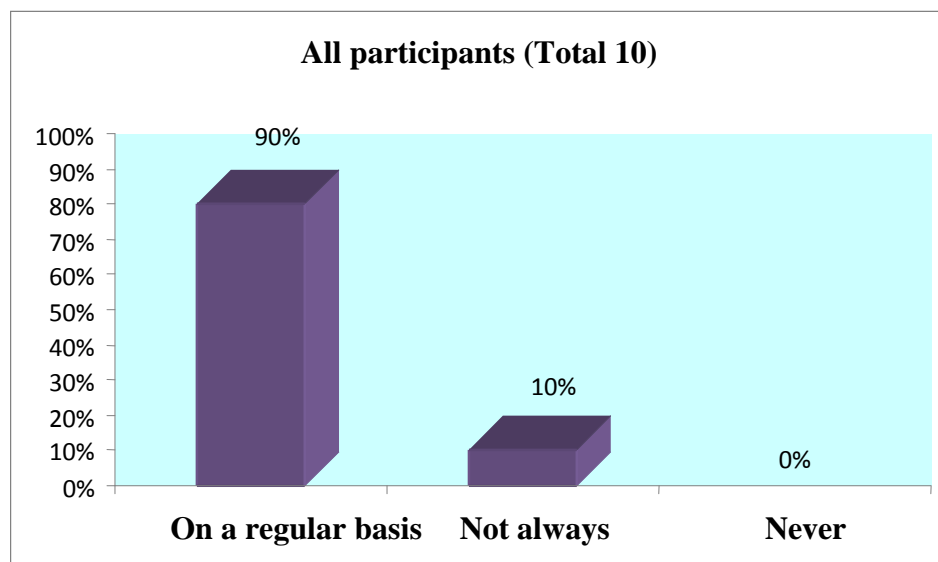


Figure 4.3.1: Habit of Performing E-mail Communication

(Source: The Interviews)

As can be seen from the graph and the table above, almost all respondents (90%) claimed to have a regular habit of using e-mail communication, and no one has answered that he/she 'never' used the medium. With this significant number of respondents who are regular users of e-mail, more representative findings about the prominence of this mode of communication in the life of young Algerian e-mail users were expected when interviewees 1; 2; 3; 4; 6; 7; 8; 9;10 were asked frequency of such regular practice.

On a regular basis	Interviewees	Percentages
Many times a day	Interviewees 4; 6; 7; 8; 10	55,55 %
Every day	Interviewees 1; 3; 9	33,33%
Every two days	Interviewee 2	11,11%

Table 4.3.1: Habit of Regular Use of E-mail Communication

(Source: The Interviews)

Answers to the frequency question (see table 4.3.1) shows that, like spoken language communication and unlike written language communication, e-mail communication is a practice of everyday among young Algerians university students.

Axe II: To investigate the written versus spoken nature of e-mail language

Interview's Question 2: *When you write an e-mail, do you concentrate more on the message - its structure i.e. do you pay attention to the correctness of your grammar and style? - or to the person- the content i.e. what you are going to write to that person?*

(Ideas, attitudes, emotions, feelings...etc.)

The message	The person
Interviewees 2; 3; 5; 9	Interviewee 1; 4; 6; 7; 8; 10

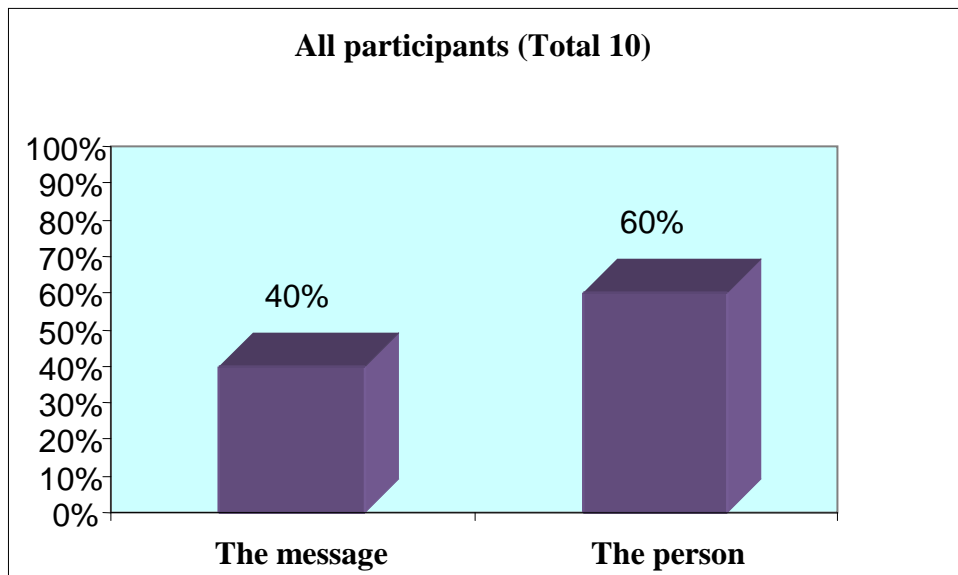


Figure 4.3.2: Testing the Psychological Model
(Source: The Interviews)

Question 2 seeks to search the written versus spoken nature of e-mail language. Figure 4.3.2 above shows that 40% of the interviewees said they concentrate more on *the message* when writing their e-mails. Hence, much more than half of them (60%) said that they pay more attention to *the person* to whom the e-mail is sent to. This may imply that young Algerian e-mail users are indeed aware of the psychological issue of e-mail exchanges. In the case of the present research, I believe that there should be a psychological dimension supporting the written-like versus spoken-like analysis of e-mail to better investigate the nature of e-mail language.

The Mix Psycho/Structural Model proposes a typology for the language of e-mail by investigating on the one hand the structural properties of e-mail and on the other hand by focusing on the psychological dimension of the e-mail production process and end up with data that support or reject the written-like and/or oral-like language features in e-mail. In fact, at the heart of the psychological model is the following philosophy: “*Every deed is based on everyone’s will*”

I utilized this to argue that the e-mail user’s role – his/her perception of what is he/she writing- should not be neglected. In other words, in writing an e-mail one can express

orality or non-orality through the focus of the message; this means that if the e-mail user’s focus is on trying to convey information rather than any emotional factors that may surround it, the language of the e-mail is, in this sense, ‘*Message-centered*’ and by consequence is a written language. But if the e-mail user is more concerned with expressing his/her feelings towards the subject matter, the language of the e-mail, by consequence, is ‘*Person-centered*’ and can be, as a result, qualified as being oral. More details on the model will be presented in figure 4.3.3.

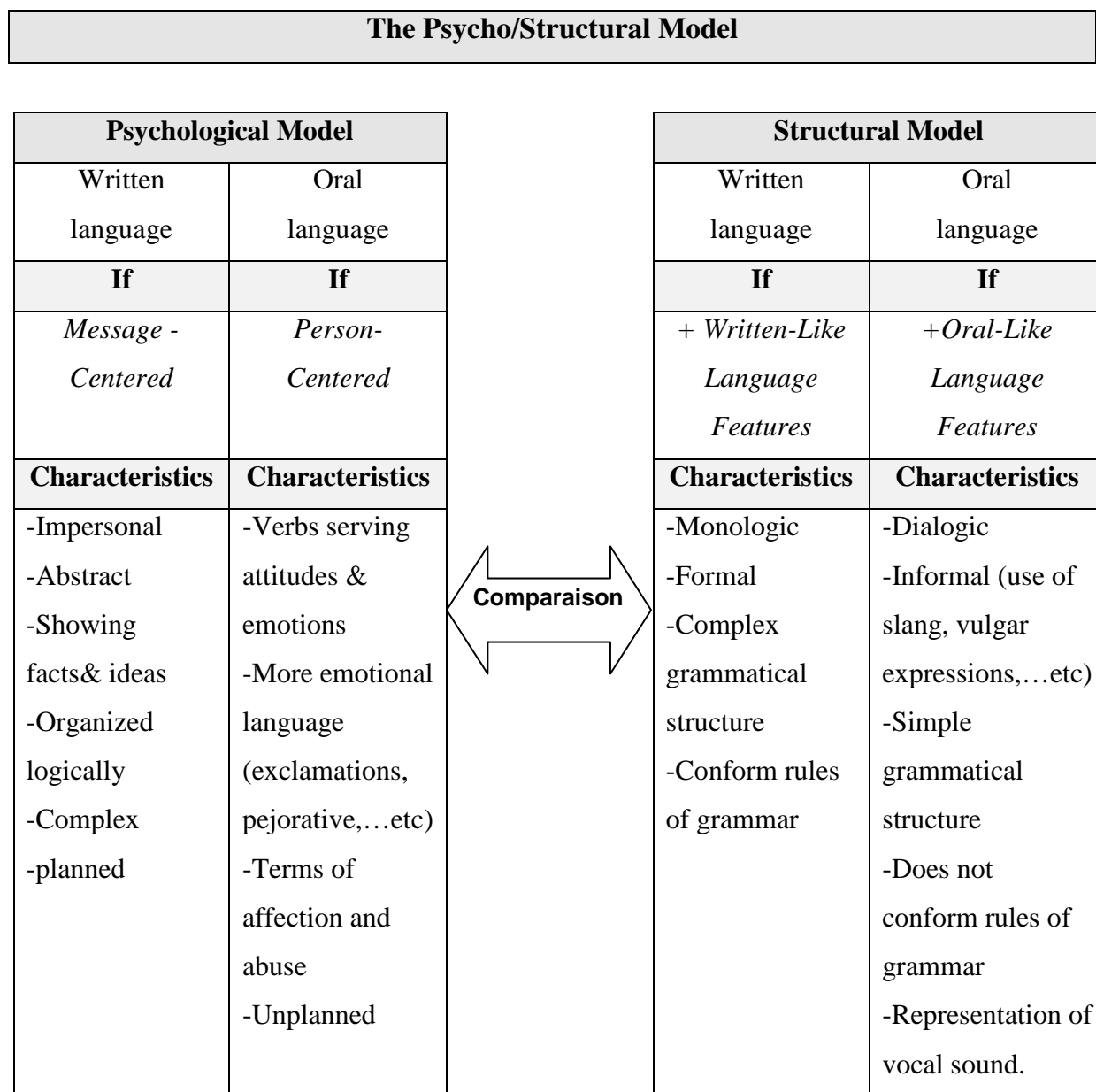


Figure 4.3.3: The Psycho/Structural Model

According to the psychological model, e-mail communication is an oral-like mode of communication. However, it is too early to advance such conclusions because we need to undertake a comparative study between the psychological model’s results and the structural model’s results to ‘better’ the research findings.

Following the structural model, the interviews Questions 3 and 4 will look up at the type of language (written /oral) in e-mail communication; then I shall proceed to comparing the psychological model’s results to the structural model ones.

Interview’s Question 3: *If you are asked to re-write the e-mail you provided for this research, in the form of a traditional letter, will you write it the same?*

Yes	No	
Interviewee 5	Little changes	Many changes
	Interviewee 9	Interviewees 1; 2; 3; 4; 6; 7; 8; 10

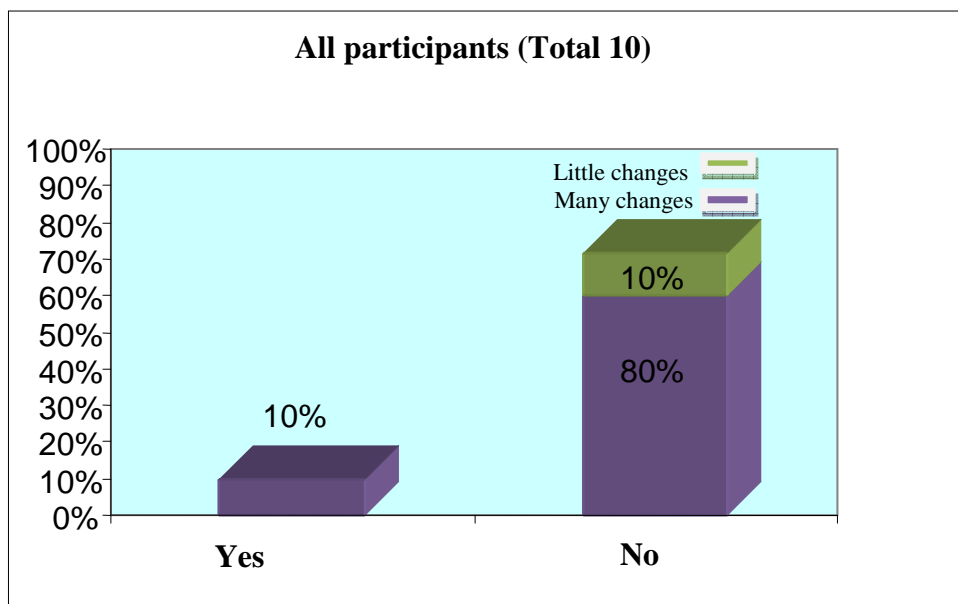


Figure 4.3.4: Testing the Structural Model

(Source: The Interviews)

Interview’s Question 4: *If the person(s) to whom you sent an e-mail is now in front of you - in a face-to-face situation- will you re-produce the same e-mail you provided for this research?*

Yes	No	
Interviewees 1; 3; 4; 6; 7; 8; 10	Little changes	Many changes
	Interviewees 9; 2	Interviewee 5

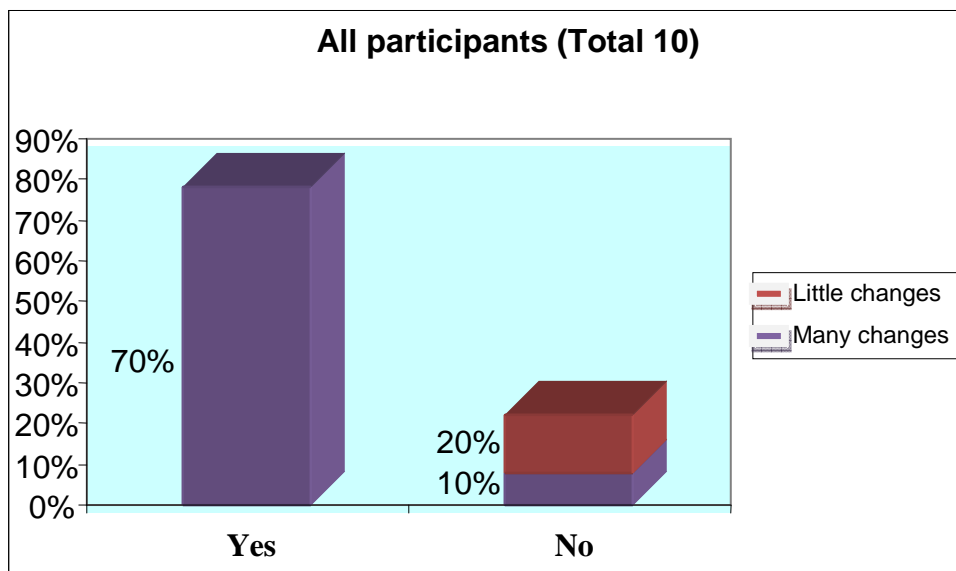


Figure 4.3.5: Testing the Structural Model

(Source: The Interview)

The graph and table for question 3 (Figure 4.3.4) shows a high score for a ‘No’ answer (90%) in comparison to a ‘Yes’ answer. Interviewees indicate that e-mail language has little in common with written language: 80% argued that they will make many changes if they write their e-mails in a traditional written-like manner, only 10% sought to keep their e-mails and make some little changes.

As for the many changes, participants proposed the following:

- Respecting rules of grammar which they learnt at school.
- Reconsidering vocabulary and orthography.
- Reformulating ideas.
- Writing words without abbreviations i.e. in their full forms.
- Writing forms of salutations, closings, and greetings more appropriately.
- Writing more details about the topics discussed within the messages.

These results showed that young Algerians users of e-mail language are able to differentiate between what is standard and non-standard in their writings and most precisely in e-mail language.

The graph for question 4 (Figure 4.3.5), on the other hand, indicates that 70% of the interviewees see that e-mail language can be produced literally in spoken language interaction without changes : they believe that e-mail language has many things in common with oral language. However, 30% of them believe that the language of e-mail should be adapted to suit the circumstances of spoken language. 20% said that they would make little changes and only 10% were of the opinion that many changes have to be exercised on e-mail language. These results showed that Algerian e-mail users are perfectly aware of the differences between what the spoken language style characteristics are and what the structure of written language style is and that structurally speaking, e-mail language tends to be more like spoken language than traditional written language.

In fact, the interview's results regarding the structural analysis of e-mail language which investigated the extent to which e-mail language is more like spoken language or written language are not sufficient to confirm the spoken like nature of e-mail language. To overcome this constraint, I sought to verify those findings by addressing the linguistic features of e-mail messages en rapport with what is regarded as being prototypically written language or oral language. From the material provided by the online language diaries, I shall present two main textual features: the written-like language features versus the spoken-like ones, and aspects of code switching writing in the corpus.

4.3.1 More of 'Talk' inside the text

It is observed that e-mail communication among young Algerians shares discourse conditions with spoken language the tendency to approximate speech have resulted in a highly colloquial language style represented through:

4.3.1.1 'Natural' Switching in E-mail Texts

Written code switching in e-mail communication data behaves in the same way(s) as it is in natural speech data. In other words, I am referring to 'Natural' language switching which means the kind of code switching that is commonly heard in everyday talk, as exemplified in the following excerpts

Extra-sentential code switching

The insertion of a tag¹⁹, such as phrase markers, exclamations from one language into an utterance that is entirely in another language.

E.g.35 : yadra khdamt mlih fi l'examen ta3 ling

(What's up, did you work well the linguistics exam?)

Intra-sentential code switching

Where switch occurs between an NP in Fr (Inseigt) and VP in AA [bækri] (came early)

E.g.36 Inseigt jat bekri

(The professor came early)

Inter-sentential code switching

Where switch occurs at clause or sentence boundary, one clause being in a language, the other being in another language.

E.g.37 rouhi shrih mane3and lesuperette ta3maraval tu leur demande la marque dream matte mousse.

(Go and buy it from a supermarket in Maraval Street, and ask them to give you a brand named dream matte mousse).

¹⁹ Following the Cambridge definition (1995:1485) of the word 'tag', it is: "A phrase added on to a sentence for emphasis, to get agreement or to make it into a question".

According to my native intuition, the above code mixed lines are considered to be ‘natural’ to the extent that it is very likely to hear these excerpts in real-life conversations among Algerian people.

4.3.1.2 Informal Language

Interestingly, results from the textual data collected through the online language diaries show that language use in e-mail communication among young Algerian users shares many characteristics with spontaneous, informal spoken language (ORSA). In the data, young Algerians ‘write their e-mails as if they are saying them’. Features that are characteristic of spoken language such as dialectal words (e.g., ManJmch (I cannot); chui (I am); tkeditji (Could you come?); chai pa (I do not know); bessah (But); a + (see you Later), pasque (because)) are spelled out in e-mail.

Moreover, it is easy to neutralize in this form of language the spoken-language accent structure of Algerian Arabic dialects mainly through vocabulary (e.g., the word spelled ‘**Kiraki**’ is typically the spoken form of How are you ? in ORSA which will be spelled out ‘**Washraki**’ in Algerian Arabic spoken , for example, in Algiers.

4.3.1.3 Use of Short Forms

It seems that that short forms of e-mail language utilized by young Algerian are not part of written language. The use of these forms enhances the feeling of directness, effortlessness and natural spontaneity typical to spoken communication.

4.3.1.4 Interactivity

E-mail messages use the medium of sight, like writers; however, their context of communication, though not face-to-face, is interactive rather than isolated, like speaking

4.3.2 More of ‘writing’ Inside the Text

E-mail communication among young Algerians shares discourse conditions with traditional writing because of:

4.3.2.1 The Lack of visual representations

E-mail communication is different from face-to-face communication in so far as I did not find any visual or acoustic manifestation. In fact, non-verbal and paralinguistic

signals, such as facial expressions, gestures, body position, eye contact, prosody, talking speed, pauses, voice pitch and so on, which are normally used in order to structure and interpret the flow of utterances, are not part of Algerian e-mailing .

In Algeria, writing through e-mail communication is a mono-modal means of expression like all other traditional written means (such as newspapers, books, and letters), and the interlocutors have to rely on what can be conveyed by the visual system of writing.

4.3.2.2 Openings and Closings

Another measure of the written-like nature of e-mail language in Algeria is the degree to which young e-mail users follow the form of traditional letter writing in their e-mails, i.e., including salutations (e.g., Salam, Salut (Hi); Asalam alikum (peace be upon you)) and closings (e.g., bisous (kisses); a+ (à plus)).

Here is a comparison between writing, speaking, and e-mail communication at the structural and linguistic levels. The main frame of the comparison draws upon Baron’s own previous works on the differences between Speaking and Writing (2008) and her comparison of asynchronous CMC characteristics with characteristics of face-to-face speech along with the present research findings

	Speech	Writing	E-mail Communication (The Present Research)	
			Characteristics	Speech- like
				Written- like
STRUCTURAL PROPERTIES				
number of participants	dialogue	monologue	monologue	+
durability	ephemeral (real-time)	durable (time- independent)	durable (time- independent)	+
level of specificity	more vague	more precise	more precise	+

SENTENCE CHARACTERISTICS				
sentence length	shorter units of expression	longer units of expression	shorter units of expression	+
one-word sentences	very common	very few	very common	+
structural complexity	simpler	more complex	simpler	+
verb tense	present simple	varied (esp. past and future)	varied (esp. past and future)	+
VOCABULARY CHARACTERISTICS				
use of contractions	common	less common	common	+
abbreviations, acronyms	infrequent	common	common	+
scope of vocabulary	more concrete more colloquial narrower lexical choices more slang and obscenity	more abstract more literary wider lexical choices less slang or obscenity	more concrete more colloquial narrower lexical choices more slang and obscenity	+
pronouns	many 1 st and 2 nd person	fewer 1 st and 2 nd person (except in letters)	many 1 st and 2 nd person	+

deictics (e.g., here, now)	use (since have situational context)	Avoid (since have no situational context).	use (since have situational context)	+
LINGUISTIC CHARACTERISTICS				
Language Style	Informal Often avoid salutations Use contractions, slang	Formal	Informal Often avoid salutations Use contractions, slang	+
Responses	Fast response time assumed	Time-constrained response	Fast response time assumed	+
Audience Identity	Intended for limited, specified audience	Can be forwarded to multiple audience	Intended for limited, specified audience	+
				SCORES 11 04

Table 4.3.2 : Speaking and Writing in Asynchronous CMC and E-mail Communication
(Source: Baron, 2008; the Present Research Findings)

As for the structural and linguistic properties of e-mail language, the above table results shows that e-mail language in Algeria bears far more resemblance to oral language than to its written counterpart and that it is , accordingly, a written version of oral language. More to be said on this concern in the following analysis (mainly results of question 5).

Interview’s Question 5: *How do you see the language in e-mail communication?*

- A:** is it traditional written language that you learnt at school?
- B:** is it your everyday spoken language that is written down?
- C:** is it a mixture of traditional written features and spoken language features?
- D:** is it a new language?
- E:** is it a language that is still in the process of development?

A	B	C	D	E
No Interviewee	Interviewees 3; 4; 6; 7; 8; 10	Interviewees 9; 2	Interviewee 1	Interviewee 5

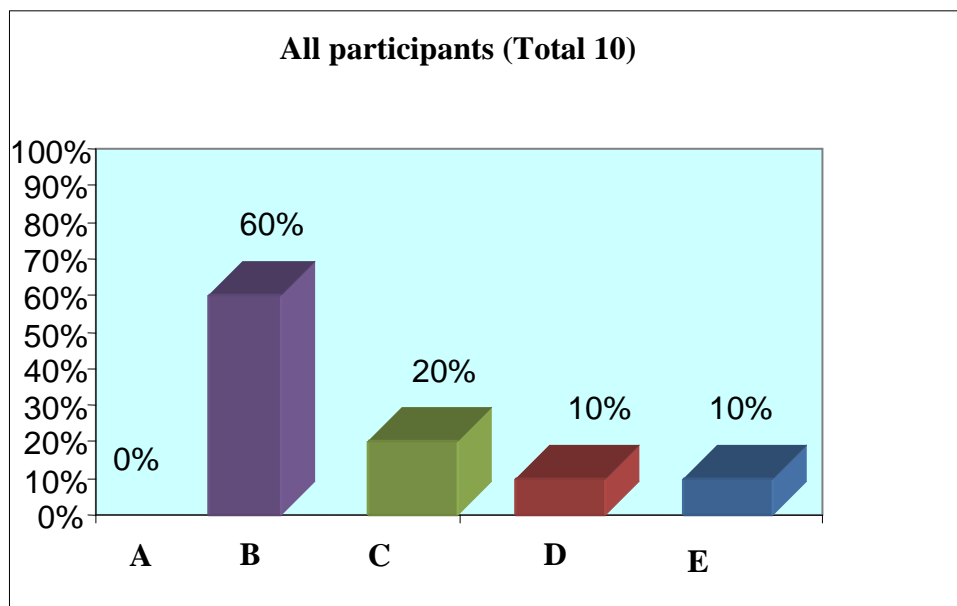


Figure 4.3.6: Language Perception towards E-mail Communication
(Source: The Interviews)

The rationale behind Question 5 is to survey directly the participants’ perception of the language they produce in e-mail communication. From Graph 4.3.6, results show that there is a large belief among participants on the spoken-like nature of e-mail language.- 60% believe that e-mail language is the everyday spoken language that is written down.

20 % indicate that the language is a mixture between oral and spoken language features. Small percentages are attributed to those who believe that e-mail language is a new language or rather a language in the process of development (10%, 10% respectively).

In fact, e-mail language is perceived among young Algerians users of the technology as being totally different (0% for e-mail language as a traditional written means of communication) from traditional written language but rather resembling to a great extent a form of speech that happened to be written down.

The phenomenon of speech representation or the written representation of spoken language has been described by Preston who called the phenomenon '*the writing of speaking*'²⁰ (1985:328).

In the present study, the characteristics of this 'normal', casual speech (AA language switching between AA and Fr) are not provided by the conventions of standard written AA as they are inexistent. The process of encoding casual speech in the writing of e-mail is one of strange-making. Four ways of encoding casual speech are recognized in e-mail language:

- **'Slangy' Speech**

This type of respelling attempts "*to capture through the use of non-standard spellings the fact that the speech is casual, not carefully monitored, relaxed-perhaps slangy*" (Preston, 1985:328):

E.g 1: [**rouhi tabgui**] beech je ne ve plu de toi

"Go away, beech I do not want to see you anymore."

E.g 2 : [**RADOI nkar3lek fi la caf ta3 Jami3A bach nrouhou**] esnbl

"Tomorrow I shall wait for you at the university coffee shop in order to go together"

²⁰ Mishler calls the phenomenon a "*re-presentation*" of speech (1991:261)

▪ **Word Repetition**

One characteristic of normal, casual speech is word repetition that is used, like spoken language, to represent emphasis

E.g 1.: hada bessah big problem, problem kbir

“It is really a big problem, a big one.”

▪ **Discourse Markers**

Another characteristic of casual speech is the use of discourse markers like ‘wya’ (Oh), ‘3labalek (i)’ (you know), ‘Saha’ (ok), and interjections like ‘wya rabi’ (oh my god). The following examples contain the use of discourse markers in e-mail language:

E.g 1: **wya** ki kunt lbareh, i rily lkd u

“Oh, you were very handsome yesterday. I liked you very much”

E.g 2 : **3labalki**, g pa trouvé le chef de dept

“You know! I did not find the head of the department.”

▪ **Dialect**

Algerians’ use of non-standard dialect can be represented in different ways. Preston calls the representation of dialect ‘dialect respelling’, and stipulates that this type of respelling *attempts “to capture regional and social features of pronunciation”* (Preston, 1985:328). The variant /gu:lilha/ is used by texters living in Oran (see the following example) whereas the variant /qu:lilha/ index a different variety of Algerian Arabic spoken that may be used by Algerian e-mail users living, for instance, in Algiers.

E.g : goulilha c pa la péne, thnk u vr mch

“Tell her, there is no need, thank you very much”

Axe III: To investigate constraints of language usage in e-mail communication

Wood & Smith (2005) argue:

“E-mail is perhaps the most popular and familiar channel for communicating through the Internet.

Like its ancestor, the much slower, paper-based “snail-mail” routed through traditional postal means, e-mail involves the exchange of textual messages between two or more parties. Unlike its ancestor, e-mail arrives very quickly and seems to express meaning in a notably variant fashion.”

(Wood & Smith, 2005: 10)

As a new mode of interaction, e-mail communication is typified by distinctive communicative and linguistic properties which are constantly manifested throughout different communicative instances. Hence, the understanding of e-mail communication as a communication and a linguistic mediator necessitates addressing constraints shaping it.

In general terms, any goal, functionality, or limit of a communication system can be seen as a constraint. In natural vocal communication, the vocal apparatus, sounds, and so forth, are part of the constraints that shape output; in written communication, technical and economic constraints become relevant.

In CMC, the technologies involved are very sophisticated; for this reason, their role has often been overestimated and conceived deterministic. Nevertheless, it is time for further research on the different constraints shaping language in CMC and more precisely in e-mail communication.

Interview’s Question 6: *What are the main constraints that shape language in e-mail communication?*

According to the interviews’ results of question 6, there are other constraints which can help to show that technical constraints do not mechanically influence linguistic content and expression. Instead they interact with other economic and communicative constraints. I summarized the interview’s findings of question 6 according to different themes. Here are the results:

▪ **Technical Constraints**

E-mail communication is an asynchronous communication mode. Therefore, no interaction is possible while the sender is writing the message. Once sent, however, the message can be read almost immediately, given that the computer of the recipient is receiving. The sender must know the e-mail address of the recipient, which requires a pre-existing social link.

▪ **Economic Constraints**

In Algeria, the cost of an e-mail message is relatively related to the cost of Internet connexion. Most Internet providers (Algeria Telecom, Mobilis, and Nedjma) offered, during first stages of Internet's integration in Algeria, expensive prices for Internet consumers. Prices were lowered further after an active consumer movement. Even at the higher price, however, an e-mail is cheaper than a voice call or a written correspondence.

▪ **Communicative Constraints**

E-mail is typically dedicated to satisfying immediate or short-term communicative aims-maintaining a link with professionals, friends and loved ones and coordinating physical interaction, such as making an appointment or planning a meeting or a shared variety. In contrast with vocal communication, the discretion and noninvasiveness of an asynchronous written medium allows for quite formal and also private contents²¹.

▪ **Linguistic Constraints**

Linguistic constraints themselves interact in complex ways. The features can be summarized, explained and exemplified with respect to e-mail as follows.

* *Written form :*

That e-mail is a written medium is self-evident, but it is nevertheless important to stress the feeling of 'spokenness' , that is, according to the interviewees, the

²¹ See Rivière (2002) on asynchronous CMC as a new form of love correspondence.

result of written language for linguistic interactions that are typically conveyed by spoken language.

* *Conciseness* :

Conciseness is another obvious feature of e-mail messages, one that in some respects recalls traditional telegraphy. The motivation for being concise seems to lie mainly in the urgency of some communicative situations. Short spellings are the core of this variety of written language.

* *Dialogism* :

Most e-mails are components of regular exchanges. This interactive dimension, which can be expressed implicitly. Dialogism partially explains interferences with spoken language, since e-mail communication situation recalls face-to-face conversation; it is also linked to the use of colloquial lexicon.

* *Speed* :

Speed fosters short spellings (which save time), simplifications of expressions and also the negligence of standard rules.

From the Findings of question 6, the following model is proposed for e-mail-mediated language:

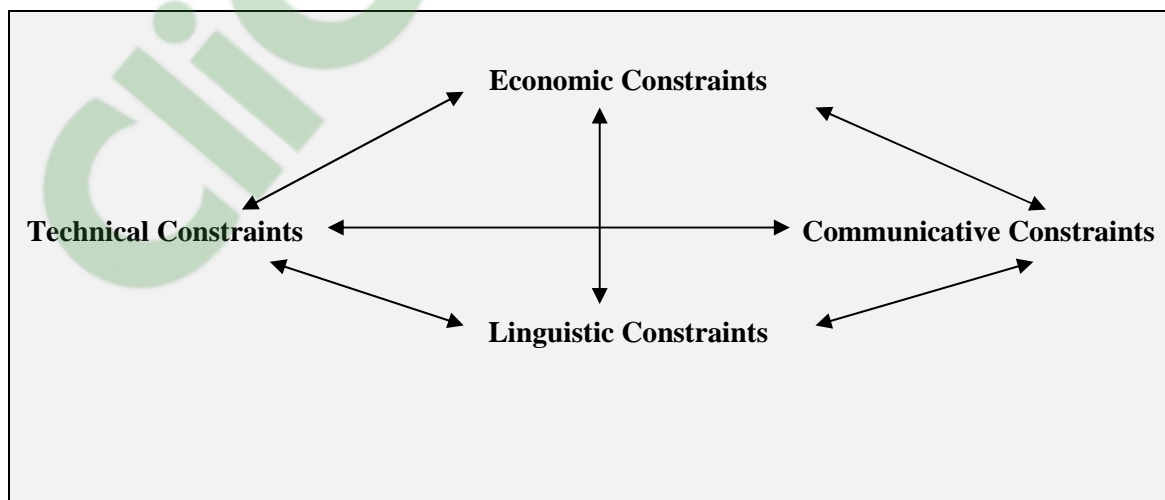


Figure 4.3.7: A Constraint-Based Model of E-mail-Mediated Language

Axe VI: To investigate attitudes towards the language of e-mail

Interview's Question 7: *Do you think that written language used in e-mail communication is influencing offline writing? If yes, how do you see this influence, negative or positive?*²²

Answers to this question are summarized into two views

First view: *Yes. E-mail language influences offline writing, however this influence is negative.*

Argument 1:

"I think that e-mail language influences offline writing negatively. I am really annoyed about the fact that I am making more and more mistakes. I am afraid and I feel that I am losing my French"

(Shared by: F4, F6, M8)

Argument 2:

"I think that e-mail language influences offline writing negatively but the negative impact of this language is not threatening Classical Arabic in Algeria because most users write Algerian Arabic – not Classical Arabic- using Roman alphabet not the Arabic alphabet. What will be in risk is Algerians' mastery of the French language."

(By: M10)

²² As far as this research's question is concerned, I had clear expectations as to the potential of my informants in evaluating e-mail language despite the fact that they are not language experts. I consider that written language is easier to evaluate than spoken language due to the relatively permanent nature that spoken language lacks and also to the fact that my participants have confirmed that they have easy access to most written material on CMC. The results from this question are destined to either corroborate or reject the hypothesis of RQ2.

Second view: Yes. E-mail language does influence offline writing. This influence is not important.

Argument 1:

“I do not think that the influence of e-mail language on traditional writing is a problem. Making mistakes when formulating language in offline writing is not that bad. Just take the example of answers that we write on our exam sheets, I can bring you the exam sheets of the students who took the best marks during examination. Their exam papers will be, for sure, full of mistakes. I suppose we are no more punished on our ungrammatical structures as we make a lot of them in our writings and because our teachers make some of them also!!! Furthermore, I feel confident on the fact that if one day I find a job and I am asked to write a report I will rely automatically on the dictionary of the computer to correct my mistakes.”

(Shared by: M1, M2, M3, M5, M10)

Argument 2:

“I do not give importance to the negative influence of e-mail communication on my language; on the contrary, I think the influence of e-mail is very interesting because now i can write Algerian Arabic, the language that I prefer for communication. It is also interesting because Algerian Arabic is a spoken language which has no alphabet but still thanks to e-mail, I can write it using a mixture of French alphabet and the sounds of Arabic.”

Clicours.com

(By: F7)

Not surprisingly, the majority of interviewees supported the idea that e-mail language is influencing traditional writing. There were those who worried about their French written competences, others expressed a relaxed attitude towards the negative consequences of the medium which was supposedly not harming their ‘dear’ language: Classical Arabic.

However, the most interesting finding, according to me, is a *laissez-faire* approach (see the second view) to the negative influence e-mail is having on Algerians’ written competences. Language users simply do not attribute significance to standard rules of written language. We are here raising questions about a generation of e-mail users that genuinely do not care about a whole range of language rules. Whether the issue is spelling or punctuation, there seems to be a growing sense of *laissez-faire*, when it comes to linguistic consistency. It used to be that when our teachers, at the university, asked us (I and my classmates) to write something on a given topic. I remember that each one of us used to try “watch his/her grammar”. Those days are long over. Instead, students increasingly look askance when teachers painstakingly correct their linguistic *faux pas*. They ask: “What’s the big deal?”. What is going on?

The “Whatever” Generation is the answer. There is a new attitude toward both speech and writing. I might call this attitude “*Linguistic Whateverism*”. Its primary manifestation is a marked indifference to the need for respecting rules of usage. But what are the potential results of this attitude for the shape of languages in Algeria in the coming decades? Some expectations:

- Writing will increasingly become an instrument for recording informal speech (as it began manifesting itself with Romanized Algerian Arabic).
- As a literate society, we will confine to write, but with less anxiety about our mistakes of punctuation and spelling conventions as they become redolent.

- We will see a diminution in the role of writing as a medium for clarifying thought.

4.4 Analysis of the Questionnaire Results

4.4.1 Procedure

The questionnaire's findings are described in three sections. The first section covers the respondents' general habits of using Internet and e-mail communication and question to what extent e-mail is seen as an enjoyable tool for sending and receiving electronic messages. The second section deals with utility of e-mail for the study of English among English university students at the Department of English- University of Oran. The third section proposes data, from the part of the respondents, on some e-mailing activities which can be exploited to promote English language learning via e-mail exchanges.

4.4.2 Size of the Sample

More than a hundred copies of the questionnaire were distributed to the students and a total of 95 respondents successfully filled in the questionnaires and returned back to the researcher.

4.4.3 Demographic data

The following table summarizes demographic data of the participants:

Age	18	19	20	21	22	23
Out of 95 informants	23	39	16	7	4	6
Educational Level	18	19	20	21	22	23
Out of 95 informants	First year LMD students					

Table 4.4.1: Demographic Matters

(Source: the Questionnaires)

4.4.4 Data Analysis

Following the grouping of the item questions in the different parts of the questionnaire, I shall now proceed to the analysis of the results obtained in each section of

the questionnaire. This will be done by analyzing data both quantitatively and qualitatively²³. On the basis of the graphs below, I obtained statistical data which give us various percentages of the findings that will hopefully serve corroborate or reject the research hypotheses.

4.4.4.1 Data on Internet and E-Mail General Communication Behavior

Before getting into the heart of RQ3, I preferred to pave the terrain by surveying the respondents' general communication behaviour to the use of the Internet and e-mail.²⁴ For the sake of clarity, Most of the different sections' findings are presented by employing bar and chart figures.

- *Aim of Question one, two, three, four, five, and six; Setting the terrain for investigation*

Q1: Do you use the Internet?

Answers	Number
<i>Yes</i>	85
<i>No</i>	10

²³ As far as section three set of aims, I chose to adopt a qualitative methodology rather than a quantitative approach because there has been a shift away from quantitative methodologies towards qualitative methodologies in educational research, According to Kervin et al. (2005 : 35): "*Educational research was initially dominated by quantitative research designs because this was believed to be the superior form for gaining knowledge ... Dissatisfaction with the quantitative approach arose in the latter part of the twentieth century because the kinds of questions that were relevant in school settings weren't adequately answered by quantitative means. As a result, in recent years, there has been an increase in qualitative studies that allow insight into these complex educational settings.*" Patton (1990:14) explains the role of the researcher in qualitative paradigms; he stipulates that in qualitative inquiry, "*the researcher is the instrument*".

²⁴ There were 6 questions to this part of the survey.

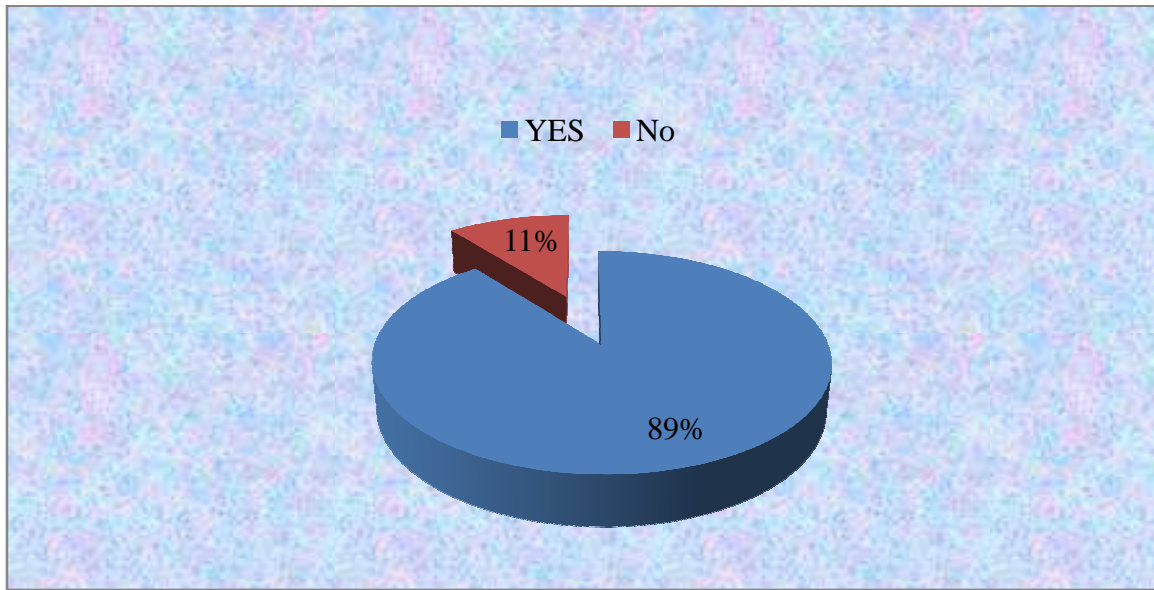


Figure 4.4.1: Use of the Internet
(Source: The Questionnaires)

The researcher found out, as far as question one is concerned, that most of the students (89%) were familiar with the Web (The Internet). However, a total of 10 subjects (11%) were not familiar with Internet facilities. This may be explained by a number of reasons.

In fact, most young Algerians need to cope with the technology because of the linguistic construction of modernity Internet is offering. *“If you are not ‘branché’ (up-to-date) with the Internet and Mobile phone technology, this means that you are ‘out’”* (Interviewee n.4). I predict that those who answered they do not use the Internet (11%) are subjected to the use/ access challenge. A good number of Algerian university students do not know how to use a computer let alone Internet; and even if they know they cannot access the technology for socio-economic reasons²⁵: *‘Internet is not in every home’* should not be ascribed solely to the Algerian context.²⁶

²⁵ For the average population, computers and Internet in Algeria are expensive.

²⁶ Ryan et al., (2000: 9) argue: *“... the infrastructure of the information age is only partly in place. It is not yet the case that every household with a telephone is connected to the Internet, nor does every household with a television also have a personal computer, but there does seem to be an air of inevitability about these developments. The only question appears to be, when will it happen? Within five years, within ten*

Q2: Where do you use the Internet?

Answers	Number
<i>University</i>	00
<i>At Home</i>	54
<i>Cyber Place</i>	42
<i>Other</i>	00

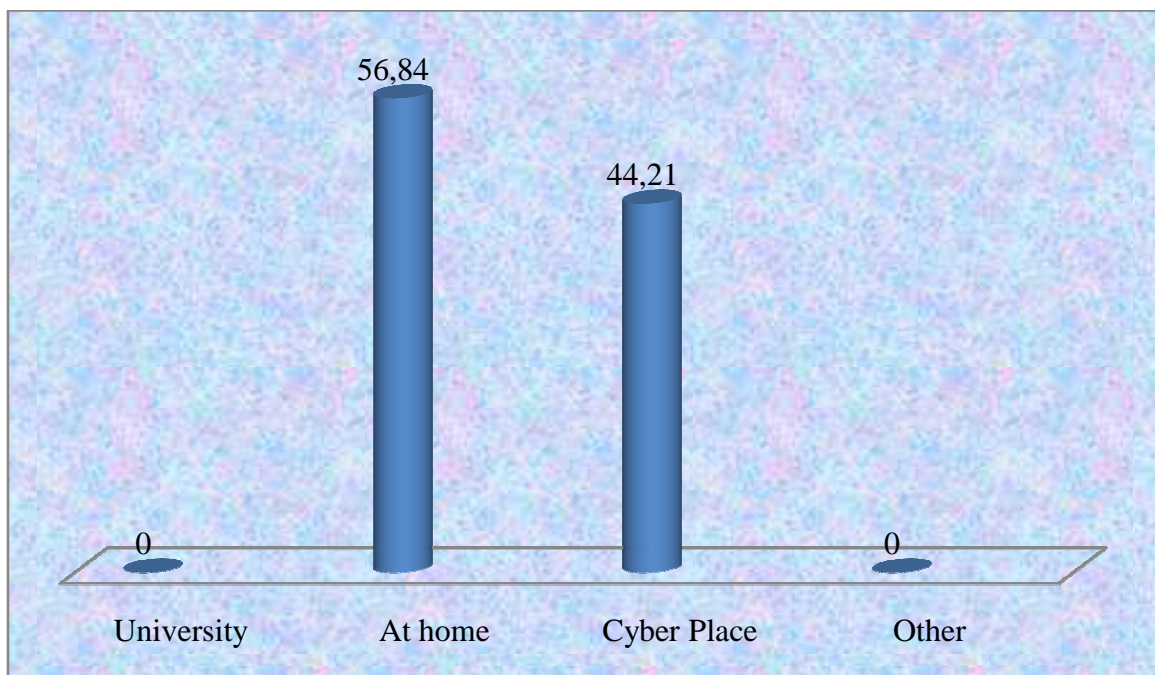


Figure 4.4.2: Access to the Internet
(Source: The Questionnaires)

The above bar figure indicates that the most common locations where respondents access the Internet are ‘Cyber Place’ and ‘At Home’ (44, 21% , 56, 84%, respectively). The bar graph shows further that no respondent suggested access at University or in ‘Other’. These results can be considered from two main perspectives. The first one would ascribe the choices (Cyber Place and At Home) to the fact that most respondents

years? Visionaries of the information age have predicted and anticipated these developments for some 30 to 40 years. Bush (1945), Pask and Curran (1982), Nelson (1990) and others have considered how global networks will impact on our lives.”

demonstrate the same perception towards Internet as a medium of social relations. It can be argued that these respondents respond to a situation where Internet is used as the medium which mediates communicative, social and intimate purposes. The second perspective sheds the light on the disappointing ICTs presence in the academic life of most university students in Algeria. Most students from Higher education do not enjoy Internet or computer facilities at Algerian universities except during lecture presentation or assignments.

Q3: Do you use e-mail communication?

Answers	Number
Yes	64
No	21

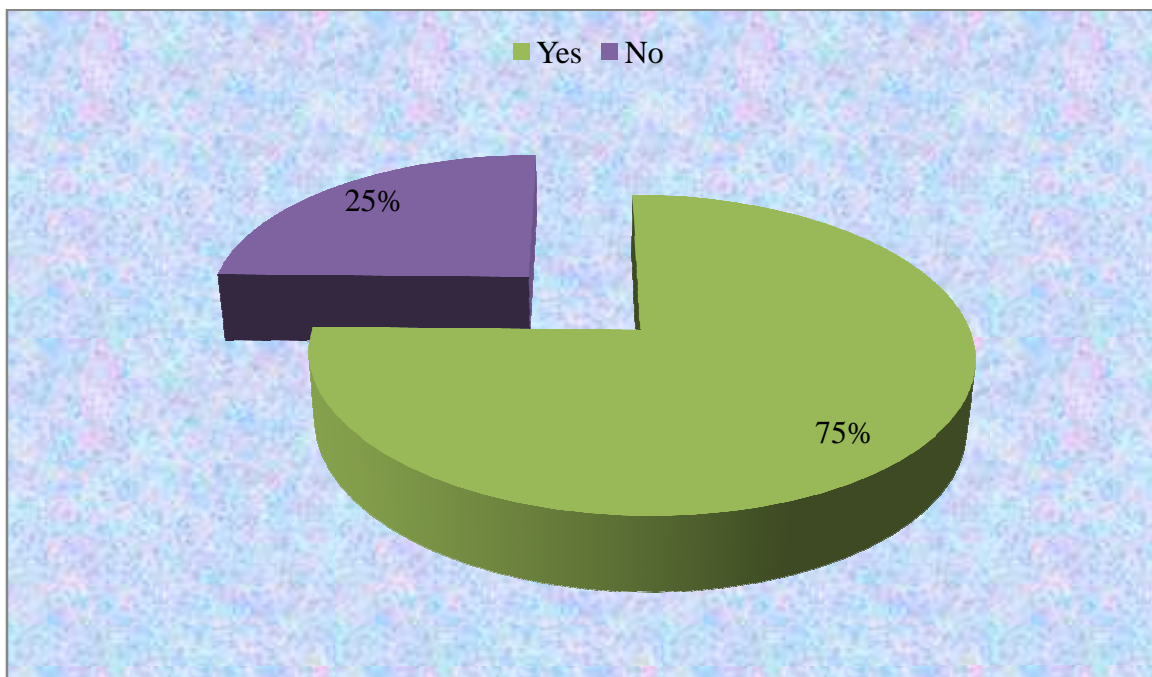


Figure 4.4.3: Use of E-mail
(Source: The Questionnaires)

Q5: With whom do you exchange your e-mails?

Answers	Number
<i>Classmates</i>	25
<i>Family Members</i>	36
<i>Professors</i>	07
<i>Close Friends</i>	54
<i>Professionals</i>	07
<i>Other</i>	00

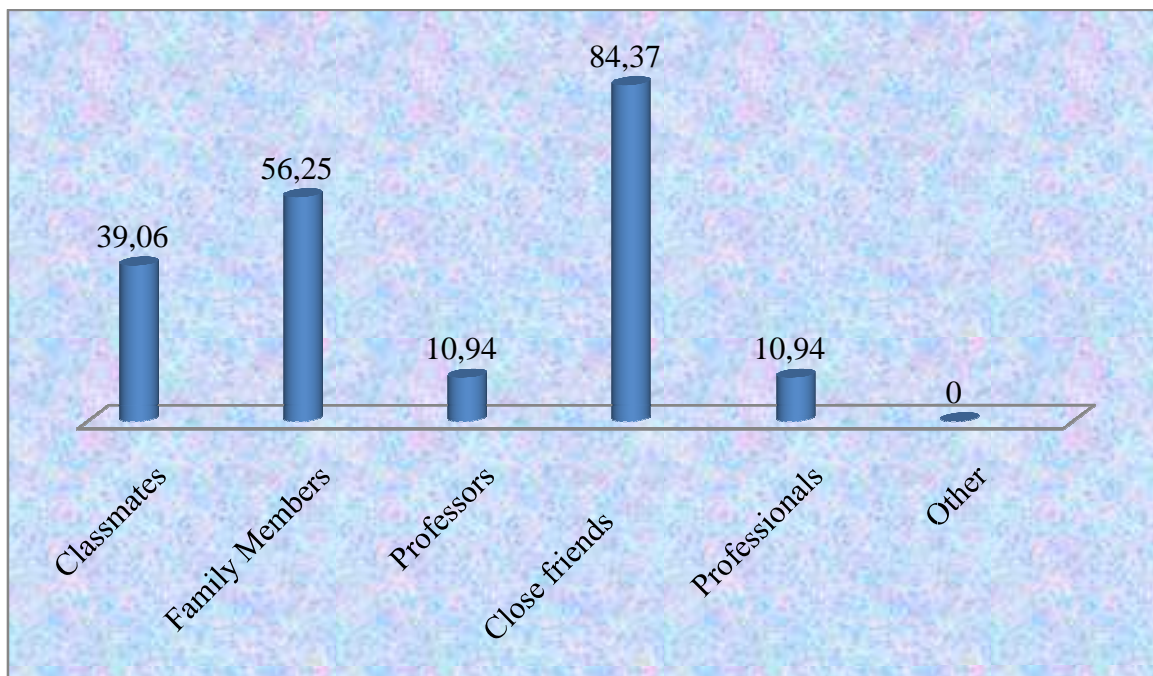


Figure 4.4.5 : E-mail Exchange Destination

(Source: The Questionnaires)

Figure 4.4.2 shows that those who answered that they are familiar with the Internet (85 subjects; 89%) have expressed that they spend time via Internet and make use of e-mail communication (64 subjects; 75%). Figure 4.4.3 indicates a good percentage (75%) for the Yes group as compared to the No group (25%). The responses to question five show that respondents' e-mail exchanges are destined principally to Close friends, Family members, and Classmates , respectively, 84, 37% , 56, 25%, 39, 06% . In addition, it is

observed that 10, 94% is attributed to those who chose to send their e-mails to Professors and Professionals. This can be explained by referring to the popularity e-mail communication enjoys among young Algerian and worldwide users as compared to other CMC platforms. E-mail is most considered as a communicative channel which enables participants to answer at times convenient for them, thereby reducing the impact of tedium, fatigue and interfering distractions²⁷. Another reason which may suggest the important usage of e-mail communication is the private social environment e-mail provides for this rather young population. It offers opportunities for experiencing psychological nearness between text author and text reader, and so sustaining social and love relationships among users²⁸. As far as Professors and Professionals answers percentages are concerned, it is suggested that those respondents who chose to exchange e-mails with their professors are students who enjoy nearness with their professor²⁹ and those who chose to exchange e-mails with professionals are probably respondents who are engaged in the professional life and pursue their studies at the university.

Q4: How often do you use e-mail communication?

Answers	Number		
<i>On a Regular Basis</i>	44	Daily	33
		Weekly	10
		Monthly	01
<i>Rarely</i>	20		
<i>Never</i>	21		

²⁷ McCoyd & Kerson (2006)

²⁸ See also findings of Question 5 (Close friends' Rate : 84,37%)

²⁹ I suggest that they may have access to private e-mail addresses of some temporary professors, not the permanent ones.

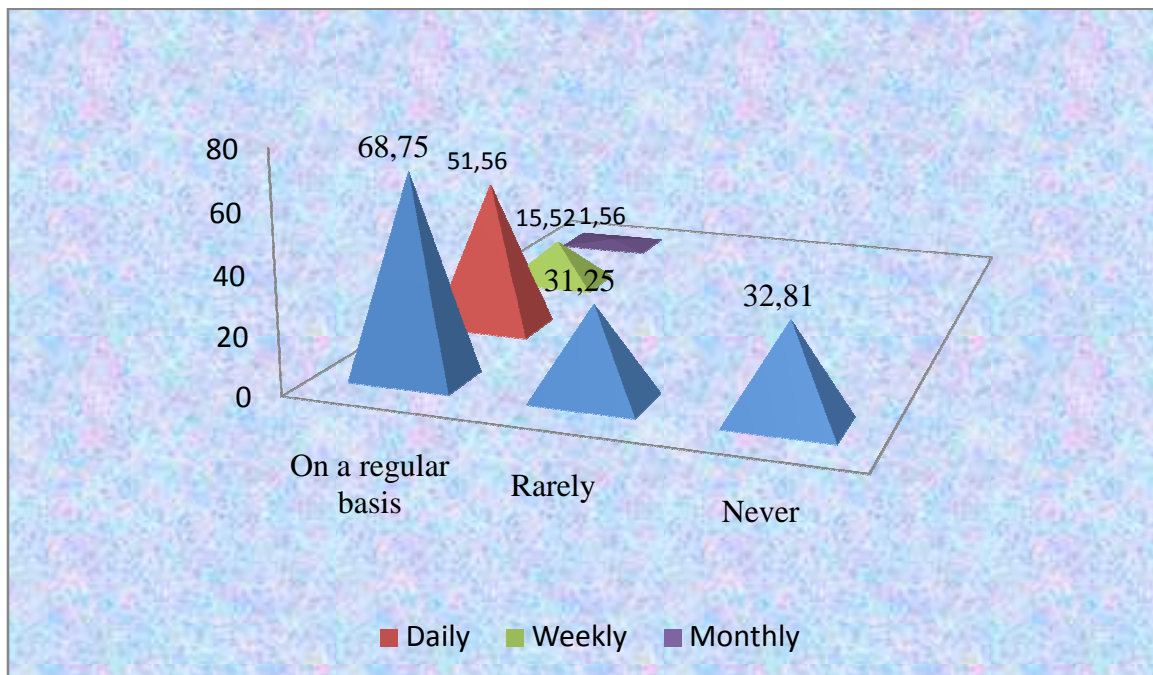


Figure 4.4.4: Frequency of E-mail Use
(Source: The Questionnaires)

The majority of the students, as indicated by the above graph (about 44 respondents; 68%), answered that they use e-mail communication on a regular basis. Twenty respondents (31, 25%) answered that they rarely use e-mail and 21(32, 81%) of them argued they never use e-mail communication. Those who answered that they use e-mail on a regular basis, 33 of them (51, 56%) said they do it as daily practice, 10 (15, 62%) as a weekly practice, and 1(51,56%) as a monthly practice. As can be seen from the Findings, the majority of respondents claimed to have a regular habit of using e-mail communication. With this significant number of respondents who are regular users of e-mail communication, more representative findings about the prominence of this mode of communication in the life of young Algerian e-mail users were expected when the regular respondents were asked about the extent to which this regular usage is a daily practice, a weekly practice, or rather a monthly one. Answers (see Figure 4.4.4) for this question showed that, like the place English language learning occupies in the life of the respondents, e-mail communication is a practice of everyday among them. .

Data Targeting RQ3 Objectives

- Aim of Question six, seven, and eight: Attitudes towards English language promotion via e-mail exchanges.

Q6: Do you use English in the language of your e-mails?

Answers	Number
Yes	57
No	07

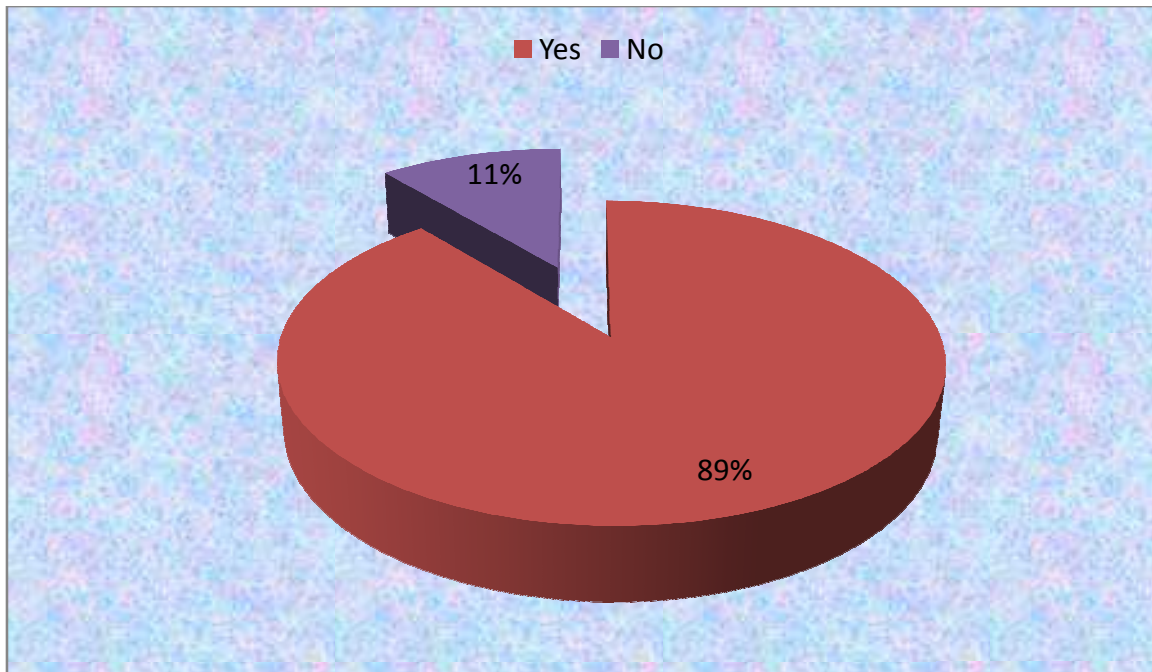


Figure 4.4.6: Use of English in E-mail

(Source: The Questionnaires)

The graph for question 6- one the core questions of RQ3- indicate that 89% of the respondents argue that they use English in their e-mails. English belongs to the linguistic repertoire of most respondents' e-mails. These results may advance the fact that our respondents are coming from the department of English and are in a position to use

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English on the Internet as their medium of instruction and in their e-mails. The Findings of this question confirm to a great extent the online language diaries results and motivate the researcher to further carry out investigation in an attempt to better our understanding of how e-mail could be beneficial for English learning among young Algerians university students of English.

Q7: If yes, do you think that e-mail exchanges using English can help you learn the English language effectively?

Answers	Number
<i>Yes</i>	60
<i>No</i>	04

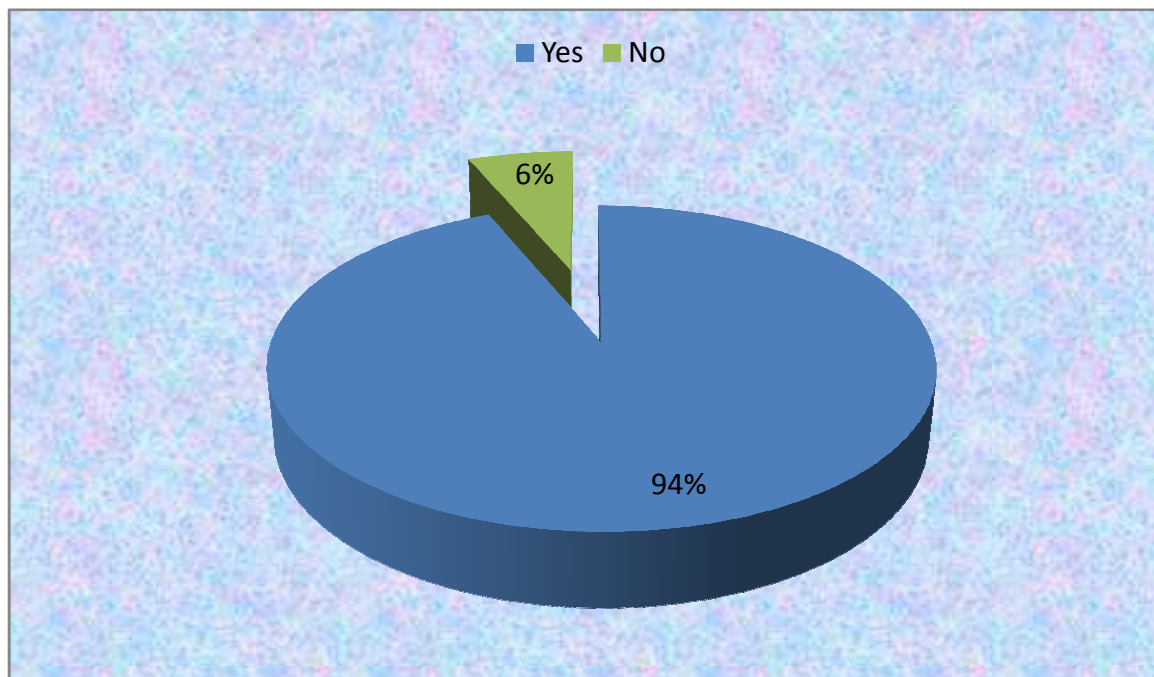


Figure 4.4.7: Attitudes towards English Language Promotion via E-mail
(Source: The Questionnaires)

The above figure shows percentages as to the attitudes the respondents manifest towards possibilities of promoting English language learning via e-mail communication. Results indicate that almost all respondents (94%) demonstrate positive attitudes towards

this type of learning and show readiness to experience the process³⁰. With this in mind, Mason (1994) argues that a good e-learning environment should:

“...be transparent, so that the learner is most conscious of the content of the communication, not the equipment”

(Mason, 1994: 6)

In fact, e-mail is considered as one of the prompting environments for e-learning activities because it among those learning environment characterized by simplicity and affordability contrary to other technological devices which have been known for their complex structures³¹.

Q8: If yes, what can you learn through e-mail exchanges using English?

Answers	Number
<i>Vocabulary</i>	59
<i>Reading</i>	63
<i>Writing</i>	64
<i>Listening</i>	43
<i>Speaking</i>	16
<i>All</i>	39

³⁰ Perhaps Garrett's (1991) most important and relevant observation for technology in language learning today was made clear in her title that the technology is there to *serve* language learning, not vice versa. Salaberry (2001) also argues that the prime research focus should now be on the interactions between learners as a result of using the technology. Thurlow et al. (2003: 10-11) suggest that: *“Our main role is as guides and mediators, facilitators and mentors. With CMC and the internet, we do not need to be techno-experts; we need merely to steer students towards a critical engagement with a powerful force in our lived realities.”*

³¹ See Collins & Bostock (1999), Perrolle (1991), and Porter (1993).

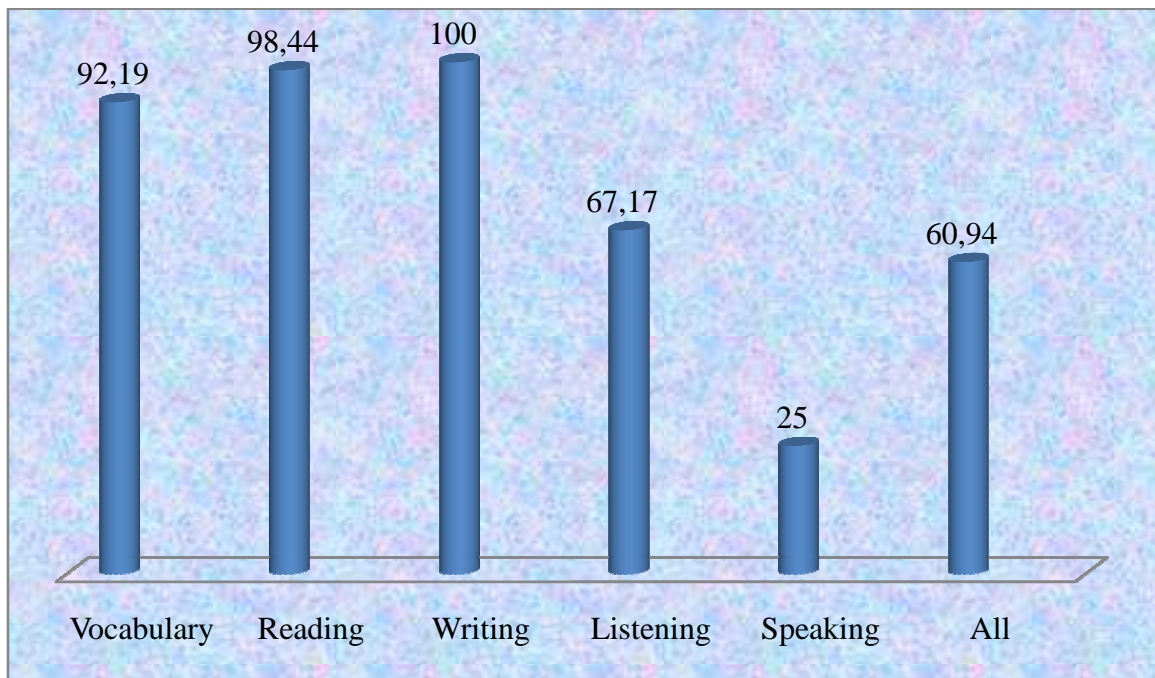


Figure 4.4.8: Skills Development through E-Mail

(Source: The Questionnaires)

As can be seen in the figure above, those who showed willingness to learn English writing, reading and vocabulary through e-mail communication (100%, 98,44%, and 92,19%) constitute a big proportion of the study sample as compared to those who chose English listening (67,17 %) and Speaking (25%). 60,94 % of the respondents suggest that e-mail communication can promote the learning of all skills. It is significant to pinpoint that language skills are complementary for any learning process and that the fact that respondents chose writing, reading and vocabulary as their primary choices is ascribed probably to the respondents' awareness of the nature of the medium which is actually identified as a written mode of transmission.

The coming section of this thesis is destined to the analysis of questions asking respondents to propose activities which may be undertaken under the umbrella of e-mail exchanges to raise students' willingness to learn English.

➤ *Aim of Question nine and ten: Proposal activities for English learning through e-mail*

Q9: Do you think that you are able to use e-mail communication effectively to improve your English competences if your professor asks you to do so?

Answers	Number
Yes	62
No	02

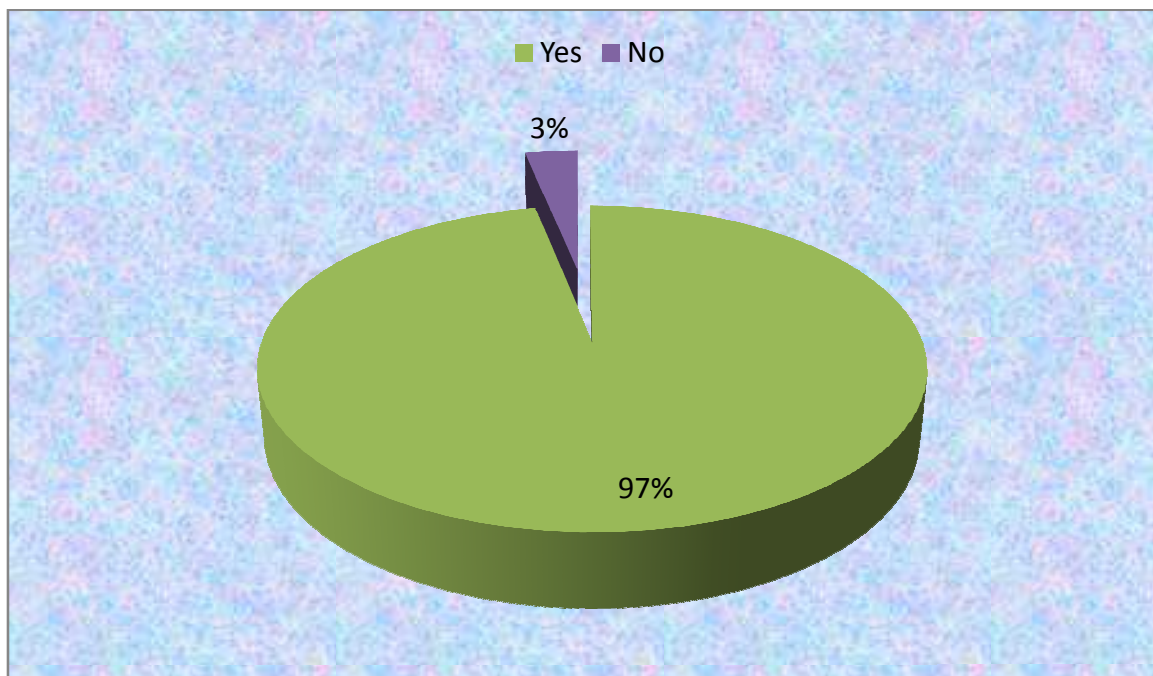


Figure 4.4.9: Ability to Use E-Mail for Instructional Matters
(Source: The Questionnaires)

It is evident, by referring to question nine's results, that almost all the respondents (97%) are highly motivated to pursue English learning via e-mail for many reasons? Here are some of the 'Yes' reasons:

-
- R30³²: “ *E-mail will help me communicate in English with my classmates and professors I will feel free*”
 - R25: “*It is more practical and easy to use it, in addition to that I have it at home, I do like it*”
 - R13: “ *through e-mail I will enrich my vocabulary, and this help me talk fluently*”
 - R17: “ *I can keep in touch with my professors everyday and at any time*”
 - R04: “ *I want to learn more outside class*”
 - R01: “*Using English everyday in e-mail activities can be very beneficial for me*”
 - R33: “*I will not feel ashamed if I make mistake . I will learn from my mistakes and my friends and professors will correct me and give me advice*”
 - R22: “ *I can do collaborative research and projects with native speakers and present to my professor for evaluation*”³³
 - R 61: “ *E-mail will push me to be careful and check my spelling when I answer an activity, and this will help me improve my spelling*”
 - R57: “ *I like this method of learning*”
 - R19: “ *I think the exchange of ideas will develop competences*”
 - R39: “ *I have Internet at home, and I would like to use for my studies*”
 - R03: “ *It makes me work harder*”

Here are the ‘No’ reasons:

- R07: “*I do not know how to use it, and I do have no computer and no Internet*”
- R09: “*I do not have a computer at home and I cannot afford it. I have a very traditional family. I wish I could have one in the future: my personal computer*”

³² R30 refers to respondent number 30. Please note that I reformulated the English of the respondents but trying to keep the data as faithfully as possible.

³³ It has been hailed as a potential solution to the problem of access to native speakers. See for example the National Curriculum for England (1999:17) which suggests, ‘*Pupils could communicate by email with speakers of the target language, including those in more distant countries*’.

Q10: Propose only ONE activity that you can do with your professor through e-mail communication to learn English and you think will be good for you to improve your English.

Here are some proposals, from the part of the users of the technology, for English learning activities mediated via e-mail communication:

- R58: *“My professor can give me some homework and asks me to send it back to him through e-mailing.”*
- R30: *“My professor can send me some grammar, reading, writing and vocabulary assignments”*
- R11: *“My professor can send me a test --and asks me to answer it and send it back in two hours, as if I am in class, you know the LMD system is full of tests and it is very tiring to do many traditional tests this is why I prefer this way than the traditional way of making tests where I am very anxious”*
- R4: *“My professor can send me some written, audio and video supports to improve my pronunciation and to know about the natives’ culture”*
- R6: *“I can send an e-mail to my professor asking him/her to answer my questions about a given topic He/she explained in class and I missed it”*
- R57: *“My professor can send me a story but cut into different chapters and asks me to comment on these chapters each time he/ she sends me one”*

4.5 Concluding Discussion of the Findings

This section summarises and concludes the thesis. It first re-visits the research questions and addresses them according to the findings reported in this thesis. It then discusses some possible implications of the research. Finally, it suggests topics for further studies.

The following research questions were raised for this study:

RQ1: *WHAT* are the linguistic practices used by young Algerian English university students in writing their E-mails? Does English figure out on the list?

RQ2: *HOW* do young Algerian English university students see E-mail language? Are their language attitudes positive or negative?

RQ 3: If English is there, *HOW* do young Algerian learners of English see opportunities for promoting English learning via Email communication in Algerian universities?

4.5.1 Findings in Relation to Research Question 1

The ultimate purpose of research question one was to analyze how written language is creatively used in e-mail language by young Algerians. Findings have shown that ED is in many respects divergent from normative written language. A number of informal language properties have been identified.

First, I found a category labelled neography (or unconventional spelling) consisting of different ways of using ASCII characters to represent effectively language use in the texts and to be communicatively competent. Such use included an abundance of abbreviated word forms, phonetic spelling, syllabograms, logograms, and punctuation. More interesting on neography's findings was the discovery of a new form of written language in ED: Romanized Algerian Arabic. It is also found (from the interviews' results) that these findings are employed to fulfil technical, economic, linguistic, psychological, and communicative needs

Second, a category which includes code switching use was observed. This study has shown that a considerable number of young Algerian e-mail users make use of Algerian Arabic and French alternatively in exchanging their e-mails. Code switching is consequently used as an effective communicative device.

Being on the agenda of research, investigating code switching did not stop at this point. It rather carried investigation to question its nature, whether oral or written. Results revealed that young e-mail users write using code switching but without any consciousness regarding language mixing. In fact, the unconscious realization of code switching in e-mail communication resembles to a great extent its counterpart in oral language. I concluded that code switching in e-mail communication can be seen as an oral

one which happened to be written down because of the constraints of the technology itself.

Third, a category which shows features from spoken language spelled out in ED. The present study has also raised the issue of the complex relationship between speech and writing in Algerian ED.

It has suggested that, for e-mail communication in the Algerian context, it may not be sufficient to study features of speech and writing from a general point of view. It has been discussed that a psychological dimension would play a very prominent part in investigating the spoken and/or like properties of Algerian e-mailing. Accordingly, findings clearly demonstrated through the psycho-structural model that it is difficult to deny the supremacy of spoken language-like features over written language-like features in Algerian ED.

The resulting language from e-mail communication showed many features associated with spoken language: The tone of the e-mails was relatively informal; there were vast amount of code switching of Algerian Arabic, English and French; most expressions were dialectal representations; more concentration was reserved to the ideas and feelings rather than to the correctness of the grammatical structure of the language. These features were, to a great extent, clear evidences on the point that language in Algerian e-mail produced by young users of the medium, just like e-mail code switching, is an oral language which is written because the medium is a written one.

4.5.2 Findings in Relation to Research Question 2

The main objective of research question two was to survey Algerian e-mail users' attitudes towards the impact of ED on standards of traditional writing. It is interesting to note that 40% of the interviewees think the use of e-mail language deteriorates language standards and the other 60% represents the 'whatever' generation who think that e-mail language has nothing of bad on language standards.

However, to put things into perspectives, I think that it is worth noting to stress that popular fears which have derived negative attitudes towards e-mail language have blinded many eyes about the very nature of this process.

In fact, distinguishing between language change and language decline is very tricky business. Since yesterday's change is often today's norm, we may simply need to acknowledge that language change is just not necessarily something bad.

In my point of view, the use of e-mail language is indispensable because of the rapid changing world of technological development. Abbreviations, acronyms, phonetic spelling, and also graphical means serves the purpose for effective communication because they convey meaning and ideas successfully just like the others.

4.5.3 Findings in Relation to Research Question 3

The importance of using the Internet in language learning needs no defense. Similar to the Internet, e-mail provides students with a familiar and fun environment in which to explore and discover English. E-mail may also promote English language learning for authentic purposes. In addition to being a supplement to authentic reading, speaking, listening and writing materials, e-mail can be explored by English students to develop their literacy and communication practices by integrating cooperative projects with native speakers.

In fact, e-mail provides a terrain for English language proficiency for our informants as it can be used in a wide range of contexts to facilitate mediating the target language. This use, coupled with the educational/entertainment value of e-mail communication, makes it a valuable language-learning tool.

Young university students of English who participated in this research showed readiness and enthusiasm towards the adoption of e-mail as a learning environment which can actively engage them in writing, research, and dialogue (written via email) out of class time.

Results demonstrate also that the change in the actual physical environment (represented by the traditional classroom environment) and its relation to students' engagement in learning is important. Unlike conventional classes, E-mail provides a virtual learning environment in which the learner is able to prosper at the linguistic and relational levels and try to captivate a chance to succeed.

E-mail, as a virtual classroom, nourishes a psychological dimension. In fact, awareness that their professors or classmates, who are far away from them, will read their work, evaluate, and exchange ideas and above all send a feed back to them provides motivation, satisfaction and more importantly self-esteem for the learners.

Finally it is important to highlight that the communication which occurs via electronic mail between teachers and students is unique because it nourishes the spirit of '*participation*' from all class members principally because:

- * Students can use electronic mail to ask questions they would normally not be voiced out in large group discussions
- * Students can communicate with students whom they not regularly talk to face to face.

4.6. Chapter Summary

The aim of this chapter is to bring to light findings related to three main axes of research. The first axe researched the linguistic characteristics of electronically transmitted written messages through e-mail communication. The second axe sought to survey how e-mail language is 'judged' by its users. The third axe proposed e-mail as a virtual learning opportunity for young learners of English at the department English-university of Oran.

Material was collected and analyzed both automatically and manually and results confirmed to some degree suggestions from previous studies as well as hypotheses in the present study. It is found that e-mail linguistic characteristics are characterized by the use of abbreviations, acronyms, phonetic spelling, syllabograms, logograms, special punctuation, use of a written form of *oral* code switching, use of the writing of oral

language, and more importantly the writing of Algerian Arabic through the use of roman characters.

In relation to attitudes towards e-mail language that was researched in research question two, most of the interviewed e-mail users demonstrated a relaxed attitude towards this language with no fear to lose written norms of standard language.

Research question three has confirmed a shared belief among the scholarly community which advances that e-mail communication is a good and promoting environment for English language learning.

At the end of this chapter, one may say that there is no doubt that e-mail communication is a technological change which has brought about social change and by consequence language change. E-mail- is something that is gaining more and more significance in the lives of many young Algerians today, and something that people seem to have a lot of opinions and concerns about it.

***GENERAL
CONCLUSION***

General Conclusion

This work is based on the assumption that when a contemporary language technology is in contact with language users, there are observable contact phenomena which are typical to both technology and its users. In respect to e-mail communication, one can not deny but recognize the novelty of a whole new set of linguistic practices characterizing this new technology.

This work has presented a number of new linguistic practices in e-mail texts among young Algerians. The research showed results related to:

First, *the use of a new written version of Algerian Arabic namely romanized Algerian Arabic*. This form of language is mainly used to facilitate imitating the colloquialism that e-mail writers are acquainted with in daily conversations. I suggest, ultimately, that the creative writing of Algerian Arabic appears to serve foster the spoken-like nature of e-mail communication and may contribute to changes in the linguistic balance of Algeria and the Arab world.

Second, *the use of neographical transformations*. Language used by young e-mail writers in Algeria deviates in many ways from the prescriptive norms of standard written language. This study has presented a systematic characterization of unconventional spelling in Algerian e-mail language. I presented taxonomy of linguistic phenomena, motivated by technical, economic, communicative, and linguistic constraints observed in a corpus of messages produced by young Algerian university students. The realization of these processes (for example, Romanized Algerian Arabic, phonetic spelling, syllabograms, logograms, punctuation,...etc.) is highly variable, reflecting the personalized and often playful nature of the private exchanges studied, and the freedom from prescriptive norms enjoyed by participants in this emergent form of e-mail written electronic communication.

Third, *the identification of e-mail language as being a spoken language that was constrained by the medium*. The relationship between speech and writing in Algerian e-mail language among young users is settled. Findings determined the spoken nature of the medium: e-mail language is an oral language but it is written because it is produced on

a written medium. It has been suggested that a psychological dimension of e-mail texts' production together with a structural analysis of these texts played a very prominent role in identifying the nature of language in e-mail among young Algerians.

Fourth, *the nature of code switching*. The research has shed some light on the nature of code switching in e-mail communication. Conclusions reached showed that there is code switching in Algerian e-mail texts but this code switching is oral one which is written because e-mail is a written medium.

Fifth, *surveying language attitudes towards e-mail language*. In fact, linguistic features generated under the impact of e-mail communication have drawn the public's attention to the negative effect of this new form of language. However, as to language attitudes towards e-mail language that the results of the interviews led to, I can say that young e-mail writers tend to show both negative attitudes and a laissez-faire attitude towards the effect of e-mail language. The negative attitudes were expected but a laissez-faire approach has made me reconsider the present state of languages in Algeria. Being unconcerned about the '*profound*' effect of e-mail communication on the standards of written language seems to raise fear and anxiety about the future of individuals themselves. I believe that, as an important new communication medium, e-mail communication is bound to have other important long-term effect on language use and language users. It is too early to tell what that impact will be.

Sixth, *e-mail as promoting opportunity for English language learning among young university students of English*. The research has proven that e-mail can be explored effectively by English students to develop their literacy and communication practices. In fact, e-mail provides a terrain for English language proficiency for our informants who showed willingness to adopt the technology and enthusiasm to experience an e-learning environment via e-mail communication.

This research has in broad terms shed some light on some aspects of e-mail communication among a small sample of young Algerian users. However, what has been learnt that is new remains incomplete because of the limitations of this research.

In fact, the limitations of the study militate against the general applicability of the findings to the Algerian population at large. One of the limitations is that the sample size is small. In addition, the overall thrust of the findings here is specific only to a given group of participants in a given context (young people who are educated bilinguals and e-mail users in Algeria). However, it is suggested that future research could extend the focus group to both adult and children levels, and involve participants with different ethnographical backgrounds such as immigrants from France or “returnees” from France and even English-speaking countries.

Another limitation is that the setting of the research was restricted to one electronic communication tool that is e-mail communication. In fact, by investigating or comparing various types of electronic communication tools, the findings of the research could be enriched.

As to future directions for research, I think that investigating e-mail communication from various points of view is a topic that is not exhausted in any way, rather the opposite: the area of CMC is growing. According to Crystal (2006:259) the future of CMC will connect means of communication together even more.

Since the samples of this research were collected from e-mail communication in the same-age group, future research should investigate whether or not a similarly high degree of code-switching will be found in other age groups. Good research can be also undertaken to explore code switching in web-based chats in which various age groups participate.

Studies should also be carried out to examine the influence of CMC on face-to-face communication. Narumiya (1998) speculates the possibility that the increasing popularity of CMC may influence the spoken language of young people in particular, because of their high involvement in CMC. This issue should be further studied in Algeria in order to obtain deeper insights into CMC and its effects on our communication.

I hope also to carry future research on the motivations that lie behind the use of code-switching in e-mails despite lack of synchronicity and face-to-face interaction.

There are still things to be said about language use in Internet which seems to inspire Algerian users to create new types of abbreviations based on Algerian Arabic words in analogy with abbreviations based on other languages, mainly French, English and Spanish.

Language crossing would be also a good topic for research. Algerian-English chatters occasionally engage in language crossing i.e. draw on a code they do not 'own' and have limited competence in it. This might be the code of a particular interlocutor (e.g., An Algerian chatter addressing an English fellow chatter in England).

Finally, it would seem that research on e-mail communication is like the medium itself-vast, evolving and infinitely varied.

APPENDICES

Appendix One

Online Language Diaries

Information Sheet n° 1

Aux participants:

Vous avez été choisi(e) pour participer à une recherche effectuée par Mme Zitouni. M dans le cadre dans le cadre d'un doctorat en Sociolinguistique à l'Université d'Oran. Merci d'avoir eu la gentillesse d'accepter de prendre part à cette collecte d'informations sur le langage e-mail. Il nous serait d'une aide précieuse si vous pourriez fournir des détails concernant votre age, sexe, vos compétences linguistiques (langues écrites et parlées), et votre niveau d'instruction. Veuillez noter que ces informations ne seront pas divulguées à une tierce personne, mais seront utilisées uniquement par le chercheur pour cette étude. .

Merci pour votre coopération!

Age :

Sexe: Masculin Féminin (Mettez SVP votre choix en couleur)

Niveau d'instruction:

.....

Langues que vous parlez et écrivez (Veuillez mettre le signe (+) pour 'langue maîtrisée' et le signe (-) pour 'langue non maîtrisée')

Arabe Classique		Français		Berbère		Anglais		Arabe Algérien
Écrit	Parlé	Écrit	Parlé	Écrit	Parlé	Écrit	Parlé	

Vous êtes maintenant invité à fournir un seul e-mail (copier-coller l'e-mail SVP sans le cadre ci-dessous). L'e-mail doit être envoyé d'une personne à une seule personne et écrit dans les 24 heures.

E-mail
--

Information Sheet n° 2

Une fois encore, merci beaucoup pour votre coopération. Si cela ne vous dérange pas, veuillez décliner votre identité (nom, coordonnées) pour un éventuel contact par le chercheur.

Facultatif :

Nom :.....

Coordonnées : Numéro de Téléphone :..... ;

E-mail (autre):.....

Appendix Two**The Interview's Questions**

The following is a list of questions used in the interview.

▪ **Step1: Introduction**

The researcher starts the interview by discussing different matters in relation to the topic of research. The aim is to induce the interviewee to a complete involvement in the conversation.

▪ **Step2: Core Questions**

Q1: How often do you use e-mail communication a week?

Q2: When you write an e-mail, do you concentrate more on the message - its structure i.e. do you pay attention to the correctness of your grammar and style? - or to the person-the content i.e. what you are going to write to that person? (Ideas, attitudes, emotions, feelings...etc.)

Q3: If you are asked to re-write the e-mail you provided for this research, in the form of a traditional letter, will you write it the same? (Please choose from the list)

Yes No Not the same with: Many Changes Few Changes

What are these changes? Please describe them

Q4: If the person(s) to whom you sent an e-mail is now in front of you - in a face-to-face situation- will you re-produce the same e-mail you provided for this research? (Please choose from the list)

Yes No Not the same with: Many Changes Few Changes

What are these changes? Please describe them

Q5: How do you see the language in e-mail communication? (Select only one answer)

Is it the traditional written language that you learned at school which has some features of oral language?

- O Is it your everyday spoken language that is written down.
- O Is it a mixture of traditional written language features and spoken language features?
- O Is it a new language?
- O Is it a language that is still in the process of development?

Q6: What are the main constraints that shape language in e-mail communication?

Q7: Do you think that written language used in e-mail communication is influencing offline writing? If yes, how do you see this influence, negative or positive?

N.B: Qsx are questions or comments imposed by the turns of the conversations, for example:

- **Qs1:** Do you have trouble with spelling when writing a letter?
- **Qs2:** Do you have trouble with spelling when writing an e-mail?
- **Qs3:** Is correct spelling important to you when writing an e-mail?
- **Qs4:** What makes you or pushes you to use abbreviations, acronyms, emoticons...etc in your e-mails?
- **Qs 5:** What are the main constraints that shape language in e-mail communication in your point of view?

▪ **Step3: Conclusion**

The researcher: “Thanks so much for taking the time to talk to us.”

Appendix Three

THE QUESTIONNAIRE

The Questionnaire's Information Sheet¹

I do thank you for accepting to participate in this questionnaire survey.

Title of the Research:

English language promotion through e-mail Communication.

Who will conduct the research?

Mrs. Zitouni, PHD student (Sociolinguistics and English Language promotion), Faculty of Letters, Languages and Arts, Oran University.

What is the aim of the study?

This questionnaire is designed to assess your attitude towards perspectives of promoting English language learning/teaching in Algerian universities through integrating a virtual learning environment which will be mediated via E-mail exchanges. It also asks you to propose activities which may be undertaken under the umbrella of e-mail exchanges to help develop your capacities in learning English. It should require about 10 minutes of your time.

What personal information is needed?

No names are needed for this investigation, only age and the participant's educational level.

What would you be asked to do?

To fill in the short questionnaire. You will be asked to tick and write your answers on the questionnaire sheet. Respondents are free to pass over questions they do not wish to answer.

Consent:

If you agree to take part in the project, your answers to the questions will remain anonymous and kept/analysed by the researcher.

How is confidentiality maintained?

All information you give will be treated in the strictest confidence. No personal or other details which could identify you will be released to anyone without your express consent.

What happens if you do not want to take part or if you change your mind?

Participation in the study is completely voluntary. The questionnaire could be stopped at any time and participants are free to withdraw from the research without giving any reason and without detriment to themselves (prejudice or negative consequences).

What happens to the data collected?

A report will be written about the findings but no individual will be identified in the report.

N.B: If you have any questions or concerns, feel free to contact the researcher conducting the study.

Please contact: zitouni_mouna@hotmail.fr

¹ Part one.

Informant N°:
About you (demographic details)Age:.....; Sex: Male Female

Educational level:.....

Instructions: *Please tick the boxes- when you judge the answer to be correct- and complete space. Usually it is best to respond with your first impressions, without giving a question much thought.*

Questionnaire one²**1. Do you use Internet?** Yes, I do No, I do not.**2. Where do you use the Internet?** University At home Cyber Place Other (specify):.....**3. Do you use e-mail communication?** Yes, I do No, I do not.**4. How often do you use e-mail communication?** On a regular basis Specify: Daily Weekly Monthly Rarely Never**5. With whom do you exchange your e-mails?** Classmates Family Members Professors Close friends

Professionals

 Other (specify):.....**6. Do you use English in the language of your e-mails?** Yes No**7. If yes, do you think that e-mail exchanges using English can help you learn the English language effectively?** Yes No

² Part two

8. If yes, what can you learn through e-mail exchanges using English?

I can learn:

- Vocabulary; Reading; Writing; Listening; Speaking; All

Questionnaire two³

9. Do you think that you are able to use e-mail communication effectively to improve your English competences if your professor asks you to do so?

Yes, I do think so, because -----

No, I do not think so, because -----

10. Propose only ONE activity that you can do with your professor through e-mail communication to learn English and you think will be good for you to improve your English .

----- ----- ----- ----- ----- ----- ----- -----
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Thank you again for your cooperation!





³ Part three.

ANNEXES

Annex One

A List of some Emoticons

Meaning	Old emoticons		New emoticons
Happy, Smiling	: -)	: =)	
Sad, Displeased	: - (: = (
Confused	?-?		
Shocked, Amazed	: - O		
Crying	:.. (

Kiss	^ 3 ^	
Annoyed/ Angry / Dissatisfied	>< >O< > . <	 
Sleepy / Bored	@ . @	
In good mood	^ . ^	
Joking	=P	

(Source: The Online Language Diaries)

Annex Two

Internet Timeline

Internet Timeline

(1957-2010)

1950s

- 1957** ✓ USSR launches Sputnik into space. In response, the USA creates the Advanced Research Projects Agency (ARPA) with the mission of becoming the leading force in science and new technologies.

1960s

- 1962** ✓ J.C.R. Licklider of MIT proposes the concept of a “Galactic Network.” For the first time ideas about a global network of computers are introduced. J.C.R. Licklider is later chosen to head ARPA's research efforts.
- ✓ Paul Baran, a member of the RAND Corporation, determines a way for the Air Force to control bombers and missiles in case of a nuclear event. His results call for a decentralized network comprised of packet switches.

- 1968** ✓ ARPA contracts out work to BBN. BBN is called upon to build the first switch.

- 1969** ✓ ARPANET created - BBN creates the first switched network by linking four different nodes in California and Utah; one at the University of Utah, one at the University of California at Santa Barbara, one at Stanford and one at the University of California at Los Angeles.

1970s

- 1972** ✓ Ray Tomlinson working for BBN creates the first program devoted to email.
- ✓ ARPA officially changes its name to DARPA Defense Advanced Research Projects Agency.

	<ul style="list-style-type: none"> ✓ Network Control Protocol is introduced to allow computers running on the same network to communicate with each other.
1973	<ul style="list-style-type: none"> ✓ Vinton Cerf working from Stanford and Bob Kahn from DARPA begin work developing TCP/IP to allow computers on different networks to communicate with each other.
1974	<ul style="list-style-type: none"> ✓ Kahn and Cerf refer to the system as the Internet for the first time.
1976	<ul style="list-style-type: none"> ✓ Ethernet is developed by Dr. Robert M. Metcalfe. ✓ SATNET, a satellite program is developed to link the United States and Europe. Satellites are owned by a consortium of nations, thereby expanding the reach of the Internet beyond the USA. ✓ Elizabeth II, Queen of the United Kingdom, sends out an email on 26 March from the Royal Signals and Radar Establishment (RSRE) in Malvern. ✓ AT& T Bell Labs develops UUCP and UNIX.
1979	<ul style="list-style-type: none"> ✓ USENET, the first news group network is developed by Tom Truscott, Jim Ellis and Steve Bellovin. ✓ IBM introduces BITNET to work on emails and listserv systems.
1980s	
1981	<ul style="list-style-type: none"> ✓ The National Science Foundation releases CSNET 56 to allow computers to network without being connected to the government networks.
1983	<ul style="list-style-type: none"> ✓ Internet Activities Board released. ✓ TCP/IP becomes the standard for internet protocol. ✓ Domain Name System introduced to allow domain names to automatically be assigned an IP number.
1984	<ul style="list-style-type: none"> ✓ MCI creates T1 lines to allow for faster transportation of information over the internet. ✓ The number of Hosts breaks 1,000.

1985	<ul style="list-style-type: none"> ✓ 100 years to the day of the last spike being driven on the Canadina Pacific Railway, the last Canadian university was connected to NetNorth in a one year effort to have coast-to-coast connectivity.
1987	<ul style="list-style-type: none"> ✓ The new network CREN forms. ✓ The number of hosts breaks 10,000.
1988	<ul style="list-style-type: none"> ✓ Traffic rises and plans are to find a new replacement for the T1 lines.
1989	<ul style="list-style-type: none"> ✓ The Number of hosts breaks 100 000. ✓ Arpanet ceases to exist.
1990s	
1990	<ul style="list-style-type: none"> ✓ Advanced Network & Services (ANS) forms to research new ways to make internet speeds even faster. The group develops the T3 line and installs in on a number of networks. ✓ A hypertext system is created and implemented by Tim Berners-Lee while working for CERN. ✓ The first search engine is created by McGill University, called the Archie Search Engine.
1991	<ul style="list-style-type: none"> ✓ U.S greenlight for commercial enterprise to take place on the Internet ✓ The National Science Foundation (NSF) creates the National Research and Education Network (NREN). ✓ CERN releases the World Wide Web publicly on August 6th, 1991.
1992	<ul style="list-style-type: none"> ✓ The Internet Society (ISOC) is chartered. ✓ Number of hosts breaks 1,000,000.
1993	<ul style="list-style-type: none"> ✓ InterNIC released to provide general services, a database and internet directory. ✓ The first web browser, Mosaic (created by NCSA), is released. Mosaic later becomes the Netscape browser which was the most popular browser in the mid 1990's.
1994	<ul style="list-style-type: none"> ✓ New networks added frequently. ✓ First internet ordering system created by Pizza Hut.

	<ul style="list-style-type: none"> ✓ First internet bank opened: First Virtual.
1995	<ul style="list-style-type: none"> ✓ NSF contracts out their access to four internet providers. ✓ NSF sells domains for a \$50 annual fee. ✓ Netscape goes public with 3rd largest ever Nasdaq ipo share value ✓ Registration of domains is no longer free.
1996	<ul style="list-style-type: none"> ✓ The WWW browser wars are waged mainly between Microsoft and Netscape. New versions are released quarterly with the aid of internet users eager to test new (beta) versions. ✓ Internet2 project is initiated by 34 universities ✓ Internet Service Providers begin appearing such as Sprint and MCI. ✓ Nokia releases first cell phone with internet access.
1997	<ul style="list-style-type: none"> ✓ (Arin) is established to handle administration and registration of IP numbers, now handled by Network Solutions (InterNic).
1998	<ul style="list-style-type: none"> ✓ Netscape releases source code for Navigator. ✓ Internet Corporation for Assigned Names and Numbers (ICANN) created to be able to oversee a number of Internet-related tasks .
1999	<ul style="list-style-type: none"> ✓ A wireless technology called 802.11b, more commonly referred to as Wi-Fi, is standardized.
2000	
2000	<ul style="list-style-type: none"> ✓ The dot com bubble bursts, numerically, on March 10, 2000, when the technology heavy NASDAQ composite index peaked at 5,048.62.
2001	<ul style="list-style-type: none"> ✓ Blackberry releases first internet cell phone in the United States. ✓ The spread of P2P file sharing across the Internet.
2002	<ul style="list-style-type: none"> ✓ Internet2 now has 200 universities, 60 corporate and 40 affiliate members.

2003	<ul style="list-style-type: none">✓ The French Ministry of Culture bans the use of the word "e-mail" by government ministries, and adopts the use of the more French sounding "courier".
2004	<ul style="list-style-type: none">✓ The Term Web 2.0 rises in popularity when O'Reilly and MediaLive host the first Web 2.0 conference.✓ Mydoom, the fastest ever spreading email computer worm is released. Estimated 1 in 12 emails are infected.
2005	<ul style="list-style-type: none">✓ Estonia offers Internet Voting nationally for local elections.✓ YouTube launches.
2006	<ul style="list-style-type: none">✓ There are an estimated 92 million websites online.✓ Zimbabwe's internet access is almost completely cut off after international satellite communications provider Intelsat cuts service for non-payment.✓ Internet2 announced a partnership with Level 3 Communications to launch a brand new nationwide network, boosting its capacity from 10Gbps to 100Gbps.
2007	<ul style="list-style-type: none">✓ Internet2 officially retires Abilene and now refers to its new, higher capacity network as the Internet2 Network.
2008	<ul style="list-style-type: none">✓ Google index reaches 1 Trillion URLs.✓ NASA successfully tests the first deep space communications network modeled on the Internet. Using software called Disruption-Tolerant Networking, or DTN, dozens of space images are transmitted to and from a NASA science spacecraft located about more than 32 million kilometers from Earth.
2009	<ul style="list-style-type: none">✓ ICANN gains autonomy from the U.S government.
2010	<ul style="list-style-type: none">✓ Facebook announces in February that it has 400 million active users.✓ The U.S House of Representatives passes the Cybersecurity Enhancement Act (H.R. 4061).

(Source: A Brief Guide to the History of the Internet)

Annex Three
The Chronological Appearance of CMC Specific Technologies

1971	E-mail
1971	Early Computer Conferencing
1979	MUDS (Multi-User Dungeons/ Dimensions)
1980	Newsgroups
1986	Listservs
1980s, early 1990s	Early Instant Messaging (IM) (e.g., UNIX talk, ytalk, ntalk)
1988	IRC (Internet Relay Chat)
1990	Moos (MUDs, Object Oriented)
1992	Text Messaging on Mobile Phones
1996	ICQ ("I Seek You") (modern IM system)
1997	AIM (America Online Instant Messenger)
1997	Blogs (Web Logs)
2003	Second Life
2003	MySpace
2004	Facebook
2005	YouTube

(Source: Baron, 2008)

Annex Four

Factors Driving Internet Change

The following is an e-mail sent to the researcher by Internet World Stats News (IWS): a free weekly newsletter featuring Internet usage research, Internet marketing tips, e-Commerce and world telecommunications reports, published by the Miniwatts Marketing Group.

À ZITOUNI Mimouna

De : **iws-newsletter@aweber.com** au nom de **Enrique De Argaez**
(editor@internetworldstats.com)

Envoyé : mer. 29/08/12 03:25

À : ZITOUNI Mimouna (zitouni_mouna@hotmail.fr)

Internet World Stats Newsletter - HTML Format

Internet World Stats News

Number 076 - August 28, 2012 - For subscribers only, delivered by email

Factors Driving Internet Change

Dear ZITOUNI Mimouna,

Many things have changed since **2000**, the year when I started reporting the Internet statistics at *Internet World Stats*. These changes directly affect you and me, as well as the over **2,400 billion** current Internet users in the world. In my opinion, the main factors that have caused these changes since 2000 in the Internet are blogging, the social media, Facebook, high broadband penetration, tablets, smart-phones, inbound marketing, cloud computing (which is just starting), and Google (who changed how we search online).

People tend to address these nine factors separately; however they interact with and affect one another. For example, blogging got individuals posting online personal content and this launched the social networks. Worldwide broadband growth and penetration made feasible the use of smart-phones, tablets and online video. Google, besides providing a great search service, sophisticated the online advertising industry. Cloud computing will provide better and cheaper web hosting services.

[Good Internet Marketing Practices](#) is something that has been missing in the web.

Thousands of very intrusive and rude marketing campaigns are online. You know what I mean. An article or a website catches your attention and you register, then **bang**, they

bombard you with tons of not requested email offers of all sorts. There are other bad marketers that collect names and addresses from the public who-is records. Terrible, annoying, and **useless** practices.

Well, there is a cure for this and it is called Inbound Marketing, a marketing strategy that is based on letting the customers find you, and not you chasing after the potential customers or prospects. The idea is to use blogs, the social web and publishing interesting website content for generating more leads and obtaining better eCommerce results, at lower cost. For details, please visit [Inbound Marketing News](#), and then continue reading and enjoy your newsletter issue 76.

Real Change Started in 1969

Two very unique events happened in **1969** which make that year stand out as the year when Technology started to change the world at higher speed each year. "*A small step for a man, a giant leap for mankind*". Nobody has said it better than Niel Armstrong himself, and the event was the remarkable Moon Landing on July 20, 1969. [Niel Armstrong](#), the first person from Earth to walk on the Moon. Regretfully he passed away on August 25, 2012. A minute of silence for this real hero, please.

The other event happened on October 29, 1969 and corresponds to the birth of the Internet. That day, Charley Kline at the UCLA tried to send the first packets of information to Stanford Research Institute using the **ARPAnet**. Read the [Brief History of the Internet](#) for more details.

The **NASA** Space program opened the way for satellite communications and this technology has been useful for spreading Internet access to all parts of the world. **ARPAnet**, you all know, evolved into the Wide World Web of today, and the rest is history. Technological advances in ICT will continue to change the world in the future.

A few years later, a guy by the name of [Steve Jobs](#) (1955 - 2011) changed the way personal computers should look and perform. He had brilliant ideas that originated user-friendly computers and devices, also changing the world.

2012 State of the Internet Report

Every quarter **Akamai**, a leading Cloud Computing company, publishes a quarterly "*State of the Internet Report*". In their graphical report, you can visualize the following data for most of the world countries:

- Average connection speed.
- Average peak connection speed.
- Number of unique IP addresses.
- High Broadband adoption (>10 Mbps)
- Narrow-band adoption (<256 kbps)

Details at [State of the Internet](#) This report includes data gathered across Akamai's global server network about attack traffic, average and maximum connection speeds, Internet

penetration and broadband adoption, and mobile usage, as well as trends seen in this data over time.

North Korea Internet Report

North Korea is a very secretive state, and the data available about this country is scarce. The [North Korea Report](#) features very interesting information.

Internet Market Research Tips

One of our readers has requested a list of the best Internet Market Research Resources. There are a lot available, some are free but others require a fee. In each issue I will provide a review and a link to the best sources of online research. Today we start with [The Pew Research Center](#), a nonpartisan "fact tank" that provides information on the issues, attitudes and trends shaping America and the world.

This report refers to Internet use and home broadband connections in the United States. See the detailed report and graphs, based on surveys, indicating that 82% adults use the Internet and that 66% have high-speed broadband at home [USA Internet Use by Age and Race](#).

Many thanks to all the readers that wrote to me with ideas, suggestions, comments and new statistics. I really appreciate your feedback and cooperation. For those of you who wish to follow me in twitter, the link is: [@deargaez](#)

Best personal regards,

Enrique de Argaez, CEO
Miniwatts Marketing Group
Miniwatts de Colombia Ltda.
www.internetworldstats.com

About this newsletter:

IWS News is a free weekly newsletter featuring Internet usage research, Internet marketing tips, eCommerce and world telecommunications reports, published by the Miniwatts Marketing Group. For contacting the editor, please write to "editor@internetworldstats.com". This issue was sent to zitouni_mouna@hotmail.fr To unsubscribe, use the a Weber link that appears below.

(Source : Enrique De Argaez, (2012), [Internet World Stats](#).)

(e-mail : iws-newsletter@aweber.com)

Annex Five

Internet Usage Statistics

The following is an e-mail sent to the researcher by Internet World Stats News (IWS): a free weekly newsletter featuring Internet usage research, Internet marketing tips, e-Commerce and world telecommunications reports, published by the Miniwatts Marketing Group.

Internet World Stats Newsletter - HTML Format

Internet World Stats News

Number 077 - October 24, 2012 - For subscribers only, delivered weekly by email

Internet Users for Mid-year 2012

Dear ZITOUNI Mimouna,

Please be advised that the new Internet World Stats for **mid-year 2012** have been processed and uploaded to the website today. The world population figures for all the regions were also updated.

The detailed statistics table as well as three graphics are available now, at the [Internet Big Picture](#) page. In the coming days the other website pages will be updated and we will let you know about the progress in future Newsletters.

Best personal regards,

Enrique de Argaez, CEO

Miniwatts Marketing Group

www.internetworldstats.com

INTERNET USAGE STATISTICS
The Internet Big Picture
World Internet Users and Population Stats

WORLD INTERNET USAGE AND POPULATION STATISTICS
June 30, 2012

World Regions	Population (2012 Est.)	Internet Users Dec. 31, 2000	Internet Users Latest Data	Penetration (% Population)	Growth 2000- 2012	Users % of Table
Africa	1,073,380,925	4,514,400	167,335,676	15.6 %	3,606.7 %	7.0 %
Asia	3,922,066,987	114,304,000	1,076,681,059	27.5 %	841.9 %	44.8 %
Europe	820,918,446	105,096,093	518,512,109	63.2 %	393.4 %	21.5 %
Middle East	223,608,203	3,284,800	90,000,455	40.2 %	2,639.9 %	3.7 %
North America	348,280,154	108,096,800	273,785,413	78.6 %	153.3 %	11.4 %
Latin America / Caribbean	593,688,638	18,068,919	254,915,745	42.9 %	1,310.8 %	10.6 %
Oceania / Australia	35,903,569	7,620,480	24,287,919	67.6 %	218.7 %	1.0 %
WORLD TOTAL	7,017,846,922	360,985,492	2,405,518,376	34.3 %	566.4 %	100.0 %

NOTES: (1) Internet Usage and World Population Statistics are for June 30, 2012. (2) CLICK on each world region name for detailed regional usage information. (3) Demographic (Population) numbers are based on data from the [US Census Bureau](#) and local census agencies. (4) Internet usage information comes from data published by [Nielsen Online](#), by the [International Telecommunications Union](#), by [GfK](#), local ICT Regulators and other reliable sources. (5) For definitions, disclaimers, navigation help and methodology, please refer to the [Site Surfing Guide](#). (6) Information in this site may be cited, giving the due credit to www.internetworldstats.com. Copyright © 2001 - 2012, Miniwatts Marketing Group. All rights reserved worldwide.

(Source : Enrique De Argaez, (2012), [Internet World Stats.](#))

(e-mail : iws-newsletter@aweber.com)

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